



Standard of Cover 2012



"Committed to saving and protecting lives and property."

Standards of Cover
2012

Lawrence-Douglas County Fire Medical
1911 Stewart Avenue
Lawrence, KS
USA 66046
Lawrenceks.org/fire_medical



Standards of Cover
Dated 13 November, 2012

Introduction

In December 1996, the International Association of Fire Chiefs and the International City Managers Association formally created a trust known as the Commission on Fire Accreditation International. This trust is supervised by the Center for Public Safety Excellence (CPSE). Today, the CPSE oversees the Commission on Fire Accreditation International (CFAI).

The focus of CFAI is to develop a comprehensive system to assist local government in risk management evaluation to establish performance goals and to link long-term strategic planning to the development of a standard of cover document. As part of the process it is paramount that agencies qualify for its customers through community expectation assessment, self assessment, risk analysis, establishing response goals and developing a system of measurement of performance; its mission, vision and expected delivery of service.

The Center for Public Safety Excellence (CPSE) defines the standards of cover for a fire department as being those “adopted written policies and procedures that determine the distribution, concentration and reliability of fixed and mobile response forces for fire, emergency medical services, hazardous materials and other forces of technical response”. There have been many attempts to create a standard for the response of firefighters and paramedics without gaining national or even international consensus. Several industry standards have been adopted, namely National Fire Protection Association standard 1710, attempting to create a standard for staffing of fire and medical response apparatus in a community. While many communities have adopted in theory the staffing and response mandates of NFPA 1710, few actually have the ability to completely comply.

The City of Lawrence initiated the self-assessment process for achieving International Accreditation in 2004. Lawrence-Douglas County Fire Medical (LDCFM) is committed to achieving accredited status to further demonstrate the department’s ability to provide superior service. As such, the department is committed to remaining accredited and submitting all required documentation on an annual basis. Three components must be submitted in order to be considered for initial accredited status. These include a

Strategic Plan, a Self Appraisal, and a Standards of Cover (SOC) document. The latter directly states the service levels currently provided.

This accreditation effort has been a collaborative and collective process whereby members of the organization with expert knowledge contributed substantially to its written content. These are the same members that contribute daily to the needs of the organization and the constituents served.

Historically, Lawrence had not used a Standards of Cover document or official statement to guide its operations until 2007. Instead, it has operated under a variety of documents, including a merger plan, operational guidelines, policies and procedures, emergency medical services protocols and verbal requirements from command staff. As a part of the accreditation model, the department worked to determine acceptable levels of service based on the NFPA fire curve models, EMS criteria, and other related factors of response.

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Executive Summary

The Lawrence-Douglas County Fire Medical Department has always been recognized by its peers as a leader in the industry. The community expects and demands the best from all government services and places a tremendous trust and responsibility with its fire medical department. The Department exists as an organization for one purpose – to serve people. The provision of fire and medical services is a core function of local government.

Mission Statement and Core Values



Lawrence-Douglas County Fire Medical

Mission Statement

Committed to Saving and Protecting Lives and Property

Core Values

Compassion and Respect

Community Oriented

Diverse

Professionalism

Teamwork

Leadership

Vision Statement



Lawrence-Douglas County Fire Medical

OUR VISION

We envision that by 2016, Lawrence-Douglas County Fire Medical will remain recognized as an internationally accredited industry leader in emergency services providing the most effective, proficient and efficient fire medical services to our community. We want to be viewed by others as a community oriented emergency service organization which values compassion, respect, diversity, teamwork, leadership and professionalism.

Our workforce planning efforts will ensure quality recruitment and retention of fire and medical staff necessary to deliver the core programs required to effectively serve the communities of Lawrence and Douglas County. With improved comprehensive training programs and through the use of contemporary organizational standards and practices we will insure consistency and success in the delivery of the Lawrence-Douglas County Fire Medical mission.

Embracing advances in technology where appropriate, the efficiency and effectiveness of our operations will continue to improve. Through improved understanding of our supporting service agencies' capabilities, and by continuously improving our partnerships with those agencies, we will maximize the efficiency of resource management in service delivery. We will monitor the condition of our physical assets and infrastructure and make improvements as necessary when resources allow.

We strive to exceed the expectations of our community, and we vow to continue holding one another accountable for carrying out our mission, living our values, and seeing this vision become reality.

February, 2012

The Standards of Cover document defines the level of emergency response resources and deployment strategies that City of Lawrence and Douglas County leaders, department administration and members commit to provide, at a minimum, to all community members.

This document further provides an analysis of the resources, deployment strategies, and operational elements of Lawrence-Douglas County Fire Medical and the community emergencies to which it responds. It establishes response time standards for timely deployment of resources necessary to respond to emergency calls for service in the community. Based on this analysis, this document also offers a number of recommendations and future goals to maintain and improve the department's response cover, thereby maintaining and improving the safety of the community.

Description of Department & Community Served

The Department

Lawrence-Douglas County Fire Medical is an organization that emerged in 1997 as a result of combining the Lawrence Fire Department and the Douglas County Ambulance Service.



The Lawrence Fire Department was first organized in 1859 as "Republic Engine Company No. 1". This volunteer fire company was formed after purchasing a steam engine and hose cart from St. Louis, MO in the winter of 1858. In 1862, this company was disbanded because of a lack of funds from the city due to the Civil War. In 1868, after constant persuasion for better fire protection from local businessmen, the city council created a volunteer fire department deemed the Head Center Hose Company. The initial firehouse, the "old engine room", was a barn at 11th and Vermont. In 1869 the Head Center Hose Company moved to the Market Building that became City Hall at 8th & Vermont. There has been a station has in this location for over 140 years.

In 1915 the Head Center Hose Company became the Lawrence Fire Department, a fully paid department, thus ending the volunteer fire service era in Lawrence.

In the 1950's, the Lawrence Fire Department received an E & J resuscitator from the Sertoma Club of Lawrence and started running "resuscitator calls" in Lawrence when needed, the first venture into the world of Emergency Medical Service (EMS).



Gold Cross Ambulance Service (a private provider) provided medical service to Douglas County until 1974. In 1974, the Douglas County Ambulance Service (DCAS) was established as the first county provided ambulance service providing basic and advanced

life support emergency medical care for citizens in Douglas County. DCAS operated tow to three ambulances out of two stations providing ALS service for the entire county.

Today, Lawrence-Douglas County Fire Medical responds to almost 10,000 alarms annually out of six response stations. The department provides all service missions to the City of Lawrence, University of Kansas, and Haskell Indian Nations University. Emergency Medical Services are provided to all cities, and unincorporated areas within Douglas County. The City of Lawrence has a fire protection rating class from the Insurance Service Office of Two (with one being the highest on a 10- point scale).

Historic Distribution of Resources

The Lawrence Fire Department (LFD) operated with one fire station located at 8th and Vermont until 1928. In 1928 station two was constructed at 19th and Massachusetts to provide coverage to the southern portion of Lawrence. This distribution of resources continued until 1968 when two new stations were constructed, a new station three at 6th and Kasold and a relocated station two at 20th and Haskell. With continued southwest growth and increasing response times a station location study was completed in 1980 which led to the construction of station four at Free State Lane and Lawrence Ave. In 1996, a report prepared by the department titled “1996 Public Safety Report” recommended the relocation of two existing stations (Station 2 and Station 4) and the construction of one station (Station 5) to meet the response time, staffing and deployment issues pertaining to our current ISO class. This plan would eliminate the need to construct and staff two additional stations to meet these standards.

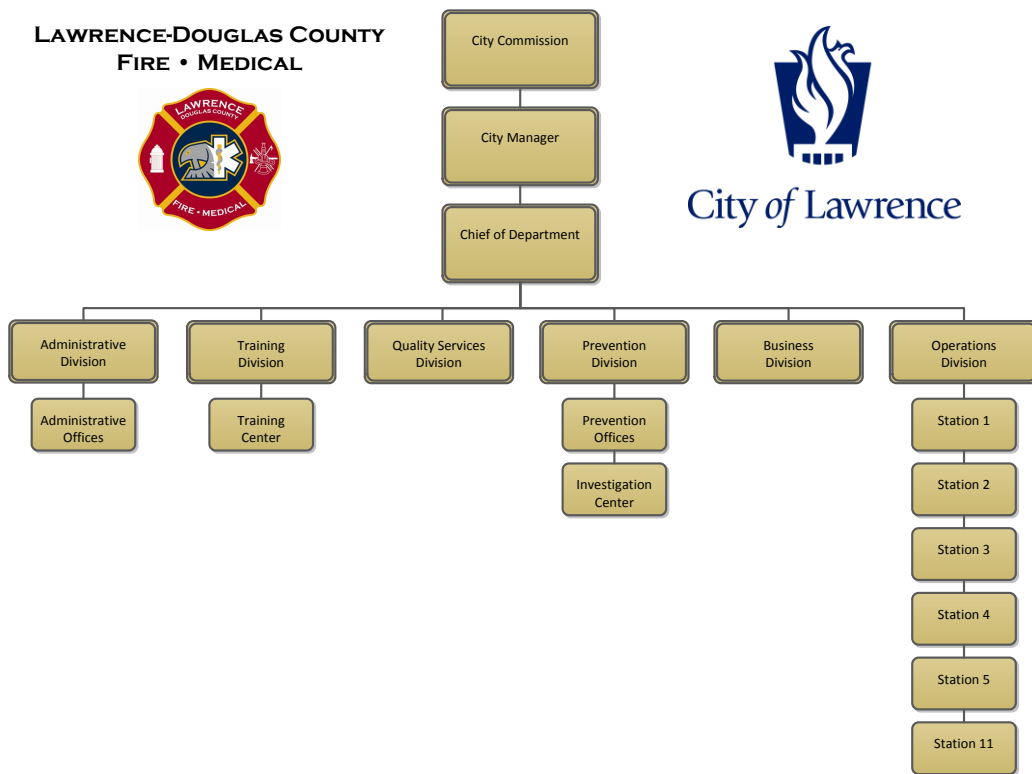
The Douglas County Ambulance Service (DCAS) was organized in 1974 and initially operated from a house near the hospital on Maine Street. They eventually moved into the original number two fire station at 19th and Massachusetts. From this location they served the entire county. In 1983 a second DCAS station was constructed next to Lawrence Memorial Hospital on Maine Street. DCAS operated from these two stations until the merger with the Lawrence Fire Department. With the merger medics received full cross training and would be deployed to four existing fire stations and a new station (station 11) would be established in Baldwin City to reduce response time to southern Douglas County. Due to rising daytime call volumes in the early 2000’s a 12 hour medic unit was assigned

to the original LFD station two at 19th and Massachusetts where the shift commanders already operated out of.

The 1996 station study was adopted and eventually funded relocating station two (for the third time) to the 2100 block of Harper, relocating station four to the 2100 block of Wakarusa, constructing a new station, to numbered station five, at 19th and Stewart and constructing new administrative offices adjacent to station five.

The department currently operates from six stations. As the City’s geographical area continues to grow, staff strives to provide the City Commission with appropriate information regarding the additional resources that will be required to service this continuous growth. The capital improvement plan outlines the addition of new fire stations to our community, as well as the companies and personnel to staff them as the city continues to develop and grow. The goal is to allow the department to maintain an equal level of coverage for all areas of the community.

Organizational Chart – Divisions and Facilities



Current Service Levels

The department is considered by today's standards as a full-service emergency services provider. From the expected to the unexpected, Lawrence-Douglas County Fire Medical provides the community an all-hazards approach to customer service. The department has an authorized strength of 129 full-time uniformed members, 6 FTE part-time (extraboard firefighters) and 6 civilian staff.

The department is a division of the City of Lawrence with approximately 25 percent of its operating budget being provided by Douglas county.

Services are provided from six response stations which are strategically located throughout the community. Relocations of two of the fire stations in 2002 and 2007 along with the construction of a new station in 2006 have provided all Lawrence residents a better level of service. The department has three additional facilities, the administrative offices, (co-located with station 5), the investigations center and the training center which includes classroom and training tower facilities.

Fire Medical Station Locations:

Station No. 1	746 Kentucky St.
Station No. 2	2128 Harper St.
Station No. 3	3708 W. 6 th St.
Station No. 4	2121 Wakarusa Dr.
Station No. 5	1911 Stewart Avenue
Station No. 11	212 Kibbee St., Baldwin City, KS 66006

All operations division personnel operate on a traditional 24-hour shift working a 56 hour workweek. There are three shifts working 24 hour on/off schedule for five days followed by 96 hours off. This system is commonly called the Berkeley schedule. The shifts are identified as X, Y and Z.

Minimum Staffing	
Shift Commander	1
Division Chief	
STATION 1	6
Engine 1	
Captain	1
Engineer	1
Firefighters	2
Medic 1*	
Lieutenant	1
Firefighter	1
STATION 2	6
Quint 2	
Captain	1
Engineer	1
Firefighters	2
Medic 2*	
Lieutenant	1
Firefighter	1
STATION 3	6
Quint 3	
Captain	1
Engineer	1
Firefighters	2
Medic 3*	
Lieutenant	1
Firefighter	1
STATION 4	6
Engine 4	
Captain	1
Engineer	1
Firefighters	2
Medic 4*	
Lieutenant	1
Firefighter	1
STATION 5	9
Truck 5	
Captain	1
Engineer	1
Firefighters	2
Rescue 5	
Lieutenant	1
Engineer	1
Firefighter	1
Medic 5*	
Lieutenant	1
Firefighter	1
STATION 11	2
Medic 11*	
Lieutenant	1
Firefighter	1
TOTAL STAFFING	36

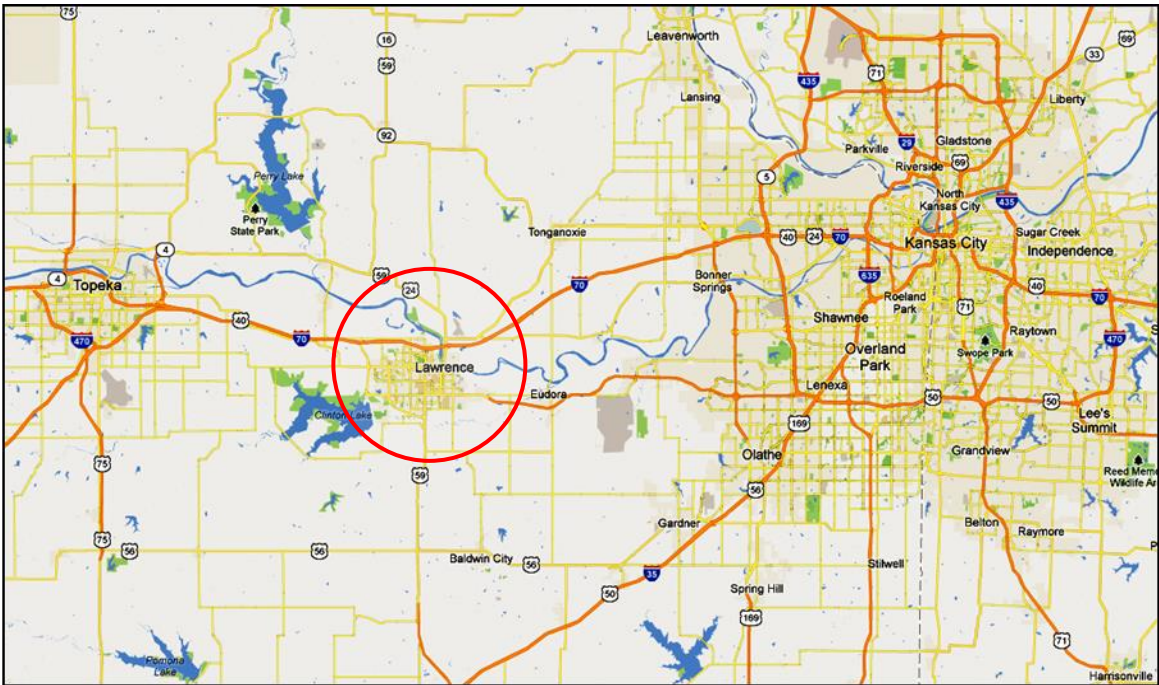
Companies & Minimum Staffing:

The department has established the companies to be staffed daily with a minimum staffing for the duty shift at 36 members. Each Shift has 40 members assigned to allow for vacation, sickness, etc. Each shift also has a varying number of extraboard firefighters to help maintain the minimum staffing number before requiring overtime. The additional personnel assigned to a shift, extraboard firefighters as well as voluntary and mandatory overtime achieve the maintenance of minimum staffing.

* Each medic unit is staffed with one Kansas certified Paramedic and one Emergency Medical Technician-Intermediate (EMT-I).

Community Overview

Lawrence is a diverse and multifaceted city, with a population of approximately 88,727 people, that provides many of the amenities of a large metropolitan area, while still maintaining a strong sense of community. Located in Northeast Kansas, Lawrence is just 30 minutes west of Kansas City, and 20 minutes east of the state capital, Topeka. Lawrence offers a rich and fascinating history, a wide range of exciting cultural experiences, nationally recognized educational institutions, and some of the most unique and enjoyable shopping opportunities in the Midwest.



The Lawrence Convention and Visitors Bureau provides detailed information about Lawrence as a destination.

Lawrence possesses all of the aspects of a friendly, active and culturally diverse community. With the perfect combination of small-town hospitality and big-city

attractions, Lawrence lays claim to its share of national recognition and historical significance.

Lawrence was founded in 1854 by the New England Emigrant Aid Society in an effort to keep the territory free from slavery. It is said that Lawrence is one of the few cities in the U.S. founded strictly for political reasons.

Lawrence boasts one of the most vibrant downtown shopping, dining and entertainment districts in the Midwest. Massachusetts Street, referred to as “Mass” by local residents, has been noted as one of the most beautiful main streets in America.

Lawrence is home to two popular public 18-hole golf courses: Alvamar and Eagle Bend.

Lawrence is also home to two universities: the University of Kansas and Haskell Indian Nations University. Approximately 28,000 students attend KU, which is ranked as one of the nations' most beautiful campuses. Haskell Indian Nations University is the nation's only inter-tribal university for Native Americans, representing more than 150 tribes from all across the country.

Dr. James Naismith, inventor of basketball and KU's only basketball coach with a losing record, is buried in Lawrence where he lived and coached most of his adult life. The KU Jayhawk basketball program is among the best in the country.

The city is located between both the Oregon and the Santa Fe Trails, which run through Lawrence and Douglas County, KS.

Lawrence streets are named after the states, in the order in which they came into the Union, beginning with Delaware. Massachusetts Street was designated the "main" street because Lawrence's founders were from Massachusetts.

Lawrence is the boyhood home of writer and poet Langston Hughes whose novel "Not Without Laughter" is said to be based on his life in Lawrence.

Governance Model

The City of Lawrence was chartered in 1854 and currently is governed by a Commission-Manager form of government in which five Commissioners is elected at large who selects a mayor annually. The City Manager is appointed by the Commission, who in turn appoints department heads, subject to City Commission confirmation. The City Manager has the ultimate approval of all employees and acts as the Chief Executive Officer of the City. The City Manager is responsible for carrying out Commission policies through a professionally trained and experienced staff.

Population Served & Demographics

Lawrence and Douglas County are located in Northeastern Kansas 40 miles west of downtown Kansas City, Missouri, and 28 miles east of downtown Topeka, Kansas. It enjoys direct access to Interstate 70, Kansas Highway 10, US Highway 59, US Highway 40 and is located a short distance from Interstate 435, Interstate 635, and Interstate 35. Lawrence also maintains a Municipal Airport and is 50 miles southeast of Kansas City International Airport.

Douglas County Demographics

Douglas County was organized in 1855 in honor of Stephen A. Douglas, a United States Senator from Illinois and candidate for the presidency in 1860. In 1854 Senator Douglas took a leading part in securing adoption of the "popular sovereignty" principle in the Act organizing the Kansas Territory. This principle allowed settlers of a territory to decide whether to be admitted as a free state or allow slavery.

Population (5th largest county in population of 105 Kansas counties)

112,211	(2011)
99,962	(2000)
81,798	(1990)
25,096	(1900)

Area

456 Square Miles

Population Density per Square Mile (includes all cites)

243

Population Density per Square Mile (unincorporated areas)

26

(Information from Lawrence Chamber of Commerce, 2000 U.S. Census, Kansas Dept. of Labor, and U.S. Dept. of Labor)

City of Lawrence Demographics

Population

88,727 (2011 US Census estimate)

Area

33.56 Square Miles

Population Density per Square Mile

2611

Race

African American	4,078	5.1%
American Indian	2,344	2.9%
Asian	3,030	3.8%
Hispanic or Latino	2,921	3.6%
Other	1,086	1.4%
Two or more races	2,382	3.0%
White	67,122	83.8%

Gender

Male	39,083	49.7%
Female	40,295	50.3%

Median Age

25.3 years

Population Distribution

65 and over	5,755	7.2%
45-64	12,103	15.1
25-44	22,800	28.5
18-24	24,569	30.7
5-17	10,526	13.1
Under 5	4,345	5.4

Housing

Average Household Size	2.3
Average Family Size	2.9
# Owner-Occupied housing units	14,393
# Renter-Occupied Housing Units	16,995
# Vacant Housing Units	1,373

Educational Attainment (over age 25)

9-12, No Diploma	5.1%
High Scholl Diploma	18 %
Some College	21.9%
Associates Degree	4.8%
Bachelor's Degree	26.9%
Graduate Degree	20.8%

Income

Median Family Income	\$51,545
Median Household income	\$34,669
Personal Income per capita	\$19,378

Public Safety Services

Fire Station Locations	5
Police Facilities	2

Educational Institutions

Public Elementary Schools	14
Public Middle Schools	4
Public High Schools	2
Private Schools	9

Colleges/Universities

University of Kansas	
Haskell Indian Nations University	

Navigable Waterways

Kansas River	
Wakarusa River	

Parks and Recreation

Recreation Centers	6
Parks	52
Park acreage	3,494
Public Pools	4
Public Tennis Courts	18
Sports Complexes	3
Trails (miles)	60
Golf Courses	5

Public Utilities in the City of Lawrence

Electric Power - Westar Energy

Water/Sewer - City of Lawrence

Natural Gas - Aquila, Union Gas, Greely Gas

Telephone – Knology Cable, SWB

Cable Television/Internet – Knology, Wicked Broadband, ATT

Reclaimed Water - City of Lawrence

Storm Water Management - City of Lawrence

Solid Waste/Recycling - City of Lawrence

Hospitals

Lawrence Memorial Hospital

Watkins Hospital (KU)

Top 10 Largest Employers

University of Kansas	9,881
Lawrence Public Schools	1,650
Vangent	1,500
City of Lawrence	1,455
Lawrence Memorial Hospital	1,322
Berry Plastics	739
Hallmark Cards, Inc.	525
Amarr Garage Doors Manufacturing	461
Douglas County	435
K-Mart Distribution Center Distribution	320

(Information from Lawrence Chamber of Commerce, 2010 U.S. Census, Kansas Dept. of Labor, and U.S. Dept. of Labor)

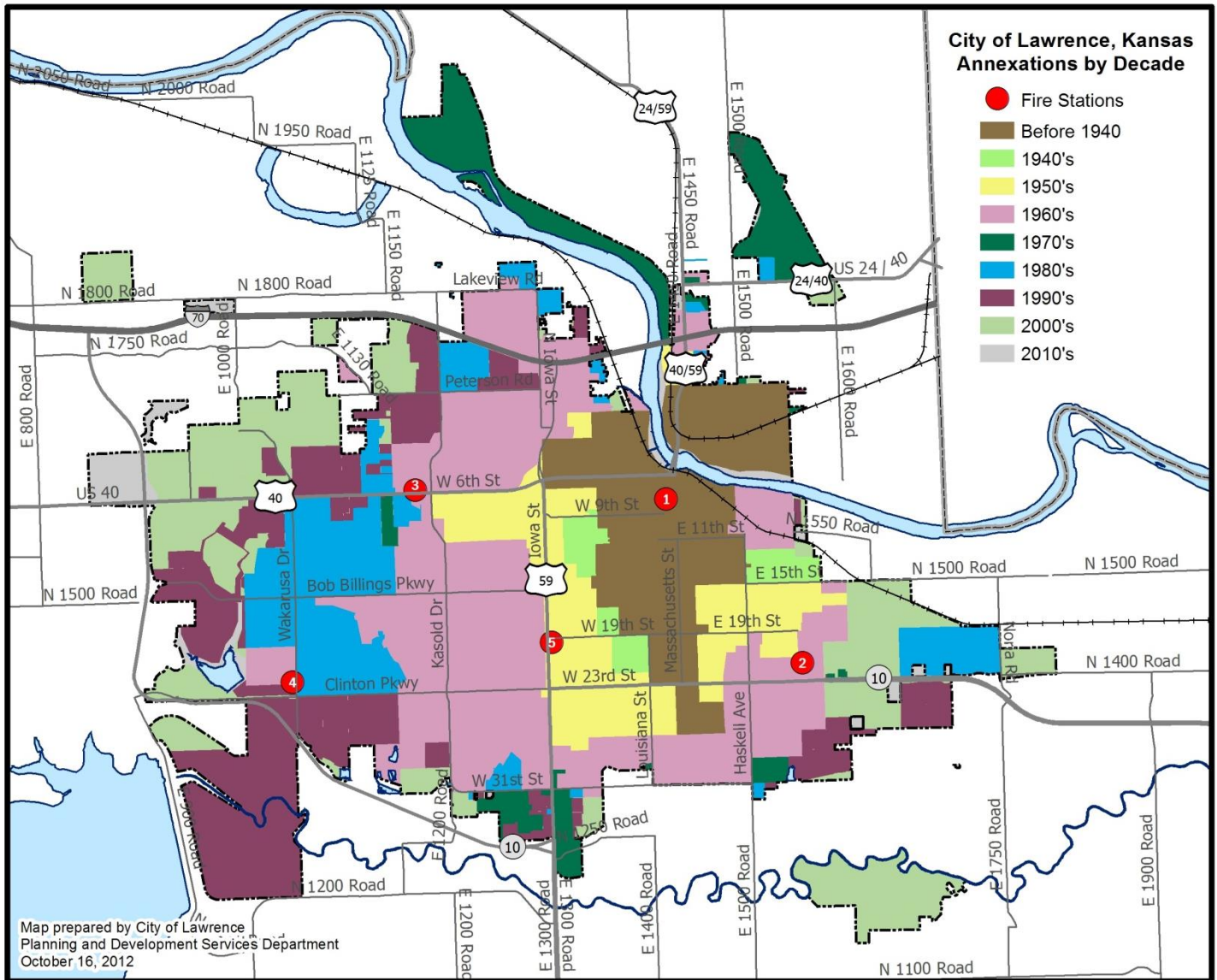
Historical Growth of Community - Population

Since 1980, Lawrence’s population has risen from 52,738 to approximately 88,727 (2011 census estimate) residents, a 68 percent increase. Douglas County’s population during the same time period has risen from 67,640 to 112,211, a 66 percent increase. During the last decade the number of calls per year for fire and EMS service has risen from 8,571 to 9,866 a 15 percent increase. Calls for service in 2012 are expected to exceed 10,000.

Historical Population – Lawrence, KS				
Census	Population	%±	Square Miles	Density
1930	13,726	-----	-----	-----
1940	14,390	4.8%	4.08	3,572
1950	23,351	62.3%	4.73	4,937
1960	32,858	40.7%	8.06	4,077
1970	45,698	39.1%	16.93	2,699
1980	52,738	15.4%	19.51	2,703
1990	65,608	24.4%	22.88	2,867
2000	80,098	22.1%	28.02	2,859
2010	87,643	9.4%	33.56	2,611

Historical Growth of Community - Land Area

As the population historical view illustrated there was a great land expansion starting in the 1960's. The expansion lasted well into the mid to late 2000's and has dropped off considerably, in part due to the downturn of national economy.



Community Risk Assessment

A risk assessment model or tool must use some combination of objective and subjective criteria in order to provide guidance in developing department programs. The program must also produce results that are generally reflective of what the organization believes to be the true risk in the community. The department has used a variety of risk



assessment models since developing a SOC. Originally the department implemented a packaged community risk assessment program from the United States Fire Administration called RHAVE™. An acronym for Risk Hazard and Value Evaluation, RHAVE™ was no longer being supported and the department located an alternate software program.

In 2006 the department implemented VISION™, a web-based software tool, developed by Emergency Reporting in Bellingham, WA, that enables fire and emergency service agencies to analyze and categorize the risks in their communities. The VISION™ software assumes that five factors exist: building (B), life safety (LS), water demand (WD), values (V), and risk range (RR). An Occupancy Vulnerability Assessment Profile (OVAP) was developed through data entered for the occupancy. Vision identified risk levels as maximum, significant, moderate and low. The vision software had two primary drawbacks for the department, first it was yet another database to maintain on top of our core database. Secondly the results did not accurately reflect the risk as department leaders inherently identified.

The department uses Firehouse™ Software as our Records Management System (RMS). Our goal is to have one database for all of our needs, and Firehouse™ has been identified as our core database. Firehouse software vendors have been promising for quite some time a new module that would allow the department to develop criteria and output a score similar to the OVAP score.

After our first accreditation site visit the department developed a risk assessment program called RAPTOR – Risk Analysis Profile & Target Occupancies and Risk. The Risk Analysis Profile as originally envisioned had the risk manager (station officers) responsible for

particular map reference, in collaboration with their crews, complete a single page sheet identifying risk for fire, EMS, special operations and identifying the public education targets. Target Occupancies or Risk – These are significant risk that would be identified community wide and would also show up in each Risk Analysis Profile.

The RAPTOR program as originally envisioned was almost entirely subjective. After feedback from CPSE and others it became clear that any system must have objective criteria as well as subjective components. The overall result is a program that is continually evolving that allows the department to analyze risk from various perspectives.

The department has identified the following as the basic types of risk we should be trying to plan for and analyze:

- Risk of having a call at a particular location fire, EMS or other
- Risk of having a specific type of call no specific location (past experience)
- Fire risk (needed fire flow)
- Risk of occupants not being able to escape fire
- Risk of building collapse under fire
- Risk of firefighters being injured or dying inside a building on fire
- Risk of economic impact to community
- Risk of negative impact on department due to an incident
- Risk of fire spread potential (conflagration or single exposure)
- Risk to firefighters in reaching occupants or fire (inside access = stairs or outside access = aerial)

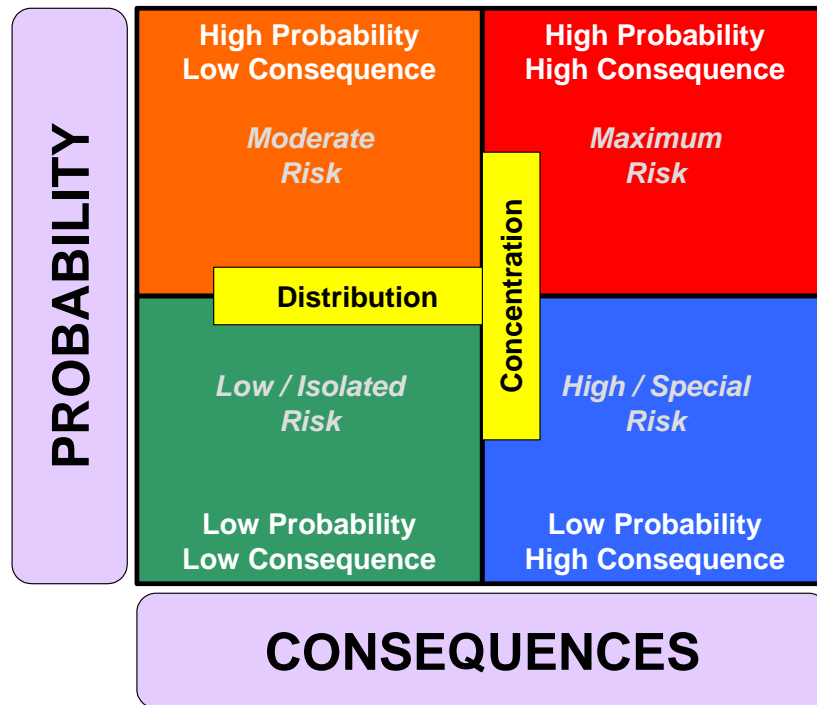


The department has identified the following as some of the best risk reduction strategies:

- Fire protection systems and alerting system
- Internal education and practice to escape or stop risk
- Strong codes and inspections practices
- Firefighter training
- Risk-Benefit training
- Pre-planning & Company familiarization

Risk Assessment Components

The risk based response polygon displayed below provides guidance on a rational strategy for company deployment.

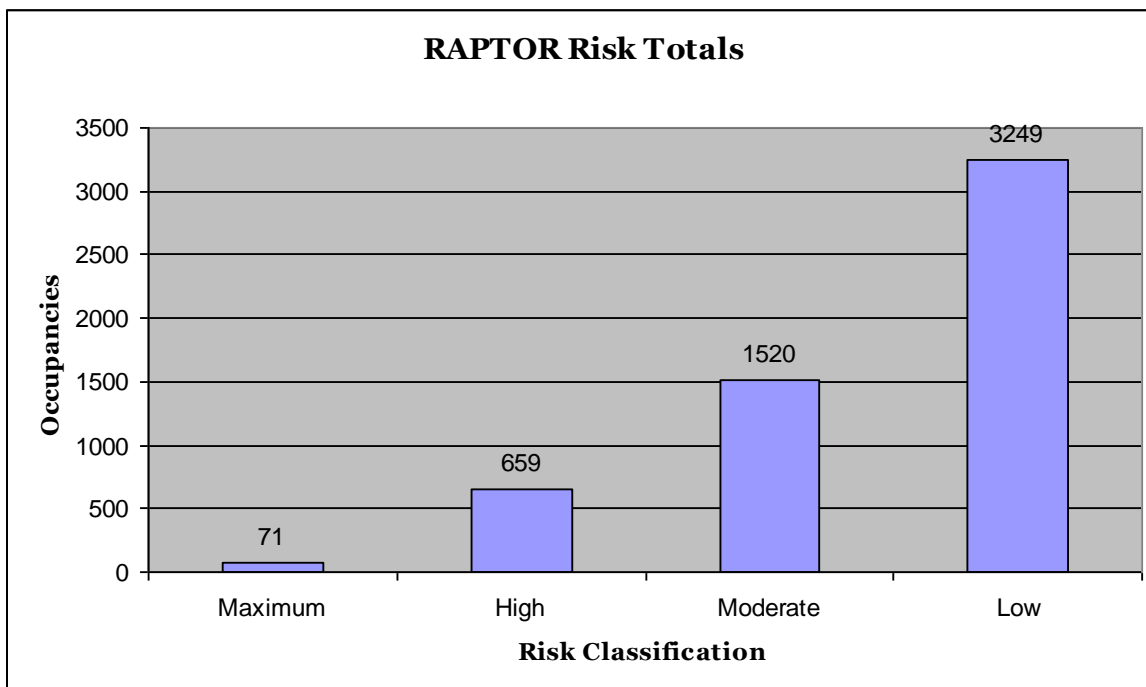


Each quadrant shows the probability of occurrence and the consequences of occurrence for each event included in the risk assessment. The quadrants also help to define the relationship between community requirements and the commitment of resources.

A community risk assessment may include defining the differences between a single-family dwelling, a multiple family dwelling, a large industrial or commercial campus, and a high-rise residential or commercial structure, then assigning each to a different quadrant of the risk based response polygon. The department distributes fire stations and apparatus uniformly throughout the community to provide prompt initial response to all types of incidents. Conversely, the department concentrates resources in high consequence areas for a large-scale response to an unlikely, but highly significant event.

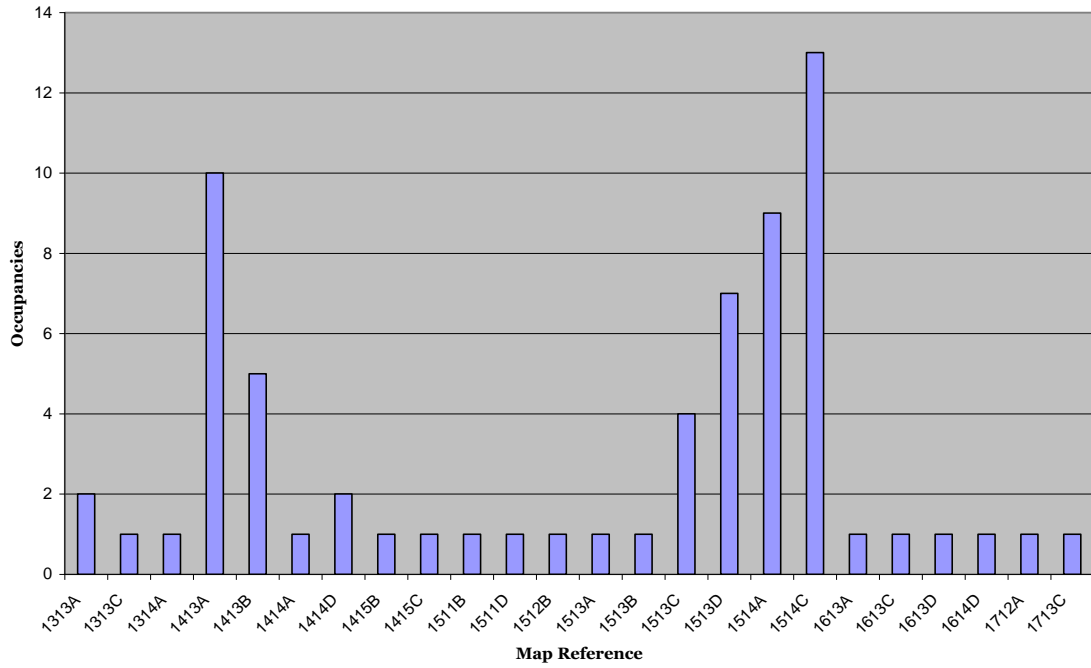
RAPTOR Risk Analysis

The RAPTOR community risk assessment provides occupancy data for urban areas. The table below provides an overall view of the risk assessment of commercial occupancies in the City of Lawrence.

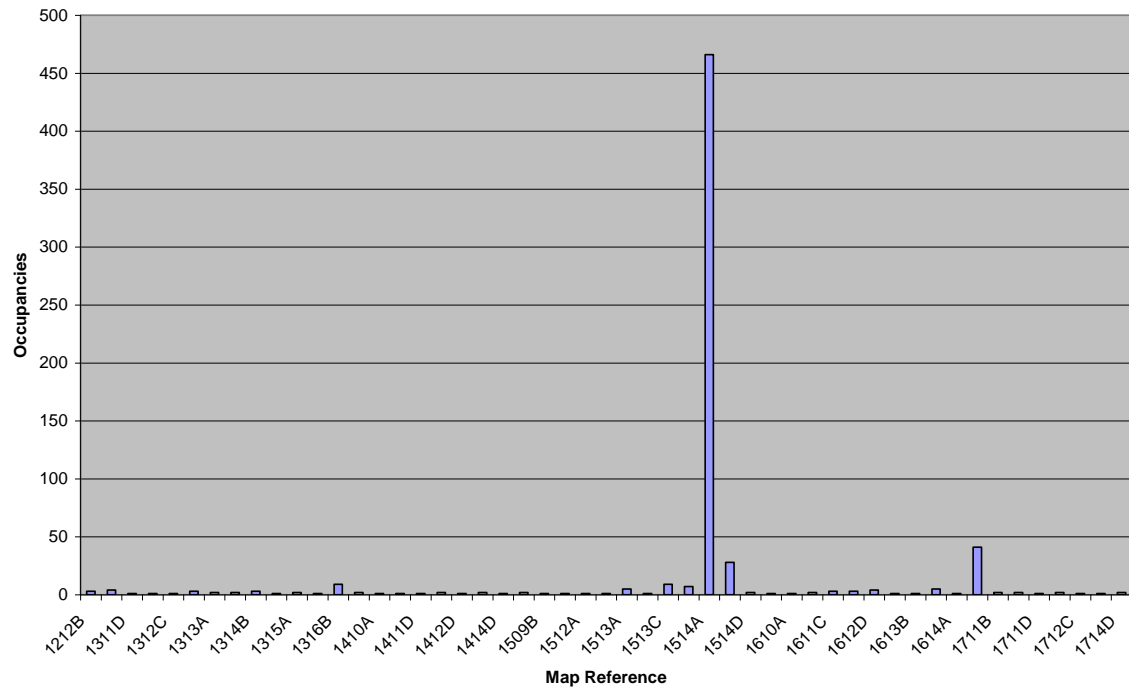


A full listing of Maximum and High risk occupancies are available in the SOC appendix.

RAPTOR Maximum Risk by Map Reference



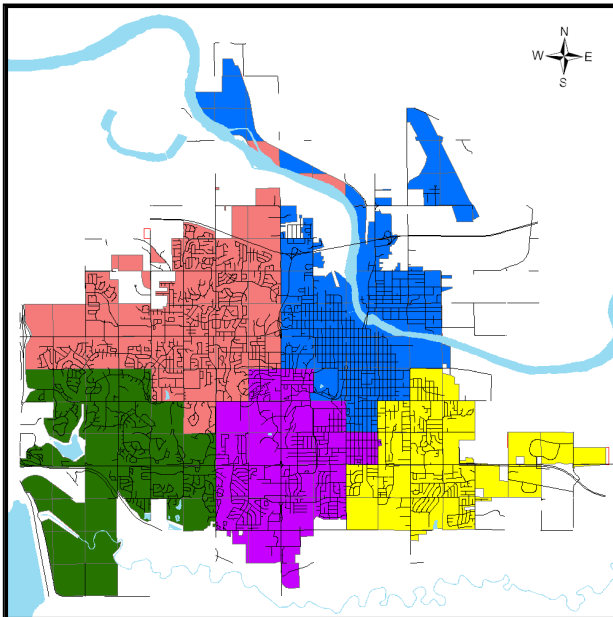
RAPTOR High Risk by Map Reference



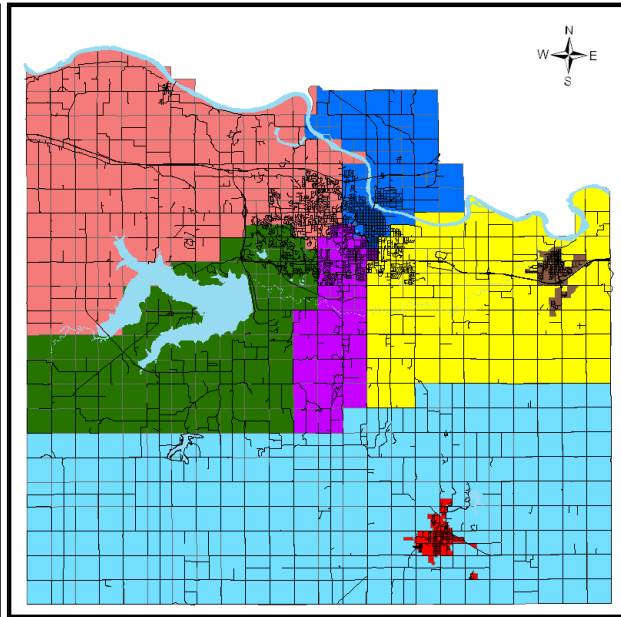
Demand Zones

The department has identified 13 demand zones in which to analyze risk as well as service levels. There are five demand zones within the City of Lawrence and eight demand zones in the County. Each demand zone can be further divided in smaller zones referred to as map references. Map references in outlying demand zones are one square mile. Map references in the urban demand zones have been reduced to one quarter square mile. By combining a group a map references a demand zone can be formed and ultimately analyzed for risk.

Demand Zones City - Urban



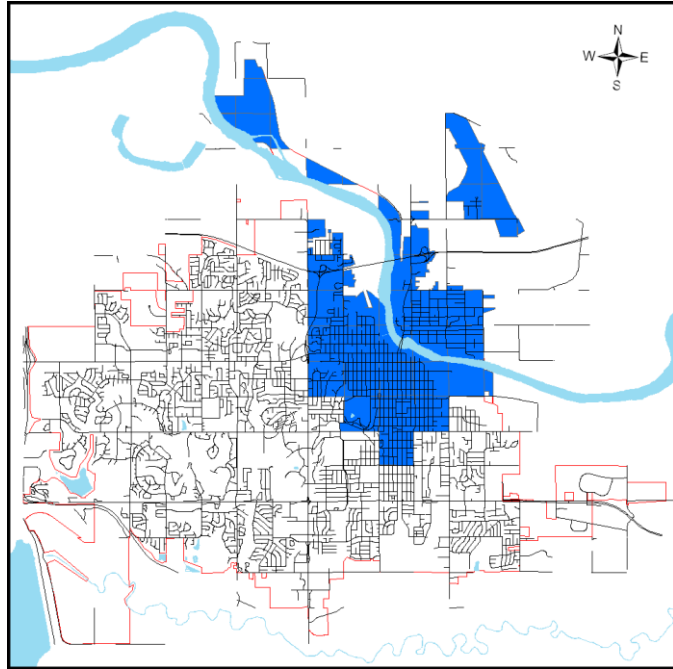
Demand Zones County - Rural



Demand Zone 1

Map Reference(s):

1414-A
1513-A, B, D
514-A, B, C, D
1515-A, B
1613-A, B, C, D
1614-A, B, C, D
1615-A, B, C
1713-A, B, C, D
1714-A, B, C, D
1715-B
1716-A
1814-C, D
1815-A, B, C, D



Profile:

This area includes the neighborhoods of Oread, Old West Lawrence, East Lawrence, North Lawrence and Pinckney. The central business district (Downtown) lie within this zone as does a portion of Kansas University. Downtown is considered the hub of daily activity in our community and transitions into a popular evening destination for entertainment and dining. Many of the commercial buildings are of vintage 19th century ordinary construction and contain mixed occupancies with retail shops on the street level and residential apartments on the upper floors.

There is a mix of owner occupied homes as well as historic residential structures converted to apartments throughout this zone. The Oread, Old West, and Pinckney neighborhoods are predominantly comprised of larger, two story Victorian / Queen Anne homes built from the mid-eighteen hundreds to early nineteen hundreds and reflect the early affluence of these areas. Utilizing balloon framing, these homes can pose a significant firefighting challenge due to their size, construction type, and limited

accessibility. East Lawrence and North Lawrence is comprised largely of smaller one story and one and one half story framed homes indicative of the working class industrial roots of these neighborhoods. Balloon framing is prevalent and bungalow style architecture is predominant. North Lawrence has struggled over the years to due to the many floods that occurred here, with the latest as recent as 1993, it is generally surrounded by farmland.

The downtown commercial district poses one of the greatest risks for this zone. The many commercial building have sporadic fire protection systems, share common walls, and as noted, have mixed occupancies making these buildings a challenge. Structural fires must be stopped or entire city blocks could be threatened with loss.

This district has had a recent boom in mixed use multi-story buildings along New Hampshire street. The newest completed in 2012 is a seven story mixture of commercial, office and residential uses located at 9th & New Hampshire. There are currently pans to construct two new multi-story buildings at the intersection of 9th & New Hampshire one would be hotel/retail building (architect rendering at right) and the other an apartment/office building



This area is comprised mainly of residential streets. Massachusetts Street is the primary thoroughfare for this zone. In the downtown area, the street is two driving lanes wide with diagonal parking on both sides. This street is heavily congested at many times of the day and evening and the department typically travels streets to the east and west of Massachusetts to avoid this area.

The Lawrence Municipal Airport, opened in 1929, is located northeast of the core of Lawrence, in Grant Township. Like many suburban airports it is located near the city but is not fully encompassed by the city limits. The airport has a terminal and several hanger buildings for storage and maintenance of aircraft.

Two railroads transverse this zone; the Union Pacific (UP) located north of the Kansas River and the Burlington Northern Santa Fe (BNSF) located south of the Kansas River.

Both railroads have main rail lines that generally travel east and west and both have spur tracks and rail switching yards. The BNSF track is also used by Amtrak on their Southwest Chief route which has a stop at East 7th and New Jersey streets in east Lawrence. Both railroads maintain numerous controlled and uncontrolled intersections throughout the City of Lawrence and Douglas County. There is significant rail traffic, especially on the UP track, with significant quantities of consumer goods, coal, and hazardous material being transported. Both railroads have high speed and low speed service through the City and County.

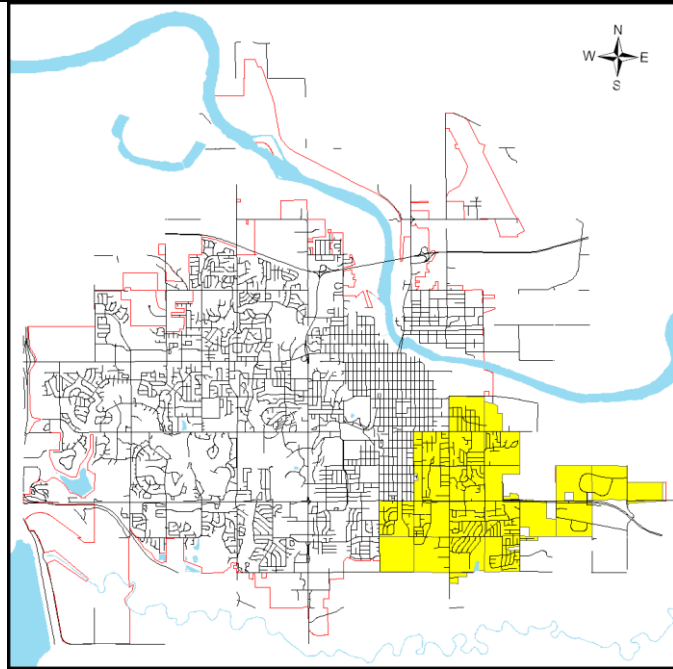
This area has quick access to US Highway 24, US Highway 40, US Highway 59 and Interstate 70. The US highway routes provide two lane services from the Kansas City and Topeka metropolitan areas to points in the eastern quarter and northeast quadrant of Kansas. Interstate 70 is a multi-lane highway that carries a significant amount of interstate traffic through the heart of Kansas. These routes are the primary routes for transportation and distribution of substantial quantities of consumer goods and hazardous material.

A notable risk within this zone is the Kansas River, also known as the Kaw River. The Kansas River flows west to east along the northeast boundary of the City and divides Lawrence proper from North Lawrence. The levee system associated with the river provides walking, biking and running surfaces with numerous off-shoots for mountain biking and hiking. There are three City parks along the river that provide recreational access to the river. A key feature of the river is a low head dam located below the Kansas River Bridge at West 6th and Massachusetts Street. This dam provides flow to a new reconstructed private hydro-electric plant and is a popular fishing destination at times.

Demand Zone 2

Map Reference(s):

1215-A
1314-A, B, C, D
1315-A, B, C, D
1316-A, B, C, D
1414-B, D
1415-A, B, C, D
1416-D
1417-C, D
1515-C, D



Profile:

This area represents eastern and southeastern expansion and growth of the City beginning in the early 1960's to present. It is predominantly residential in nature with a mix of commercial, light industry, and Haskell Indian Nations University. This area includes the neighborhoods of Breezedale, Prairie Park, High Chaparral, East Hills and Park Hill. These neighborhoods are largely owner-occupied, platform framing over slab, residences. As the City continues to grow, vacant areas within these neighborhoods are being developed with wood-frame duplexes and medium to large apartment complexes. This area also contains larger mobile home parks. Commercial development within this area lines East 23rd street, Haskell Avenue south from east 19th street, and Delaware Street.

East Hills Business Park, established in 1987, is a City hosted, light industrial park located at the eastern edge of the City. Buildings within the park are large, tilt-up concrete over slab, structures. Two of these businesses located in the business park are in the top 10 for employment numbers for the city. South of the business park is the

Douglas County Jail, a large correctional facility.

Haskell Indian Nations University (HINU) is a federally funded University offering free tuition to members of registered Native American tribes in the United States. Typical enrollment is approximately 1000, representing 150 tribes and all 50 states.

Also located in this zone are the Douglas County Fairgrounds and the former site of Farmland Industries. The fairgrounds, located north of East 23rd street on Harper Street, is a popular destination throughout the year as a host of frequent canine and equine events; a large, annual swap meet in the spring; and a large County Fair in August. The fairgrounds also border the site of Farmland Industries. This now defunct facility was a large producer of fertilizer, predominantly ammonium nitrate. It is currently being readied for future development by the City.

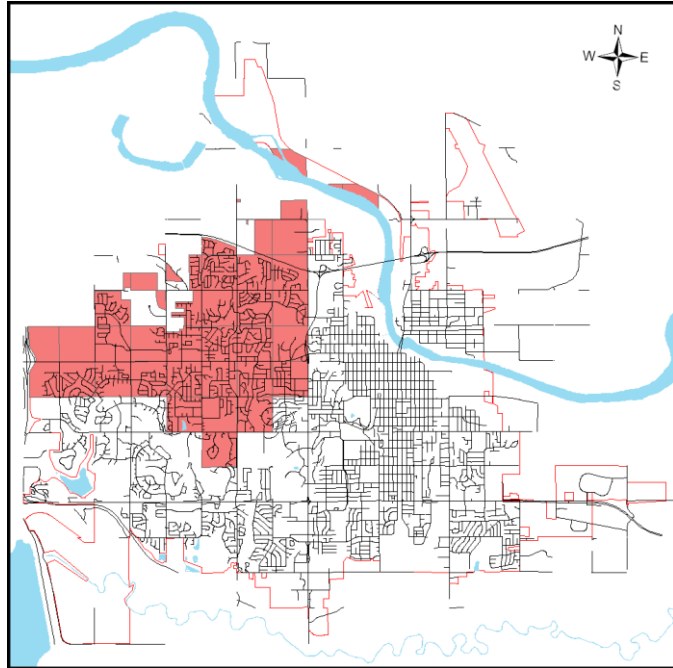
The far eastern side of the City, which includes the East Hills Business Park, lies within a regional development project known as the K-10 Corridor. This corridor lies along the route of Kansas Highway 10 (K-10), a four lane limited access highway, which runs west from Interstate 435 in Johnson County to Lawrence. Kansas Highway 10 enters the City and becomes East 23rd street. Because of the high speed associated with this highway, numerous accidents occur due to poor speed controls and highway urban interface. Located at the transition of K-10 and East 23rd street is O'Connell Road. O'Connell Road has become a primary residential artery extending south from K-10 to the City limits and provides access to the east side of Prairie Park neighborhood and the Douglas County Jail. Future transportation expansion includes completing the South Lawrence Traffic way and providing a link from K-10 to US Highway 59.

All occupancies within the East Hills Business Park meet protection requirements as established by City code. Of note are API Foils and Prosoco. Due to the use and or production of hazardous material by these companies, their respective structures utilize state-of-the-art containment and suppression systems including but not limited to high density sprinkler heads; vapor ventilation; external containment with foam system; and blast walls.

Demand Zone 3

Map Reference(s):

- 1411-B
- 1509-A, B
- 1510-A, B
- 1511-A, B, C, D
- 1512-A, B, C
- 1609-A, B, C, D
- 1610-A, B, C, D
- 1611-A, B, C, D
- 1612-A, B, C, D
- 1710-C, D
- 1711-A, B, C, D
- 1712-A, B, C, D
- 1812-C, D



Profile:

This area represents growth and expansion of the City to the northwest from the 1950's to present. Neighborhoods within this area include Perry Park, Quail Run, Sunset Hills, and portions of West Lawrence. Homes within this zone are predominantly larger, two story, platform wood frame over basement construction. Areas of the zone that border the Kansas University or are located in newer western areas have very large wood frame apartment complexes. This area also is home to the Lawrence Country Club with its private 18 hole golf course and the Alvamar Orchards public 9 hole golf course. Homes bordering these courses are generally larger and more expensive. West 6th street, also known as US 40 Highway, is a primary east/west artery and is commercially developed its entire length. Additional commercial and office park development extends south of West 6th street along Wakarusa Drive.

The northern boundary of this area contains a large industrial complex defined by the

intersection of North Iowa Street and Lakeview Road. Structures within this area range from very large clear span steel to tilt-up concrete. Occupancies include a K-Mart Distribution Center; Schlumberger oil well cable; Heinz Pet Food; and Berry Plastics, manufacturer of plastic dinner ware. These occupancies are covered by full fire protection systems. This area has wide two lane roads and handles semi traffic in great volumes. A railroad spurs cuts through this area for delivery to the industrial complexes located on the south side of Lakeview Road.

The greatest area of growth for Lawrence is currently targeted for this area. A new 1000 unit apartment complex is planned along with developing commercial areas. The city and Kansas University are currently in serious negotiations to develop a new track stadium, softball complex, large recreation center and amphitheatre in the far northwest portion of this zone.

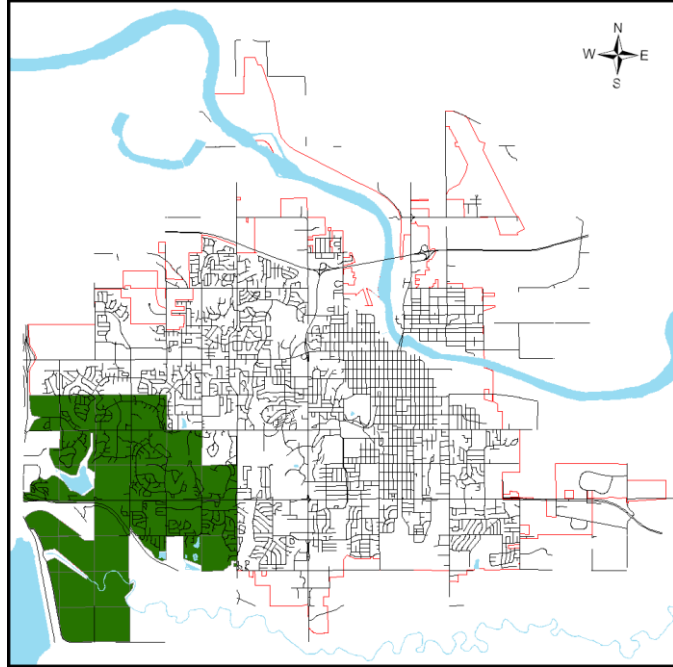
The primary arteries that bisect the zone include West 6th Street (US Highway 40) ; Iowa Street and McDonald Drive which provide access to Interstate 70 to the north and US Highway 59 to the south; Peterson Road; Kasold Drive; and Wakarusa Drive. Large trucks can access Interstate 70 from two directions, with access gates on McDonald Drive and at the intersection of US Highway 40 and Kansas Highway 10, thereby reducing the demand on the access routes. Congestion does become an issue along each of these arteries during peak morning and evening traffic periods in which there are substantial traffic in-flow/out-flow. Noon time traffic is moderate to heavy and is impacted by Free State High School.

The greatest risk lies in the northern industrial park with a concentration of occupancies that have significant fire loading. Access to this area and to the commercial structures along West 6th Street and along Wakarusa Drive is good and does not present notable problems. Additional risks present are the numerous assisted living and nursing home occupancies. These occupancies tend to be large multi-story wood frame structures with large numbers of elderly and or incapacitated residents. The occupancies also have higher EMS call volumes.

Demand Zone 4

Map Reference(s):

1209-A, B, D
1210-A, C
1309-A, B, C, D
1310 -A, B, C, D
1311-A, B, C, D
1409-A, B, C, D
1410-A, B, C, D
1411-A, C, D
1509-C, D
1510-C, D



Profile:

This area is best described as residential in nature and represents west and southwest growth and expansion of the City. With the exception of a small area immediately west and adjacent to Kasold Drive, this area was constructed 1990 to the present. Large land segments have been dedicated to recreational pursuits. The Alvamar Country Club maintains two 18 hole golf courses, one public and one private. Homes adjacent to the golf courses and located within the Alvamar and Lake Alvamar sub-divisions are large and expensive. There are large multifamily apartments complexes located on the north-western and southern sides of this zone. Construction within this zone is predominantly platform wood frame over slab or basement. Wakarusa Drive hosts commercial development and a medium sized commercial park, Oread West Research, located at the intersection of Wakarusa Drive and Bob Billings Parkway.

The extreme southwest corner of this zone includes Corps of Engineers land that the city annexed for the purpose of recreation. It is comprised primarily of the Eagle Bend 18 hole golf course, YSI sports complex (baseball, football, kickball and soccer) and the

Speicher baseball/softball complex. The City has constructed a wide concrete trail through this zone that provides access to the western recreational complexes and a scenic route for cycling, running, and walking. Clinton Lake lies adjacent to the western boundary, providing excellent aquatic and watercraft recreation and hiking and cycling trails with easy access from the City.

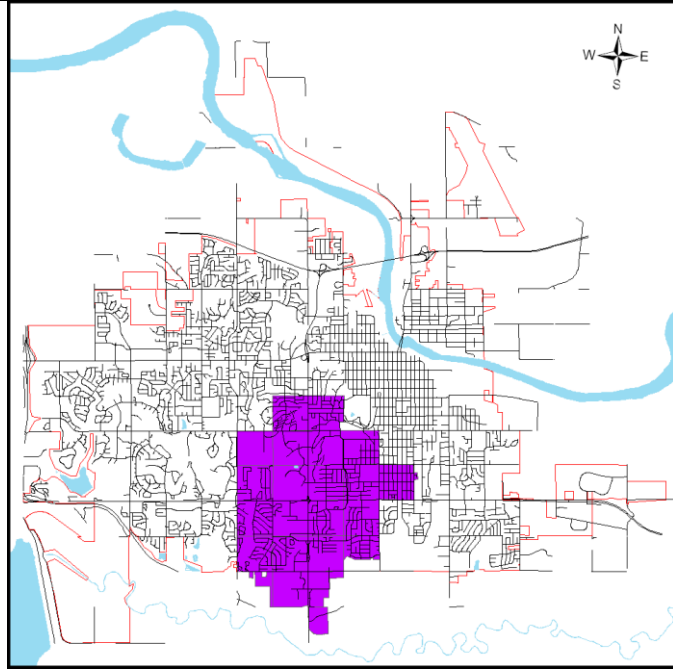
The majority of roads in this area would be classified as residential. The current south and west borders of this zone is the South Lawrence traffic way. This trafficway is the western most leg of Kansas Highway 10 and is commonly referred to as the “bypass”. When completed, it will be a four lane, limited access road. Kasold Drive and Wakarusa Drive are the primary roads that shuttle residential traffic to Clinton Parkway and West 6th Street which in turn provide access to the bypass and Interstate 70. These roads may become moderately congested during peak traffic periods. Bob Billings Parkway is the primary feeder into the western most areas of the City.

This zone hosts a substantial number of very large apartment complexes. These complexes are typically three stories, platform wood framing over slab, with high life hazard and significant exposure problems. Access into several of the complexes is limited with narrow streets and tight radius turns producing access issues for large apparatus. In addition, this is in area of limited wildland/urban interface and some steep topography. Because of terrain and this zones southwest location, radio communication can be an issue in some areas. Water rescue is also a risk. This zone is adjacent to Clinton Lake and contains Lake Alvamar. Topography has produced numerous deep valleys with significant run off and water flow that is directed to the lakes and the Wakarusa River. Many of these valleys and water ways lie adjacent to or pass through development and are easily accessed by residents.

Demand Zone 5

Map Reference(s):

1212-A, B, D
1213-A, C
1312-A, B, C, D
1313-A, B, C, D
1412-A, B, C, D
1413-A, B, C, D
1414-C
1512-D
1513-C



Profile:

This area runs from the University of Kansas core to the south Iowa retail district. It has a higher population density representative of growth around the University of Kansas due to residential dorms located in this district. Areas south of Clinton Parkway represent newer growth and development from the mid-1970's to present while areas south of West 23rd Street represent 1960 to the present. All construction types are represented in this area from balloon and platform framed residential structures to non-combustible high/mid rise structures. At the very heart of this zone is the University of Kansas with a student population of 28,000. South Iowa Street bisects this zone and contains significant commercial and retail development and rivals the downtown area as a shopping destination with retailers such as JC Penny, Target, Wal-Mart, Kohl's, and Home Depot. There are also numerous restaurants, sports bars and a large multiplex theater. This zone hosts the largest number of apartment complexes and contains one of the largest mobile home communities in the City.

West 23rd Street and Iowa Street intersect in this zone. Both routes are four lanes wide

and both are heavily developed with commercial and retail development. West 23rd Street is the west extension of East 23rd Street after Massachusetts Street and carries westbound traffic from Kansas Highway 10 into the core of the City. Iowa Street runs north to south and is the city leg of US Highway 59 through Lawrence. US Highway 59 was reconstructed over the last few years to interstate standards and opened in October 2012 to be a major route out of south Lawrence connecting to I-35. Due to the convergence of K-10 and US 59 there is a significant amount of heavy truck traffic through this zone. In addition, population density, commercial and retail development, and the University Kansas, create extremely high volumes of traffic and congestion throughout this zone.

Demand Zone DG1

Map Reference(s):

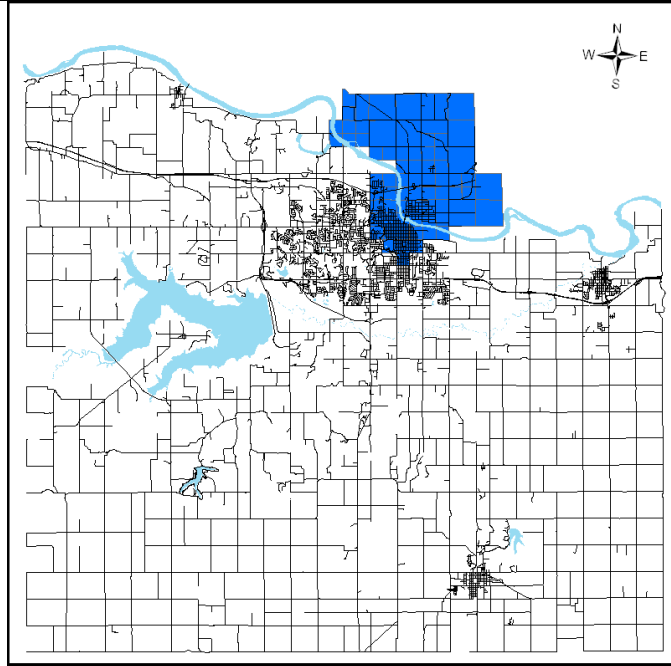
1615 - 1616

1714 - 1716

1813 - 1816

1912 - 1916

2011 - 2016



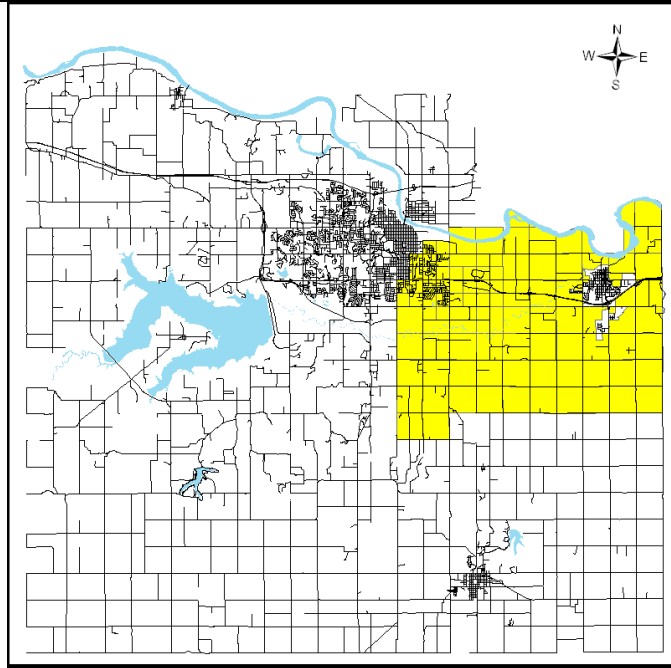
Profile:

This zone is best described as rural in nature. This zone is north of the city of Lawrence and is commonly referred to as Grant Township. Roads in this area generally are located one mile apart and follow a common grid pattern. Principal Roads – Interstate 70, US Highway 24-40 and US Highway 24-59 as well as a few County roads, allow faster travel throughout the zone., The bulk of the roads are gravel with a few being identified as minimum maintenance and commonly identified as dirt roads and impassable except in the best conditions. Kansas River flows through this zone. This zone surrounds Lawrence municipal airport. Responses to and along Interstate 70 have extended travel times due to this highway being six lanes with restricted access and median barriers. Responding units frequently must respond to a service area several miles east of the county line, turn around and respond back to a scene located across the barriers.

Demand Zone DG2

Map Reference(s):

0814 – 0815
0914 - 0923
1014 – 1023
1114 – 1123
1214 - 1223
1316 – 1323
1416 - 1423
1515 - 1523
1618 - 1619
1622 - 1623



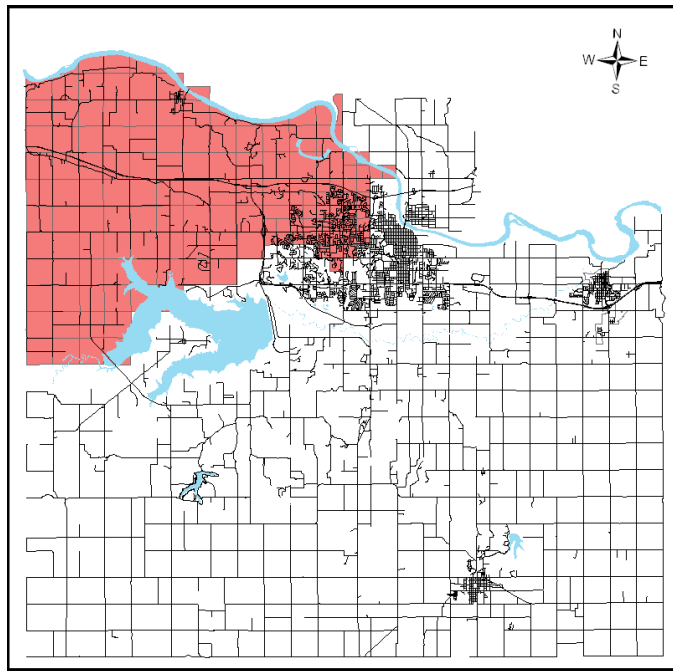
Profile:

This zone is best described as rural in nature. This zone is east of Lawrence and surrounds the area outside of Eudora. Roads in this area generally are located one mile apart and follow a common grid pattern. Principal Roads – Interstate 70, Kansas Highway 10, County Road 438 (N1800), County Road 442 (N1600), County Road 1023 (E175/E250), County Road 1029 (E600), allows faster travel throughout the zone. The bulk of the roads are gravel with a few being identified as minimum maintenance and commonly identified as dirt roads and impassable except in the best conditions. The Kansas River is on the north border of this zone.

Demand Zone DG3

Map Reference(s):

- 1100 – 1103
- 1200 – 1203
- 1300 – 1305
- 1400 – 1407
- 1500 – 1509
- 1600 – 1611
- 1700 – 1711
- 1800 – 1812
- 1900 – 1911
- 2000 – 2010
- 2100 – 2106
- 2202 - 2205



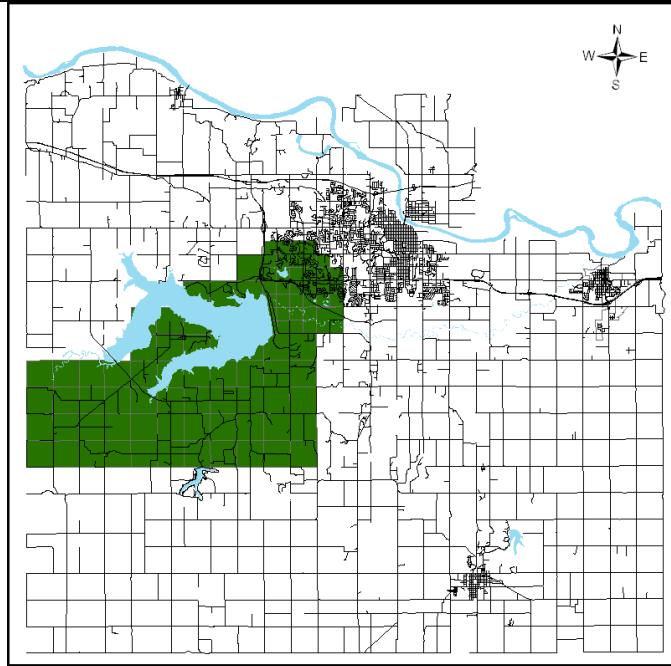
Profile:

This zone is best described as rural in nature. This zone is west of the city of Lawrence and contains the city of Lecompton with a 2010 population of 625; the zone extends to the Shawnee County line. Roads in this area generally are located one mile apart and follow a common grid pattern. Kansas Highway 10 and US Highway 40, as well as a few County roads, allow faster travel throughout the zone. Interstate 70 travels through this zone however, its limited access provides no faster travel for areas within the County except on the Interstate proper. The bulk of the roads are gravel with a few being identified as minimum maintenance and commonly identified as dirt roads and impassable except in the best conditions. Responses to and along Interstate 70 have extended travel times due to this highway being six lanes with restricted access and median barriers. Responding units frequently must respond to a service area at the western county line, turn around and respond back to a scene located across the barriers. The Kansas River borders the northern edge of this zone. Clinton state park and lake is the southwest border of this zone.

Demand Zone DG4

Map Reference(s):

0700 – 0710
0800 – 0810
0900 – 0910
1000 – 1010
1104 – 1110
1204 – 1211
1306 – 1311
1408 – 1410



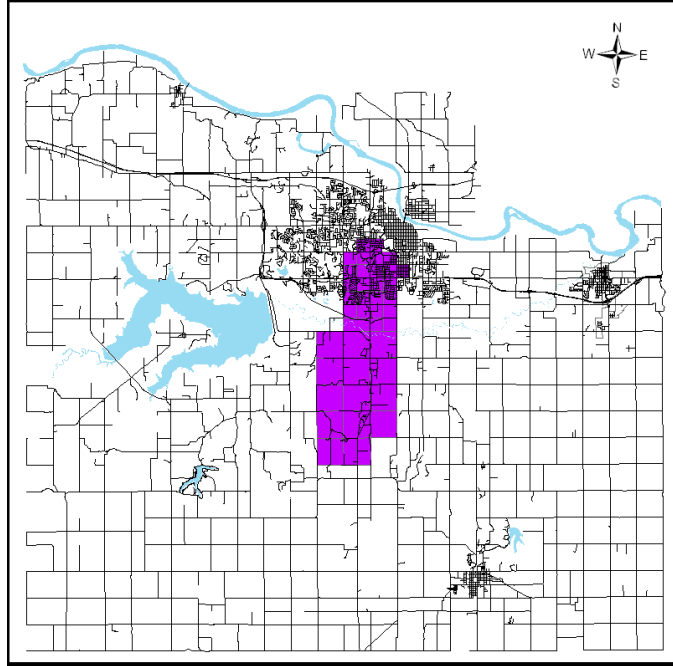
Profile:

This zone is best described as rural in nature. This zone is west of the city of Lawrence and borders the southern part of Clinton lake area and west to Shawnee county line. Roads in this area generally are located one mile apart and follow a common grid pattern. Kansas Highway 10, as well as a few County roads, allows faster travel throughout the zone. The bulk of the roads are gravel with a few being identified as minimum maintenance and commonly identified as dirt roads and impassable except in the best conditions. The majority of Clinton Lake is also located in this zone. The lake provides full recreation for the residents as well as travelers to the area.

Demand Zone DG5

Map Reference(s):

0711 – 0712
0811 – 0813
0911 – 0913
1011 – 1013
1111 – 1113
1212 - 1213



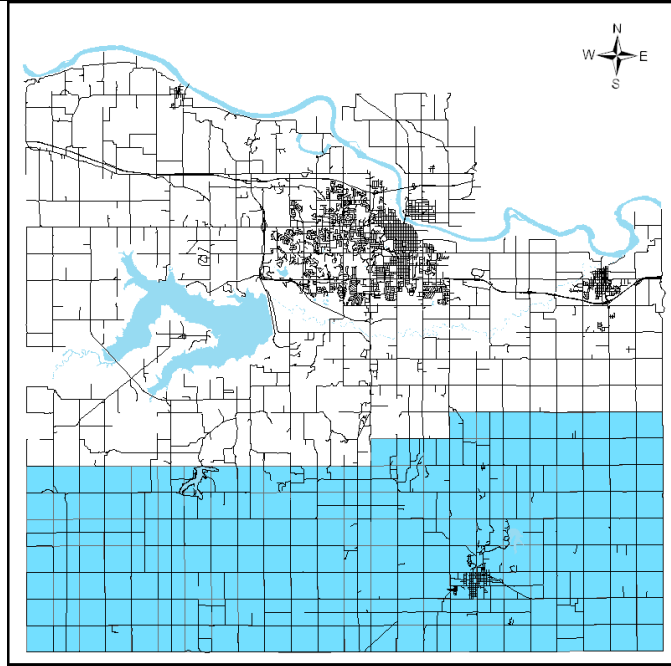
Profile:

This zone is best described as rural in nature. This zone is directly south of Lawrence. Roads in this area generally are located one mile apart and follow a common grid pattern. US 59 highway as well as a few County roads allow faster travel throughout the zone. US 59 is the primary entrance and exit for the south side of the City of Lawrence and thus heavily traveled. A new limited access highway 59 east of the present highway was completed in October of 2012. The bulk of county roads are gravel with a few being identified as minimum maintenance and commonly identified as dirt roads and impassable except in the best conditions.

Demand Zone 11

Map Reference(s):

0000 – 0023
0100 – 0123
0200 – 0223
0300 – 0323
0400 – 0423
0500 – 0523
0600 – 0623
0713 – 0723
0816 – 0823



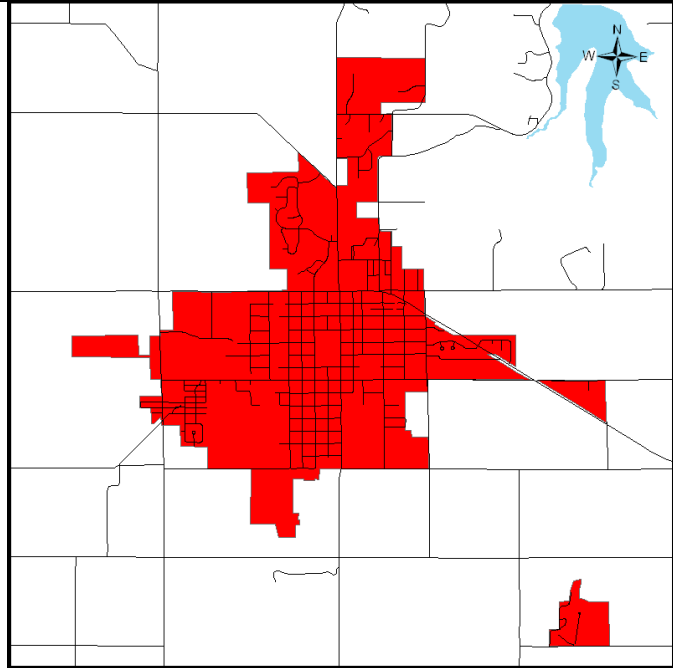
Profile:

This zone is best described as rural in nature. This zone is in the southern most area of the county with east border Johnson County west Osage and south Franklin. Roads in this area generally are located one mile apart and follow a common grid pattern. US Highway 56 and US Highway 59, as well as a few County roads, allow faster travel throughout the zone. The bulk of the roads are gravel, with a few being identified as minimum maintenance and commonly identified as dirt roads and impassable except in the best conditions. US 59 was recently re-built as a limited access highway to the east of existing US 59 and was opened to traffic in October 2012.

Demand Zone BC

Map Reference(s):

0116-A, B
0117 – A, B
0118-C
0215-B, D
0216 –A, B, C, D
0217-A, B, C, D
0218-A, C
0316-B, D
0317-A, B, C, D
0417-C, D



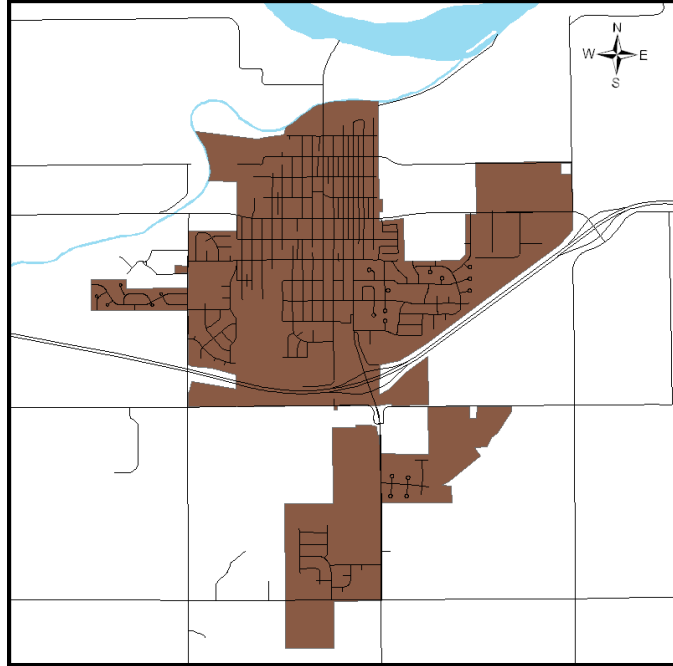
Profile:

This area comprises the City of Baldwin, located in southern Douglas County, with a 2010 population of approximately 4,515. There is some industry scattered throughout the community with no central hub. US Highway 56 is the most heavily traveled road and generally divides Baldwin north and south; commercial properties continue to grow on both sides of this highway. The City is primarily residential in nature with most being one and two family dwellings. Baldwin is home to Baker University, a private college with a student population of over 900. The city is steadily growing with the current growth area located north of US Highway 56. Roads in this zone are residential and generally pose no issues for emergency response. Principal Roads: US Highway 56, County Road 1055.

Demand Zone EC

Map Reference(s):

- 1221-A, B, C, D
- 1222-A, B, C, D
- 1320-A, B, C, D
- 1321-A, B, C, D
- 1322-A, B, C, D
- 1421-A, B, C, D
- 1422 – A, C



Profile:

This area comprises the City of Eudora, located in eastern Douglas County with a 2010 population of approximately 6,136. There is some industry located primarily along Kansas Highway 10. There are two commercial areas. The central business district is comprised of business located along Main Street. Church Street, the main access point from Kansas Highway 10, also has a cluster of business located near the intersection of highway. The remainder of the city is residential in nature with most being one and two family dwellings. The city is experiencing good growth and is primarily expanding on either side of the K-10 Corridor and is primarily expanding south of the highway. Roads in this zone are residential and generally pose no issues for emergency response. The Kansas River is at the north and Wakarusa river at the west edge of the city.

Non-Fire Risk Assessment

This section contains an analysis of the various non-fire related risks considered within Lawrence-Douglas County Fire Medical's response area. As part of the analysis, historical and statistical data is used in order to determine trends based on type and location of the non-fire emergency. Additional parameters utilized are natural barriers or locations for risk potential, mobility of risks, and socio-economic factors that might contribute to the non-fire risk within the city, economic impact factors if applicable, and the likelihood for a non-fire incident occurring.

While much analysis has been conducted based on the fire risk potential within the City of Lawrence, the non-fire risks, although somewhat identified, have not previously been given due consideration. The purpose of this analysis is to better analyze those identified risks in relevance to emergency response and mitigation.

Non-fire risks exist in all jurisdictions. Subdivisions of these risks would include: health, natural disaster, transportation and security.

The identification of some standardized non-fire hazards lead to an assessment of that risk factor as they pertain primarily to the City of Lawrence, as well as the impact on our emergency services. The assessment of each hazard as listed took into consideration the likelihood of the event, the impact on the city itself, and the impact on the department.

Emergency Medical Services (EMS)

Risk – High

The department has identified the risk level of emergency medical services as high. Calls for EMS continue to be the dominant emergency type within the City and County. Medical responses continue to account for approximately 75% of all annual emergency responses managed by the department. The department provides advanced life support services utilizing paramedics countywide.

Douglas County and the City of Lawrence have identified the department as the best agency available to provide this service due to the overlapping needs of fire, rescue, EMS

response time, personnel staffing, certifications, and equipment deployment. The department provides six primary and five secondary Advanced Life Support (ALS) ambulances. Each primary unit is staffed by one Paramedic and one Emergency Medical Technician – Intermediate (EMT-I).



EMS includes first response, rescue, treatment, transportation and reporting for medical emergencies to approximately 7000 calls per year within the City of Lawrence and Douglas County. Medical supervision is provided on shift by a Shift Commander as well as medical direction provided by the department's Medical Director.

The department annually provides over a hundred medical stand-bys for various events. The University of Kansas has thousands of spectators for sporting events and requirements are in place for medical stand-by's.

Severe Thunderstorm

Risk - High

The department has identified the risk of severe thunderstorms as high. Climate conditions that create the severe thunderstorms exist mostly in the spring and summer months. However, there remains a potential for storms year round. In Kansas, severe thunderstorms frequently occur in the late afternoon or evening.



Severe thunderstorms consist of high winds, lightening, some localized flooding, and at times, hail. Fallen trees and localized flooding impact mobility in and around the City and have an impact for emergency responses. Downed power lines create an interruption in power supply, activation of alarms and an electrical hazard for response units.

Because the threat and risk of severe thunderstorms and lightning is persistent in Lawrence, homes and buildings could be damaged due to high winds and lightning strikes. Life loss should not be much of a factor in a severe thunderstorm. Mutual aid from neighboring communities could be activated, but may be limited due to similar responses within those communities.

The department has the ability to provide the emergency response services needed to mitigate the various effects of thunderstorms. Operational parameters exist for thunderstorms in order to enhance responses, maintain responder and citizen safety, and utilize resources in an efficient manner.

One operational parameter exists with the Douglas County Emergency Operations Plan covering thunderstorms and could be activated if needed. Historically, the department has been able to maintain emergency response to impacts as stated in this section.



Tornado/Microburst

Risk – High

The department has identified the risk of tornadoes as high. The potential for impacts and effects from tornadoes and/or microburst exist within the City of Lawrence. As is the case with severe thunderstorms, the climate conditions which spawn such meteorological events are ideal during the spring and summer months.

These events historically have been random, but as a by-product of thunderstorms, the potential exists. With tornadoes and microburst come the potential for major property damage and mass casualty. The economic impact would be great, depending on the magnitude of the damage.



Any tornado moving through Lawrence would be devastating due to the density of population per square mile and the prevalence of homes built over slabs due to high water tables and rocky soil. The last tornado to seriously affect Lawrence

occurred May 8, 2003 and touched down in southwest Lawrence. The tornado caused heavy damage to about 40 homes and six apartment buildings. One resident was reported injured and damage was estimated at \$6.4 million dollars.



In the early evening hours of June 19, 1981, a tornado devastated southwest Lawrence with the heaviest damage and a single fatality occurring near the intersection of West 31st and Iowa Streets. The west side of a K-mart store collapsed, killing a 30-year-old Lawrence man. Damage was estimated at approximately \$20 million and 35 people were injured.

An April 12, 1911 tornado swept through the north end of the downtown area, killing a couple in their home.



Lawrence-Douglas County Fire Medical: Standards of Cover

A microburst is very strong winds that quickly descend from the base of a severe thunderstorm and then spread out quickly upon impact with the ground. This straight line, damaging winds can cause extensive damage across a large area.

On March 12, 2006, a microburst struck Lawrence around 8 A.M. The microburst contained 70 to 90 mph straight line winds. The damage from the microburst in Lawrence included extensive damage to trees, power lines, and over \$8.0 million dollars of property loss.

Emergency warning sirens can alert citizens of any funnel cloud or tornado in the area or conditions that could create them. With proper warning, life loss can be kept to a minimum but estimating and preventing property damage would be difficult. Risk level for a tornado for loss of life and property would be high. Depending on the nature and scope of the incident, the Emergency Operations Plan would be implemented.

Flood/Flash Flood

Risk - Moderate

The department has identified the risk of flooding and flash flooding as moderate during any part of the year. The Kansas River has a long history of flooding that has caused significant damage and economic losses.

Historically, the early 1900's ushered in a wet cycle; this persisted for nearly fifteen years. There were minor floods in 1901 and 1902, and then in 1903 came a significant flood. In 1903, the river channel was about one-half of its present width. At the conclusion of the flood approximately one-third of North Lawrence was added to the channel of the Kaw River by the disastrous flood.

Floods of lesser proportions occurred in 1904, 1905, 1908, 1910, 1912, and 1915 with relatively minor property damage. This frequent reoccurrence was of sufficient significance and inconvenience to slow the development of North Lawrence.

Lawrence had to cope with two floods in less than a month in 1951. On June 23, the Kaw level reached 25.6 feet at the Lawrence dam, the highest it had been since 1903. The Great

Flood of 1951 was the most costly catastrophe of its kind in local area history and occurred on "Black Friday," July 13, 1951. Surprisingly, not one life was lost in Lawrence and the immediate area. Loss estimates here ranged from \$4 million to \$6 million. The peak Kansas (Kaw) River reading at the Bowersock Dam in Lawrence was three and one half feet above the crest of the fabled 1903 flood, which had been recorded at 27 feet. Flood stage at the dam was 18 feet, the same as today. With the Flood Control Act of 1954 a series of reservoirs; including Clinton, Milford, Perry and Tuttle; and a river levee system were constructed in northeast Kansas to reduce flooding and its affects.

The Kansas River, last flood outside the river levee occurred in June of 1993, causing the evacuation of several residents and causing millions in damage to North Lawrence.

As the City continues to grow new development has shifted the flow of water during heavy storms to areas previously not considered a problem.



Flash Flooding intersection of 23rd and Ousdahl June 2010

Drought/Heat Wave

Risk - Moderate

The department has identified the risk of drought and or heat wave as moderate during summer months. The threat of drought is persistent in Lawrence. The City of Lawrence has taken significant measures to reduce the impact of drought. Department operations and capabilities may be jeopardized due to a lack of a water supply. Loss of life could very well be a factor with the number of older adults in Lawrence. EMS capabilities could be stretched to the limit by an abundance of dehydration calls. Fire calls could greatly

increase due to dry conditions. Economically, the City of Lawrence could be affected by loss of vegetation (trees, shrubs, flowers, plants, grass). Lawn watering and car washing restrictions should be in effect and monitored. Cooling stations would be established throughout the City of Lawrence. Senior citizens and shut-ins would need to be checked on regular basis.

Winter Storms

Risk - High

The department has identified the risk of winter storms and or heavy snowfall as high during winter months. Severe winter storms can cause widespread damage and disruption. Heavy snow often results in paralyzed transportation systems, automobile accidents and stranded vehicles. The hazards posed by winter storms may be catastrophic. Glazing from ice storms and heavy snow can affect power lines and other utilities. Intense wind, extreme cold and snow can have profound health affects, especially on the elderly.



Historical response data indicates that ice build up can create problems. In January 2002, the City and Douglas County were part of the northeast Kansas federal disaster area after a January 30 storm knocked down tree limbs and power lines and left thousands of Lawrence residents without power for several days.

Structural collapses may occur due to heavy snowfall on roofs. Life safety would be minimal, but property damage could be high due to roof collapses and frozen water pipes.

In the advent of severe winter weather and snow conditions, the departments Severe Weather SOP would be put into effect. The plan increases staffing and modifies response to insure the highest level of service is maintained when roads and access to homes and businesses are adversely affected.

Earthquake

Risk - Low

The department has identified the risk of earthquake as low. The risk from earthquakes in Kansas is relatively low according to a report, completed in 2000, from the Federal Emergency Management Agency. Kansas ranked 45 of 50 states in the amount of damage caused by earthquakes in an average year. The Kansas City, MO, area was ranked 35th among 35 major metropolitan areas.

Kansas is not generally associated with earthquakes, but does sit on the Nemaha fault. The largest earthquake to strike Lawrence occurred April 24 1867. This tremor was estimated to be 5.1 on the Richter Scale. It was centered near Wamego and affected an area estimated at 300,000 square miles, including much of Nebraska.

The potential for large devastating earthquakes has sparked a great deal of ongoing research concerning mitigation and hazard reduction of possible future earthquakes. Major structural damage to buildings, utilities and infrastructures may result. Injuries and casualties could be significant. Evacuation, housing, food and water would pose significant operational concerns. Clearly, the size of the quake would determine the life risk and property loss involved.

This region has had notable examples of earthquakes including the three very large New Madrid, Missouri, earthquakes that shook the eastern half of the United States in the winter of 1811-12. In terms of the amount of land shaken, these earthquakes were the largest in recorded U.S. history.

Hazardous Materials

Risk – Moderate

The department has identified the risk of hazardous materials incidents as moderate. The department provides hazardous materials response, identification, rescue, EMS and mitigation within the City and County. The department has been identified by the City and County Commissions as the best agency available to provide this service due to the overlapping needs of fire, rescue, EMS, response time, personnel staffing, certifications

and equipment deployment. The department provides certified hazardous materials



technicians, certified first responders, and equipment through its own team and in concert with Regional Hazardous Material Response Teams.

The department has identified railroad lines, local, state and interstate highways as transportation routes for the transportation of hazardous cargo. The department protects hazardous industrial operations, fuel storage facilities; hazardous materials waste operations and hazardous operations within the City.

Technical/Heavy Rescue

Risk – Moderate

The department has identified the risk of a technical and or heavy rescue as moderate. The department provides technical rescue services within the City and supports our EMS mission in the County and provides mutual aid as needed. The department provides firefighters trained in various aspects of technical to respond to technical rescue emergencies for confined spaces, trenches, structural collapse, and below grade or elevated structures. The department has identified major highways, water towers, utility services, new construction, remodeling of structures and water & sewer pipe maintenance as potential sites for technical rescue. The department performs an on going evaluation process, to identify new potential technical rescue hazards or sites.



Technical rescue operations generally require specialized training and equipment. It would be very difficult for a community such as Lawrence to have the resources to successfully mitigate a protracted or complicated rescue by itself. The department in many instances would need the support of regional technical rescue teams for complex and time demanding operations.

Water/Ice Rescue

Risk - Moderate

The department has identified the hazard level for drowning and water rescue as moderate. The department provides water rescue primarily within the city but responds countywide to support the EMS mission and provide mutual aid. The department has identified itself as the best agency available to provide these services due to the overlapping needs of fire, rescue, EMS, response time, personnel staffing, certifications, and equipment deployment.



The department provides a trained team of ice rescue and swift water rescue personnel. These team members respond with rescue boats and related equipment to the many ponds, lakes and rivers within the department response area. The department has identified several small ponds, Clinton Lake, and a

segment of the Kansas River as target risk within its response area.

Recovery services are provided by the Douglas County Sheriff Underwater Recovery Team with boat support provided by the department.

Transportation

Risk - Moderate

A primary transportation risk is the threat of train derailment. The department has identified two railroad lines which run through the City: The Union Pacific (UP) and the Burlington Northern Santa Fe (BNSF). A derailment could pose a significant life safety threat if a commuter train derailed, injuring or killing dozens of passengers. A train carrying hazardous material could potentially injure, kill and or displace residents for an extended period of time.

On October 2, 1979, Amtrak Train No. 4, the Southwest Limited, operating on the Atchison Topeka rail line, derailed just northwest of downtown within the city boundaries. One passenger was killed and scores were injured.



In December 2003, 16 coal cars on a Union Pacific train derailed in north Lawrence near 4th and Locust streets. Approximately 100 workers piled an estimated 1,600 tons of spilled coal to be hauled away, righted railcars that were tossed onto their sides, and repaired 600 feet of damaged track.

Media interviews of a Union Pacific Railroad spokesperson indicated they average more than one derailment a day in their system.

Approximately 70 trains a day carrying consumer goods and hazardous material use the UP line that passes through Lawrence.

Aircraft Emergencies

Risk - Low

Lawrence is geographically within the flight patterns of the Kansas City International Airport and the Lawrence Municipal Airport. While the potential exists for an aircraft to go down, historical response data indicates that this probability is low. A response by the department to an aircraft emergency within its jurisdiction would be handled with a full response of resources. The impact of such an incident would depend on the location, damage caused, and potential for life loss. Since Lawrence is primarily a residential community, the potential for a mass casualty incident as a result of a downed aircraft is a real possibility.

Civil Disorder

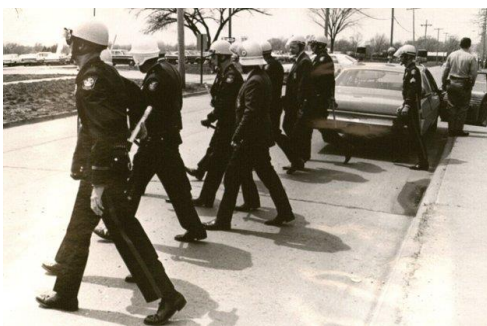
Risk - Moderate

The department has recently elevated its risk of civil disorder from low to moderate. As



have many parts of America. The most famous civil disturbance to affect the city was Quantrill's raid in which 300-400 Confederate guerillas rode into Lawrence and attacked the city at dawn on August 21, 1863. Most houses and businesses in Lawrence were burned and 150-200 men and boys were killed.

Lawrence suffered from civil disorder in the late 1960's. Fire apparatus were targeted and



struck by gunmen, requiring national guardsman to provide security while responding to and managing incidents. With a major college university located within the city, civil disorder can erupt with little warning. The City and the University are hosts to community events throughout the year that create increases in the

daily population. Incidents involving civil disorders are generally rare and are handled routinely with minimal assistance. Other incidents related to civil disorder could include violent protests and crimes.

Lawrence's central location between Kansas City and Topeka makes the local nightclubs and bars a short trip away. Gang activity in these metropolitan areas had previously viewed Lawrence as "neutral" territory. However, current trends and recent events indicate this is changing and has raised the awareness level of public service and emergency service personnel. Recent civil disorder has quickly led to gunfire and chaos.

The department has identified and planned for the risk of civil disorder in late March and early April during the NCAA basketball tournament. The University of Kansas touts a top level basketball team that frequently participates in tournament play. The further they progress in the tournament ranking, the greater the risk of civil disorder.



Domestic Terrorism/Weapons of Mass Destruction (WMD)

Risk – Low

The department has identified the risk of terrorism as low but at times rises to moderate. Although Lawrence is not a major metropolitan area, recent intelligence indicates that terrorists are targeting “soft” targets in small to medium sized communities. Lawrence is home to Kansas University, a large and nationally recognized college campus. A facility such as this could be targeted because of its value to the larger surrounding area and as a “high impact even” (body count).

The potential for a terrorism or WMD attack within City of Lawrence was made real after the destruction of September 11, 2001. The FBI continues to warn that domestic terrorist; individuals, anarchists, hate groups and the militia, using explosives, make all locations within the United States vulnerable. The potential for destruction, economic and social impact, would be significant to the City and County. With current intelligence indicating that terrorists, domestic and international, are specifically targeting Public Safety personnel, the impact on the department could be devastating.

While training and considerations of such a strike continue, the ability to train for all scenarios is not practical, nor possible. The department would conduct a response to a terrorism or WMD event much as any other event. The mitigation of such an event would require the implementation of the National Incident Management System (NIMS) and a multi-jurisdictional approach to successfully mitigating such an event.

Utility Failure

Risk - Moderate

The department has identified the risk of utility failure as moderate. The City of Lawrence and Douglas County have major high-pressure natural gas lines within their boundaries. A breach in these lines, either intentional or accidental, could create significant operational challenges. Evacuation of surrounding homes and businesses, shutting down of roads, scene safety, resource deployment and product control would be major tactical priorities. Depending on the nature and scope of the incident, unified command with representatives of local government, police, fire, public works and the pipeline company would be established.

According to the Interstate Natural Gas Association of America (INGAA), natural gas pipelines across America are operating normally and safely. At this time, there is no specific threat to the U.S. natural gas pipeline infrastructure. Immediately following the attacks on Sept. 11, pipelines across America instituted heightened security measures.

With the passage of the Pipeline Safety Integrity Act of 2002 (PSIA), the United States Congress mandated that specific requirements be implemented for ensuring the integrity of liquid and natural gas pipeline systems throughout the United States. This legislation and subsequent regulations codified by the US Department of Transportation (DOT) require pipeline operators to develop programs to improve how they manage the integrity of their pipeline systems.

Critical Tasking

In order to affect positive change in an incident, department personnel must be properly assigned, resources must be properly placed and equipped and each individual must be assigned a critical task(s) to complete. Consequently, those individuals must arrive within a time frame which allows them a chance to use their skills to mitigate the incident at hand. This section will illustrate critical task for representative type incidents the department responds to.

Critical tasks are those tasks that must be conducted in a timely manner by personnel at the scene. The department has evaluated the critical tasks needed for a variety of incidents. When identifying critical tasks, the safety of our personnel is paramount. A command structure must also be in place to ensure that critical tasks are being met. Listed below are descriptions of critical tasks that must be accomplished by the effective response force for various emergencies.

Structural Firefighting Critical Tasks

Critical tasks must be conducted in a timely manner by firefighters at structure fires if firefighters are expected to control the fire. There are several other tasks that must be performed prior to termination of the scene such as salvage and overhaul. In creating standards of cover, an assessment must be conducted to determine the capabilities of the arriving companies and individual firefighters to achieve those tasks. The department has evaluated the critical tasks needed for a structural fire. When identifying critical tasks, firefighter safety must be emphasized. Whenever interior fire operations are to be accomplished, which require the use of protective clothing (including turnout gear, SCBA, and a minimum 1-3/4" hose line); additional personnel must be staged to perform rescue functions for interior firefighters. A command structure should also be in place. Below, you will find key critical tasks that must be accomplished by the effective response force in order for the department to meet its mission, goals, and objectives.

Common Critical Tasks for a Structure Fire	
Task	Firefighters
Attack Line	2
Backup Line	2
Search and Rescue	2
Hose Line Support	1
Ventilation	2
RIT Team	2-4
Engineer	1
Command/Safety	1-2
Totals	16

Structure Fire Response Assignment		
Company/Unit	Quantity	Total Staffing
Engine/Quint/Truck	2	8
Rescue	1	3
Medic Unit	2	4
Shift Commander	1	1
Assignment Totals	6	16

Emergency Medical Services Critical Tasks

The department responds to approximately 7000 EMS related calls a year. These calls include cardiac arrests, heart attacks, difficulty breathing, childbirths and strokes. For the majority of ALS level EMS call the basic response is one medic unit staffed with a Paramedic and Emergency Medical Technician-Intermediate.

Emergency communications dispatchers have the responsibility of screening calls utilizing the Priority Dispatch Emergency Medical dispatch (EMD) system to establish the correct effective response and to provide pre-arrival instructions for callers. Upon arrival of the first officer on the scene, the initial response may be adjusted actual conditions/patient have been assessed. SOP's are utilized to request adequate personnel for these types of calls needing additional resources.

A moderate acute medical emergency may be defined as an incident with a risk of serious outcome or potential life loss. A single acute coronary syndrome patient with difficulty breathing and shock like symptoms would necessitate the following task by responding personnel.

<i>Common Critical Tasks for an EMS Incident</i>	
Paramedic Critical Task	EMT-I Critical Task
Primary and secondary assessment	Oxygen set up and administration
Triage decision and direct all patient care	ECG application
ECG interpretation	IV line placement and monitoring
Medication administration	Vital signs and oxygen saturation monitoring
Bio-com communications with medical control	Radio communications with dispatch
Application of standing and physician orders	Patient and equipment packaging for transport
Report to medical staff on arrival	Vehicle operations to/from scene
Written report documentation	Vehicle readiness and restocking
	Assist with all EMT level care

EMS Response Assignment		
Company/Unit	Quantity	Total Staffing
Medic Unit	1	2
Assignment Totals	1	2

Hazardous Materials Critical Tasks

The department currently maintains a hazardous materials unit and hazardous materials support trailer at station four. Approximately 40 personnel are trained to NFPA 472 competencies for Hazardous Material Technician. The remainder of the department is trained to the operations level. Guidelines for response and critical tasks are set forth in the Hazmat Response SOP. A hazardous materials response would necessitate the following task by responding personnel.

<i>Common Critical Tasks for a Hazardous Materials Response</i>	
Task	Firefighters
Command	1
Rescue	2
Decontamination	2
Restrict access	1-2
Research	1
Isolate spill	2
Medical monitoring	1
Entry Team	2
Back-up Team	2
Safety	1
Totals	16

Hazardous Materials Response Assignment		
Company/Unit	Quantity	Total Staffing
Engine/Quint/Truck	1	4
Medic Unit	2	4
HazMat Unit	1	4
Rescue	1	3
Shift Commander	1	1
Assignment Totals	6	16

Technical Rescue - Critical Tasks

The often complex and dangerous nature of a technical rescue requires that responders both highly trained and rapidly deployable. The common tasks associated with mitigating a rope rescue, trench collapse, building collapse, water or ice rescue are identified below.

<i>Common Critical Tasks for a Technical Rescue Response</i>	
Task	Firefighters
Command	1

Hazard Identification/Control	4
Rescue	2
Backup Rescue	2
Rigging/Shoring/Air Support	1-4
Medical Standby	2
Safety	1
Totals	13-16

Technical Rescue Response Assignment		
Company/Unit	Quantity	Total Staffing
Engine/Quint/Truck	2	8
Rescue	1	3
Medic Unit	2	4
Shift Commander	1	1
Assignment Totals	6	16

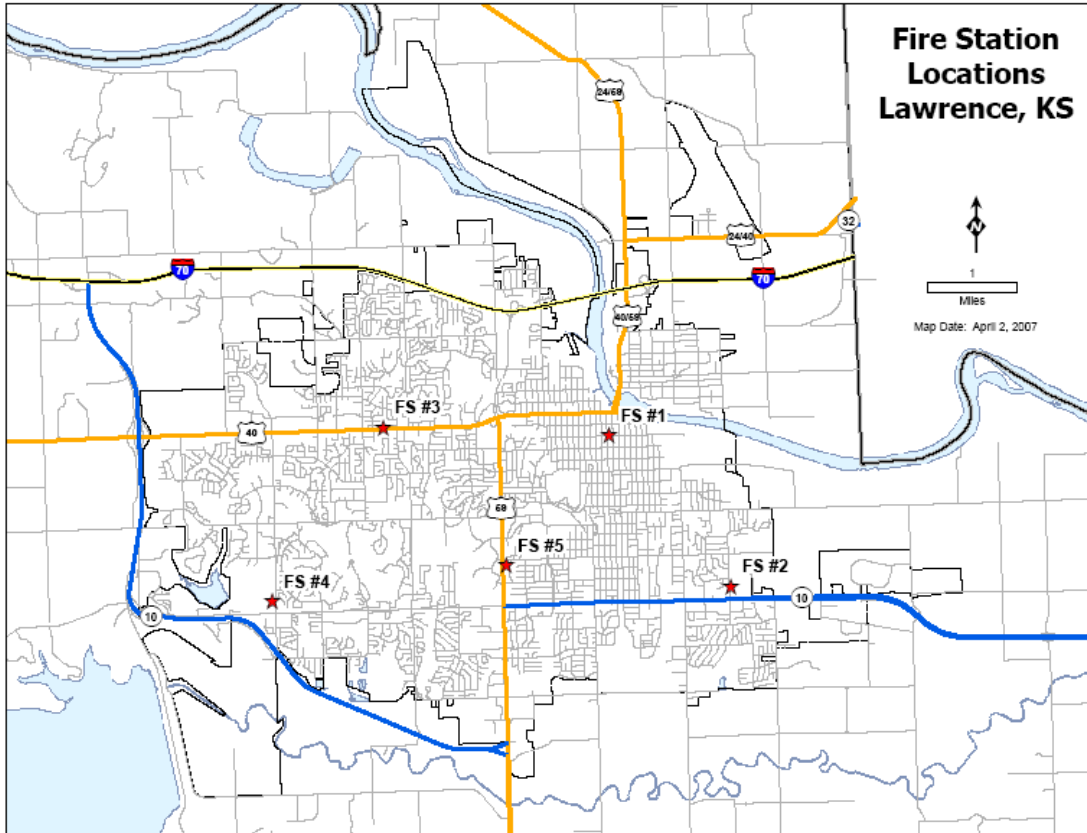
Critical Task Summary

Incident scenes are unpredictable in many ways. While it is possible to state what critical tasks must be accomplished for each incident to be mitigated, it is not always possible to predict how many firefighters it will take to accomplish a specific task. On larger incidents, it is expected that chief officers not assigned to the initial response will arrive on scene to provide command support. This supports the on-duty response by adding personnel for command functions such as planning, logistics, and administrative positions.

The department has utilized its risk assessment, experience, knowledge, and call history to determine what the effective minimum response force should be for the identified incident types. These numbers represent an accurate number of firefighters to develop an effective response force for each of the incident types. The need for more or less personnel may arise on any incident at any time. Incident conditions or complexity must dictate the response available for any given fire, even if that response is above what is outlined in this document.

Service Level Objectives

The Standard of Cover for the department has been derived from and influenced by two specific concepts: distribution of emergency resources and the concentration of those resources throughout the community.



Distribution of Emergency Resources

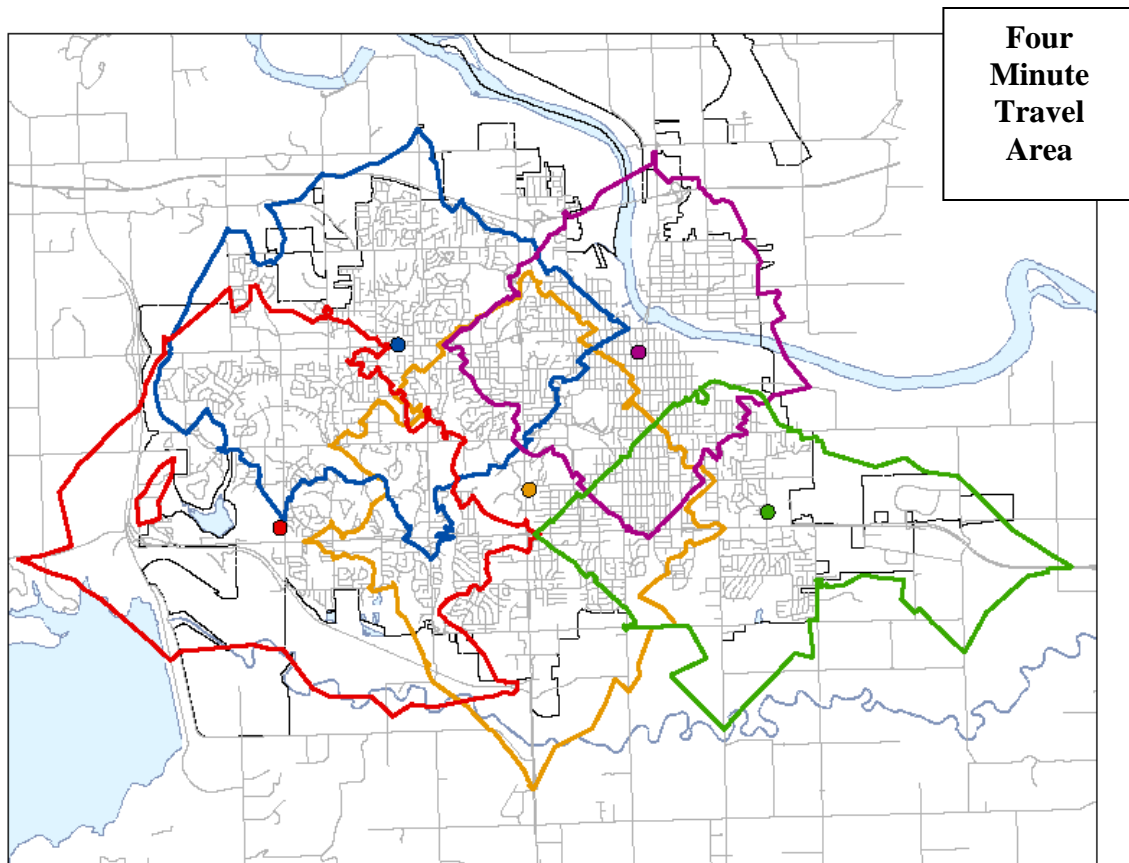
Distribution of response resources defines the specific geographical location for each resource. Resources change locations at any one point in time. These estimates are based upon what is considered first due or closest resources under normal response situations.

Fire station location is driven by a number of factors the least of which is delivery of quality service. Stations are usually located where they are most tolerated by the residents and where the City owns or can obtain land inexpensively. Extraordinary requirements are needed for a department to locate a service facility exactly where it is needed. Rarely considered is that several blocks in either direction sometimes makes a serious change in

regular response patterns and the ability to meet the SOC total response time objectives. In the case of Lawrence, the City currently operates five response facilities from which both fire and emergency medical services are dispatched.

Distribution of station and resource locations is needed to ensure rapid first due response deployment in order to mitigate emergencies. Distribution is measured by the percent of the jurisdiction that covered by the first due units.

Currently, the department operates out of five stations in the City of Lawrence, each containing an engine/quint/truck company staffed with four personnel and a medic unit staffed with two personnel.



Concentration of Emergency Resources

Concentration addresses the spacing of multiple resources arranged close enough together so that an initial "effective response force" can be assembled on scene targeting total response time benchmark objectives. An initial effective response force is that which will most likely stop the escalation of an emergency in a specific risk type. Such an initial response may stop the escalation of the emergency, even in maximum risk areas. However, an initial "effective response force" is not necessarily the total number of units or personnel needed if the emergency escalated to the maximum potential. Additional "alarms" or units could be planned on from further away, including mutual aid.

The concentration of emergency response units in Lawrence is a reflection of the demand for service. Fire and emergency medical services are delivered from all five locations.

The focus of providing an initial effective response force is that it will most likely stop the escalation of the emergency, be it fire or increased illness. Concentration of service delivery is best measured by risk/category type where higher risk areas would require second and third due units in shorter time frames than typical or low risk areas. The department handles responses to all hazards in a similar manner.

Services concentration measures are considered in:

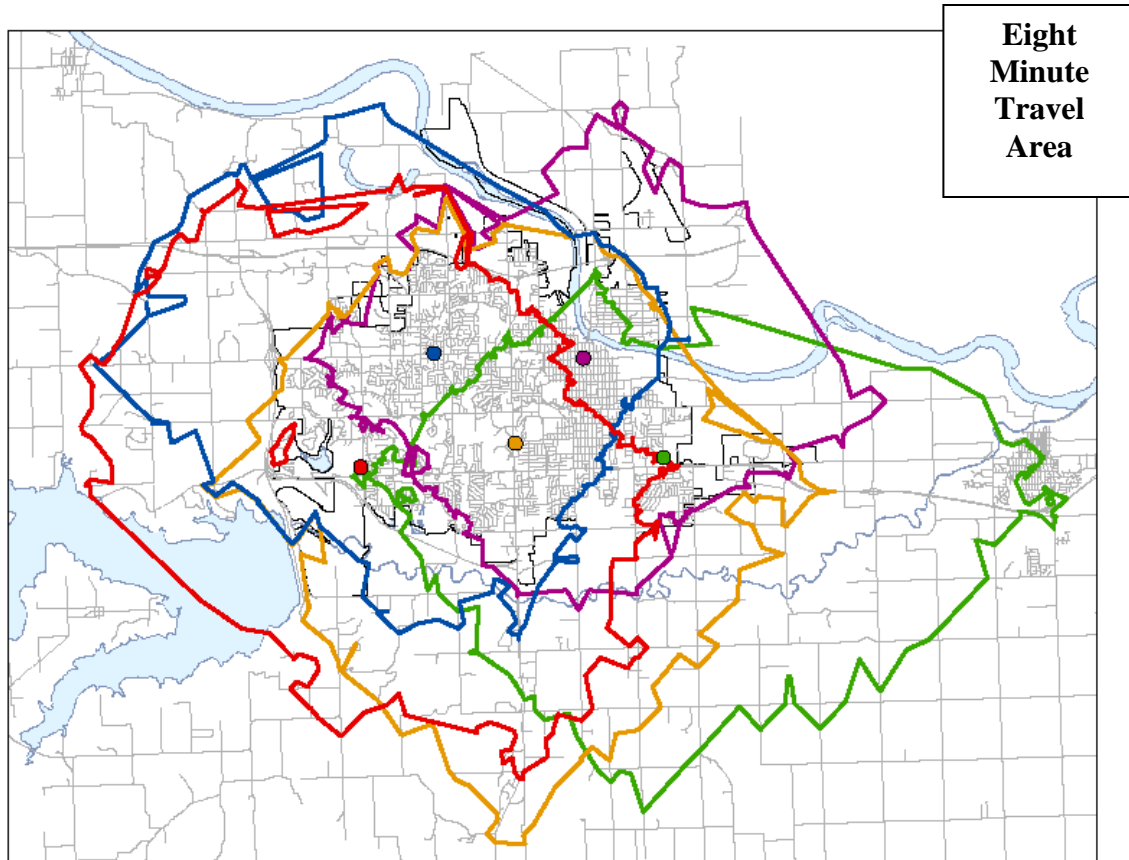
Percent of square miles, or

Percent of equally sized analysis areas, or

Percent of total road miles in jurisdiction for the number of total units in the initial effective response force

Service concentrations often pull on distribution of resources making evaluating these impacts on service delivery difficult. There is no one perfect solution to this complex decision. The Fire Chief and staff have developed what is considered to be the best placement of resources and staffing based upon what is known, what is anticipated and what is possible.

In determining concentration, the department has again looked at the risk assessment, call volume, population, and critical tasking.



Standards, Goals and Objectives

In order to perform a complete assessment of a community's ability to respond to specific emergencies, it must establish standards. These standards must be made based on an educated understanding of the risk faced both from the source and from the community.

In order for a community's emergency resources to make a positive impact on the event, they must arrive in time to affect change. In this section we will assess and establish a total response time measurement for the service taking into consideration the factors involved in creating effective change in both structural fires and life threatening emergency medical calls.

Total Response Time

Total response time is a compilation of the elements beginning with alarm handling time, turnout time, and travel time. The total response time concept is simple to grasp but has been extremely hard for fire departments and Fire Chiefs nationwide to accept. Fire departments nationwide typically have different descriptions for the term "Response Time". Generally it describes travel time only or turnout and travel time combined. Total response time includes the alarm handling time component often overlooked by most departments. The simple fact is when a customer calls us for service they generally are not interested in all of the pieces that make up these differing response times. They know they called and it took longer than we have traditionally said it took us to arrive.

The concept of a total response time continuum has evolved from standards set by the National Fire Protection Association (NFPA) and the Center for Public Safety Excellence (CPSE). This theory of a total time assessment and standard was foreign to the fire service prior to the mid 1980's.

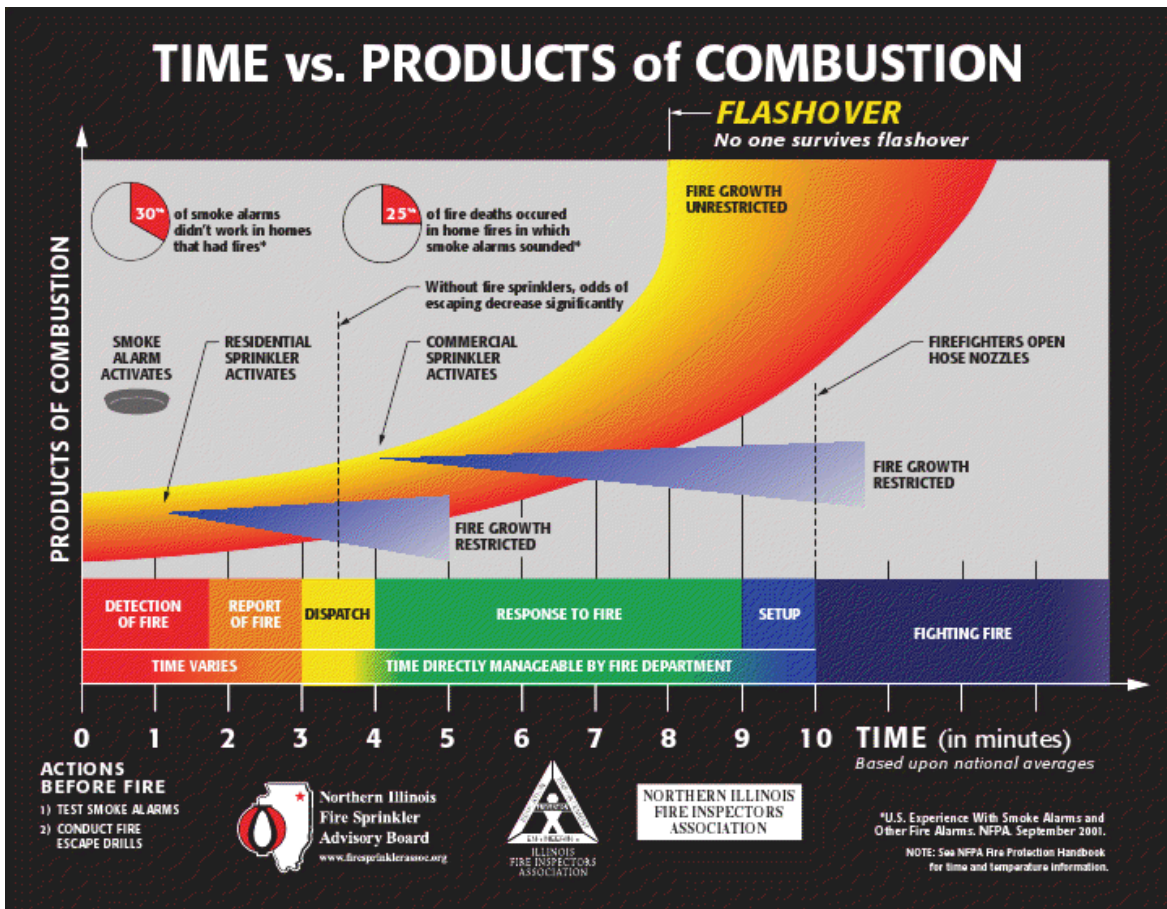
Total Response Time Objectives

We operate around two basic cycles. The first is the cycle of fire: heat, fuel and oxygen cycle continuously while a fire burns. Firefighters train to break this cycle at any of these three points. The second cycle is the cycle of life: the heart, lungs and brain work continuously to sustain life. When that cycle is broken due to illness or injury, firefighters train to keep this cycle going in an effort to save a life, like performing CPR. *One cycle disconnected, one cycle reconnected* – both in an effort to save lives, both within a critical few minutes.

If emergency system designers plan effective response around the benchmark times of flashover and brain death, the measure of time needs to be defined and understood. In an emergency, there are many benchmarks such as ignition point, heart cessation, calling 911, dispatch, travel time and set-up times. We must plan a system that places effective resources on-scene at our benchmark targets, taking into account all the tasks necessary.

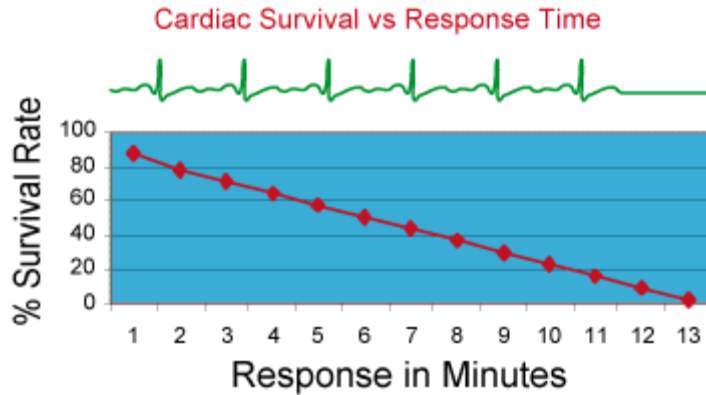
The Cycle of Fire

A fire within a structure can be classified into three defined growth stages. The first is the incipient phase and occurs from ignition to open flame. The second phase of fire is the free burning stage and is characterized by rapid growth and heat production. During this phase of fire growth the fire can reach the point of flashover. Flashover is the point when the fire dramatically grows from burning the initial contents to all of the contents in the space. Flashover is likely to occur if the temperature of the upper gas layer in an enclosure reaches approximately 1,100 degrees Fahrenheit. The final phase of the fire growth is the smoldering phase, which occurs when the available oxygen is consumed by the fire. At this stage, a rapid introduction of oxygen into the room can lead to a sudden backdraft.



The Cycle of Life

EMS related incidents have benchmarks in time which critically ill or injured patients need to be stabilized and transported to a medical facility. A key component must be in place for this stabilization to take place. Spontaneous circulation can cease in almost every type of medical emergency whether it is an injury or illness related problem. Physiologically, brain death begins four to six minutes after the cessation of circulation, or cardiac arrest. After ten minutes, based on research, the survivability outcome of a patient who suffers from the loss of spontaneous circulation is considered unlikely, even with advanced life support interventions.



Given these response objectives, how does a community evaluate and measure the department's progress or efficiency? The elected officials annually adopt a fiscal budget which helps to dictate the department's standard of cover. The community, in essence, buys a level of protection for itself. The purpose of defining the factors that determine the standards of cover allows the community to be informed about the decisions it makes for the provision of emergency services. Before making a decision or establishing a standard of cover, the following information was examined:

Emergency Operations Cascade of Response Elements

Event Initiation	Pre-Response elements
Emergency event	
Alarm	
Notification – Alarm is Reported/Received	Total Response Time
Alarm Handling	
Turnout Time – Unit Notification/Enrout	
Travel Time – Unit is Responding to Alarm	
On Scene Time - Unit Arrives On Scene	
Initiation of Action – Unit Begins Operations	Post Response Elements
Termination of Incident	

Event Initiation

Event initiation is the point at which factors occur that ultimately will result in the activation of the emergency response system. Factors that may contribute to the event initiation may occur from seconds to a day or more prior to leading to the actual emergency event.

Alarm

Alarm is the time it takes for someone to discover that an emergency exists and start the process to get the emergency response system activated. This process may mean dialing a personal cellular phone, driving to a location that has a fixed phone or simply hiking out of the wilderness to find someone with a radio to make the notification.

Notification

Notification is the time which the alarm is actually received by the communications center and could include walk in citizens, phone calls, or radio reports. Many departments, including LDCFM, enhance the notification process through the use and requirements of automatic alarm notification. In addition, over the past decade the community has experienced a perceived decrease in the reporting time on most alarms do to the proliferation of cellular phones. Previously, reporting of an emergency may have been delayed because of a lack of communications options. Although cellular phones make reporting an emergency quicker the greatest time killer is trying to verify the location of the caller. In cases where the caller is unsure of their location the communications center can attempt to ping the phone for general location with escalating alarm processing times. This is never more evident than when new students flood Lawrence in the late summer, all with cellular phones and many in an unfamiliar location.

Alarm Handling

Alarm handling is the time interval from when the first notification was received and the completion of dispatching the recommended units. The Computer Aided Dispatch (CAD) system utilized by the Emergency Communication Center (ECC) assists in recommending and assigning units to an incident.

Emergency Medical Dispatching (EMD) protocols help to target the correct effective response force and provide instructions for callers of EMS but delay the overall alarm handling time in doing so. Many accredited agencies have discovered that there are competing interest when evaluating the usefulness of an EMD system. The department implemented the priority dispatch EMD system in 2004 and was confident it was making a difference in the overall response efforts. In 2008 the department started measuring alarm handling times utilizing a fractal measurement at 80 percent. This single change in measurement changed the department's confidence level. The EMD vendor would not define a time frame in which to process calls instead focusing on accuracy of answering questions. The ECC relied on the vendors support and indicated they would always process medical calls as quickly as they could. This resulted in the department trying to work with the ECC director and an interim ECC director to establish standards. All standards were resisted and quality assurance reports were identified to support they were doing a good and accurate job.

A new ECC director is now in place, in part because of the lack of alarm handling standards. The current director and the department have agreed after evaluating two years of EMD data to modify the system. The system changes basically dispatch units by chief complaint as soon as proper information is received and verified. The new benchmark target will be 60 seconds. After the completion of the EMD algorithm the response can be balanced to the appropriate levels if necessary

The department is also in the process of changing alerting procedures with the new EMD system. The next step is the implementation of digital alerting which will allow simultaneous rather than sequential station alerting and computerized voice announcement. This system has been funded and is expected to be operational in the first quarter of 2014.

Turnout

Turnout time is the time interval, from notification of a station or unit, to the assigned unit responding. Station facilities are equipped with radio tone-alert activation. Turnout time is measured from the time of completion of alerting by dispatch, to the vehicles clearing the stations and announcing “enroute” on the radio or utilizing their mobile data computers.

Newer station designs have not specifically focused on the time to get from any part of the facility to the apparatus and subsequently have had an impact on turnout times. Increased emphasis on never removing a seatbelt while responding has raised levels of safety but also impacted turnout times on many types of calls.

The department turnout time is consistently above the 60 to 80 second recommendations of NFPA 1710. In 2011 the department ran a series of turnout time scenarios in order to better understand what benchmark and baseline turnout times should be. Three scenarios were developed and the shift commander on each shift conducted the testing in every station. Crews were aware the testing would be occurring but there was no schedule and the first test was unannounced in order to capture the protective clothing layout at the apparatus in a normal daily configuration. The individual and overall results are in the table that follows.

Turnout Time Study Results

Station & Shift	Structure Fire from Dorm					MVA From Fitness Room					Structure Fire From Dayroom				
	First FF At Rig	First FF On	Last FF On	Enroute	Elapsed	First FF At Rig	First FF On	Last FF On	Enroute	Elapsed	First FF At Rig	First FF On	Last FF On	Enroute	Elapsed
1X	19	45	75	86	01:26	26	64	72	86	01:26	10	37	59	68	01:08
1Y	12	40	53	67	01:07	38	52	70	85	01:25	18	44	57	69	01:09
1Z	14	42	53	56	00:56	31	62	69	79	01:19	18	37	50	78	01:18
2X	41	57	105	108	01:48	19	51	83	94	01:34	32	66	101	109	01:49
2Y	29	60	79	92	01:32	16	50	61	70	01:10	19	56	62	76	01:16
2Z	27	56	91	105	01:45	23	54	75	85	01:25	17	52	74	83	01:23
3X	40	49	92	106	01:46	25	45	72	80	01:20	21	37	61	69	01:09
3Y	25	46	53	78	01:18	12	40	52	69	01:09	11	30	53	61	01:01
3Z	40	80	86	100	01:40	22	53	69	75	01:15	15	65	78	95	01:35
4X	45	83	111	114	01:54	26	69	84	94	01:34	27	70	94	108	01:48
4Y	35	60	83	90	01:30	18	49	59	69	01:09	18	54	72	81	01:21
4Z	35	63	90	96	01:36	29	62	86	91	01:31	26	63	84	84	01:24
5X	49	86	97	109	01:49	28	62	70	80	01:20	37	73	88	104	01:44
5Y	40	72	79	88	01:28	22	48	65	76	01:16	26	61	70	78	01:18
5Z	29	55	69	80	01:20	21	48	76	84	01:24	19	45	78	91	01:31
MAX	49	86	111	114	01:54	38	69	86	94	01:34	37	73	101	109	01:49
MIN	12	40	53	56	00:56	12	40	52	69	01:09	10	30	50	61	01:01
90th %					01:49					01:34					01:48

All times are in seconds except elapsed shown as minutes and seconds

The results and analysis of these turnout times have led the department to believe a benchmark of 60-80 seconds at the 90th percentile may be difficult to achieve. The results of the test indicated that a 90th percentile mark would be closer to 1:45 seconds. The department will continue to look at ways to reduce these times without encouraging unsafe practices of running to the apparatus or not donning the proper protective clothing prior to being seated, to reduced the chance of removing the seatbelt.

New station alerting scheduled to be operational in Early 2014 will add countdown timers to better increase awareness of the time since the station was alerted. Mobile data computers have been in place to receive alarm information for some time but the system was not found to be reliable enough to do unit status changes. In August of 2011 radio modems were replaced by broadband cards, at a significant annual cost increase, for all mobile data computers. This change created a level of reliability that brought about the requirement to utilize mobile data for enroute and on scene statuses. The short time in use has lowered turnout times and created a greater awareness of actual turnout times. The system is still not as reliable as the department would like it to be and is being regularly monitored and adjusted.

Travel

Travel time is the time interval from when the assigned unit going enroute to an emergency until that unit arrives at the emergency and goes “on-scene”. Travel time and safety have been impacted through the use of traffic calming measures and traffic control preemption devices. Traffic preemption devices are installed on all traffic signals in the City of Lawrence and are utilized on each emergency response to reduce the delay at traffic signal controlled intersections. Traffic calming devices, road design standards and gated areas of the community have the opposite effect of slowing travel time to emergencies.

On-Scene

On-scene time is the point at which units have arrived “on-scene” and is generally done in conjunction with a brief initial radio report describing the incident as viewed from the apparatus.

Initiation of Action

Initiation of action begins with the conclusion of the initial report which will include the action to be taken by the reporting unit as it deploys from the apparatus. Initial actions may include but is not limited to investigation, advancing an attack line, patient assessment. The initiation of action taken may last from moments to days and will result in the mitigation of the incident.

Termination of Incident

This is the time at which units have completed their incident task and are available to respond to another emergency incident.

NFPA 1710 Impact

The department has evaluated the feasibility of meeting NFPA 1710, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. This standard is often quoted as a nationwide standard and outlines an organized approach to defining levels of service, deployment capabilities, and staffing for “substantially” career fire departments. Specifically NFPA 1710 provides standard definitions for fire apparatus, personnel assigned, procedural guidelines within which they operate, and staffing levels needed to accomplish specific tasks on arrival at an incident.

NFPA 1710 states that fire departments shall establish a performance objective of not less than 90% for each of the following response time objectives:

- One minute twenty seconds (80 seconds) turnout time for fires and one minute (60 seconds) turnout time for EMS calls.
- One minute for alarm handling time.
- Four minutes (240 seconds) or less for the arrival of the first-arriving engine company at a fire suppression incident and/or eight minutes (480 seconds) or less for the arrival of a full first alarm assignment at a fire suppression incident (including one individual for incident command outside of the hazard area).
- Four minutes (240 seconds) or less for the arrival of a unit with first responder, or higher, level capability at an emergency medical incident.
- Eight minutes (480 seconds) or less for the arrival of an advanced life support unit at an emergency medical incident, where this service is provided by the fire department.

The department evaluates emergency response data in a variety of categories and believes that response time goals can be adjusted for the safety of its members without compromising service to the community. The department has not formally adopted this standard.

Benchmark Service Level Objectives & Baseline Performance

Based on the assessed risk, the department has a standard for the delivery services. These services are based on many factors and have served to develop what is considered as an acceptable level of risk.

The department has had a long-standing history of established response time goals. These goals were originally derived more from an expectation and assumption rather than as a measurable fact. The effective service area of each fire station is the area that is accessible by fire units within four minutes driving time, taking into account street patterns, terrain, and traffic arrangement of fire stations as factors that impact response and station location.

The department's baseline statements reflect actual performance during 2008 thru 2011. The department does not rely on the use of automatic aid or mutual aid from neighboring fire departments to provide its effective response force complement of personnel.

The department's Structure Fire benchmark service level objectives are as follows:

For 90 percent of all low, moderate, and high risk structure fire responses, the total response time for the arrival of the first-due unit, with a minimum of 4 firefighters, shall be: 6 minutes and 30 seconds. The first arriving unit shall be capable of: establishing command; completing an initial size up; establishing water supply; and initiating fire attack and/or rescue. These operations shall be done utilizing safe operational procedures.

For 90 percent of all low, moderate, and high risk structure fire responses, the total response time for the arrival of the effective response force (ERF), with a minimum of 16 firefighters, shall be: 10 minutes and 30 seconds. The ERF shall be capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; evacuation; ventilating the structure; exposure protection; controlling utilities; and performing

salvage and overhaul. These operations shall be done utilizing safe operational procedures.

The department's Structure Fire baseline service level for 2008-2011 is as follows:

For 90 percent of all low, moderate, and high risk structure fire responses, the total response time for the arrival of the first-due unit, with a minimum of 4 firefighters, was: 7 minutes and 36 seconds. The first arriving unit is capable of: establishing command; completing an initial size up; establishing water supply; and initiating fire attack and/or rescue. These operations were done utilizing safe operational procedures.

For 90 percent of all low, moderate, and high risk structure fire responses, the total response time for the arrival of the effective response force (ERF), with a minimum of 16 firefighters, was: 10 minutes and 43 seconds. The ERF is be capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; evacuation; ventilating the structure; exposure protection; controlling utilities; and performing salvage and overhaul. These operations were done utilizing safe operational procedures.

Structure Fires - 90th Percentile Times – Baseline Performance		2008-2011	2011	2010	2009	2008
Alarm Handling	Pick-up to Dispatch	1:54	1:34	2:02	1:59	1:37
Turnout Time	Turnout Time 1st Unit	2:19	2:15	2:14	2:16	2:19
Travel Time	Travel Time 1st Unit Distribution	4:37	4:08	4:48	4:21	5:02
	Travel Time ERF Concentration	7:35	7:24	7:46	7:19	7:36
Total Response Time	Total Response Time 1st Unit On Scene Distribution	7:36	6:59	7:32	7:21	8:17
	Total Response Time ERF Concentration	10:43	10:11	10:39	10:16	10:22

The department's EMS benchmark service level objectives are as follows:

For 90 percent of all priority medical incidents, the total response time for the arrival of the first-due unit, with a minimum of 1 paramedic and 1 EMT-I, shall be: 6 minutes and 30 seconds in urban areas, 12 minutes and 30 seconds in rural areas, and 9 minutes and 30 seconds countywide. The first-due unit shall be capable of establishing command; assessing scene safety; conducting initial patient assessment; obtaining vitals and patient's medical history; initiating basic life support with AED capability until the ALS Transport unit arrives on the scene.

For 90 percent of all priority medical incidents, the total response time for the arrival of the ERF (ALS unit), with a minimum of 1 Paramedic and 2 EMT-I's, shall be 10 minutes and 30 seconds in urban areas, 14 minutes and 30 seconds in rural areas, and 12 minutes and 30 seconds countywide. The ERF shall be capable of: establishing command; assessing scene safety; conducting initial patient assessment; obtaining vitals and patient's medical history; providing intravenous (IV) access-medication administration and transport the patient.

The department's EMS baseline service level for 2008-2011 is as follows:

For 90 percent of all priority medical incidents, the total response time for the arrival of the first-due unit, with a minimum of 1 Emergency Medical Responder or 1 EMT-B was: 7 minutes and 58 seconds in urban areas; 14 minutes and 19 seconds in rural areas, and 10 minutes and 15 seconds countywide. The first-due unit is capable of establishing command; assessing scene safety; conducting initial patient assessment; obtaining vitals and patient's medical history; initiating basic life support with AED capability until the ALS Transport unit arrives on the scene.

For 90 percent of all priority medical incidents, the total response time for the arrival of the ERF, with a minimum of 1 Paramedic, 1 EMT-I and 1 Emergency Medical Responder or 1 EMT-B, was 8 minutes and 33 seconds in urban areas, 17 minutes and 33 seconds in rural areas, and 11 minutes and 42 seconds countywide. The ERF is capable of: establishing command; assessing scene safety; conducting initial patient assessment; obtaining vitals and patient's medical history; providing intravenous (IV) access-medication administration and transport the patient.

EMS Priority 1 - 90th Percentile Times – Baseline Performance			2008-2011	2011	2010	2009	2008
Alarm Handling	Pick-up to Dispatch	---	3:21	3:22	3:14	3:18	3:30
Turnout Time	Turnout Time 1st Unit	---	2:01	2:05	1:58	2:01	1:53
Travel Time	Travel Time 1st Unit Distribution	Urban	4:21	4:09	4:18	4:37	4:20
		Rural	10:15	09:06	10:14	10:15	9:36
		Countywide	6:28	4:56	6:40	5:47	7:26
	Travel Time ERF Concentration	Urban	5:07	4:54	4:47	5:29	5:07
		Rural	15:03	11:24	12:38	12:46	15:44
		Countywide	7:46	6:33	7:29	7:46	7:43
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	07:58	07:58	7:52	7:45	7:59
		Rural	14:19	12:10	13:55	13:49	15:04
		Countywide	10:15	9:29	10:35	10:15	11:19
	Total Response Time ERF Concentration	Urban	8:33	8:38	8:50	08:27	8:27
		Rural	17:33	14:23	15:36	16:48	18:43
		Countywide	11:42	10:43	11:31	12:26	12:16

The department's Hazardous Materials benchmark service level objectives are as follows:

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, with a minimum of 4 firefighters, shall be; 6 minutes and 30 seconds. The first-due unit shall be capable of: establishing command; sizing up; assessing the situation to determine the presence of a potential hazardous material; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm and cold zone. These operations shall be done utilizing safe operational procedures.

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with 16 firefighters shall be 10 minutes 30 seconds. The ERF shall be capable of providing the equipment, technical expertise, knowledge, skills and abilities to mitigate a hazardous materials incident. These operations shall be done utilizing safe operational procedures.

The department's Hazardous Materials baseline service level for 2008-2011 is as follows:

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, with a minimum of 4 firefighters, was; 9 minutes and 45 seconds. The first-due unit is capable of: establishing command; sizing up; assessing the situation to determine the presence of a potential hazardous material; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm and cold zone. These operations shall be done utilizing safe operational procedures.

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with 16 firefighters was 14 minutes 17 seconds. The ERF is capable of providing the equipment, technical expertise, knowledge, skills and abilities to mitigate a hazardous materials incident. These operations shall be done utilizing safe operational procedures.

Hazardous Materials - 90th Percentile Times – Baseline Performance		2008-2011	2011	2010	2009	2008
Alarm Handling	Pick-up to Dispatch	2:29	2:12	2:18	2:36	1:58
Turnout Time	Turnout Time 1st Unit	2:27	3:27	2:27	2:14	2:09
Travel Time	Travel Time 1st Unit Distribution	5:32	5:05	5:27	5:29	5:32
	Travel Time ERF Concentration	10:13	9:23	7:25	10:37	9:16
Total Response Time	Total Response Time 1st Unit On Scene Distribution	9:45	7:17	7:02	09:45	09:48
	Total Response Time ERF Concentration	14:17 ¹	7:45	11:07	14:17	12:41

1 – The department assembled an ERF for Hazmat eight times from 2008-2011.

The department's Technical Rescue benchmark service level objectives are as follows:

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, with a minimum of 4 firefighters, shall be; 6 minutes and 30 seconds. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; controlling the hazard; and providing basic life support to any victim without endangering response personnel. These operations shall be done utilizing safe operational procedures.

For 90 percent of all technical rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with 16 firefighters shall be 10 minutes 30 seconds. The ERF shall be capable of; establishing patient contact; providing the equipment, technical expertise, knowledge, skills and abilities to mitigate a technical rescue incident; providing advanced life support and transport patient(s). These operations shall be done utilizing safe operational procedures.

The department's Technical Rescue baseline service level for 2008-2011 is as follows:

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, with a minimum of 4 firefighters, was; 11 minutes and 35 seconds. The first-due unit shall is capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; controlling the hazard; and providing basic life support to any victim without endangering response personnel. These operations were done utilizing safe operational procedures.

The department responded to seven incidents in the Technical Rescue Classifications for 2008-2011. An effective response force was assembled for one of the incidents classified as a technical rescue.

Response Reliability

Response reliability is defined as the probability that a unit or units would be available to handle emergency responses in their respective districts. If every piece of department apparatus were available in quarters or district, every time a call was received, then the department's response reliability for every district would be 100 percent. If, however, a call is received for a company in their first due district and the company is not able to handle the incident, a substitute (second due or greater) company must be assigned from another station. If the substituting company is too far away, the department will not be able to meet the total response time objectives for that particular incident.

The chart below illustrates the reliability for all emergency calls located in a particular district.

	Station 1 District	Station 2 District	Station 3 District	Station 4 District	Station 5 District	Station 11 District
Reliability 2008- 2011	67%	69%	76%	71%	71%	77%

Reliability is reduced when companies are unavailable for a multitude of reasons including:

- Out-of-station or district training
- Fueling apparatus
- Routine apparatus maintenance
- Emergency repair of apparatus
- On the scene of another emergency
- Covering another station

When looking at response reliability, it is important to consider the size of the area that a station covers and the call volume for that station. The bigger the response district or the busier the company it is more likely they will be unavailable.

Drawdown of Resources

During fiscal year 2011, the department was authorized 120 positions in the Operations Division. Shifts were assigned 40 each with a minimum staffing level of 36 for any given day. The department defines an effective response force as the minimum amount of equipment and staffing reaching an emergency within the maximum amount of designated total response time. An effective response force should be able to respond and control a fire within the maximum prescribed travel time by a full assignment of companies. This assignment, based upon the risk level of the structure, is also based upon staffing, equipment and travel times to that structure.

The department has set the draw-down level as three engine/quint companies and three medic units. When this level is reached and a request for mutual aid is received, notification of the department's inability to respond will be given until or unless off-duty personnel are called back to duty to maintain this minimum draw-down level. Weather conditions and the shift commander's knowledge of resources that are coming available can influence the draw-down level.

The draw-down of resources does not only represent apparatus but personnel. In an effort to provide effective, consistent company-level leadership, the department provides for a Company Officer for each of the first line apparatus. In addition to the regularly assigned company officer, the department also has a number of qualified firefighters certified as acting officers trained to the company officer level that are capable of riding-up as the company officer in the absence of a regular company officer.

The department also understands that there may be the need to staff certain positions within NIMS with personnel regularly assigned to administrative duty. Currently there are ten members working administrative shifts who can assume NIMS positions. By implementing this option, the number of personnel available on-scene could be increased by as many as 10 additional personnel. This utilization of key personnel resources allows for complete draw-down of department personnel prior to calling upon outside resources to manage an incident.

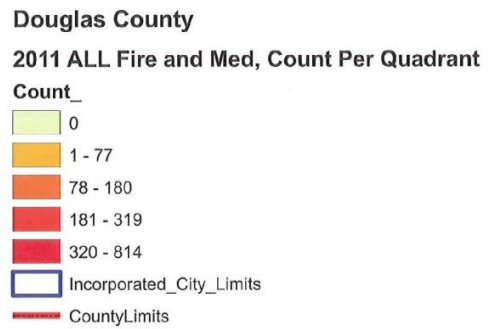
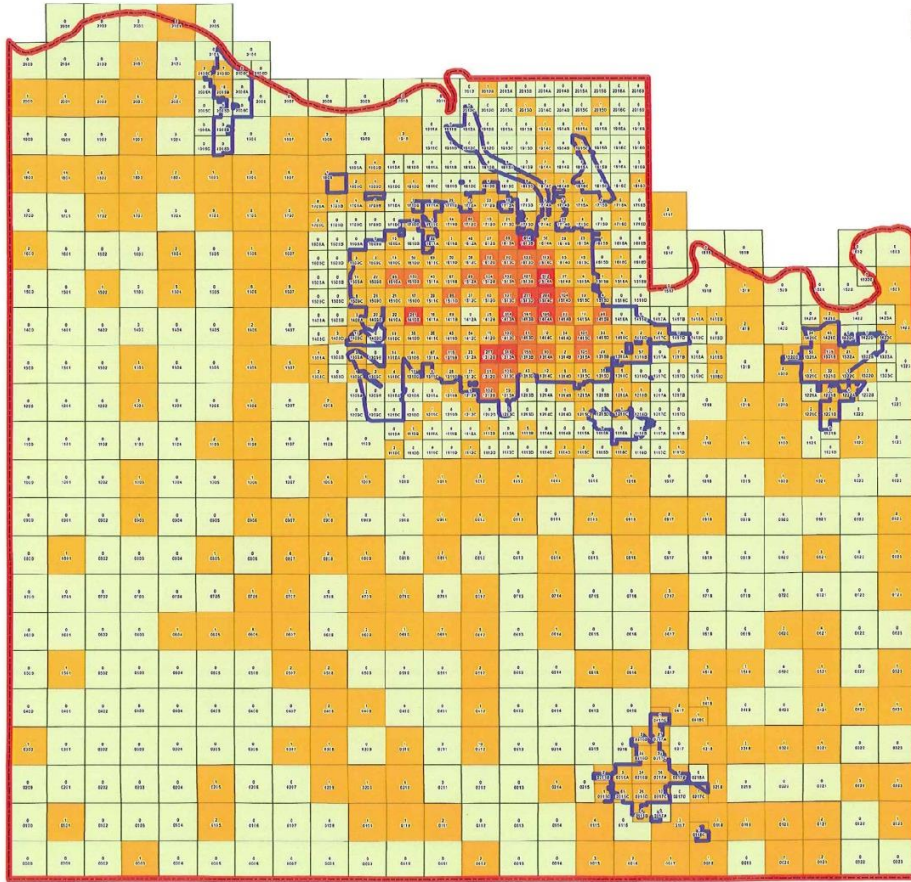
Exhaustion of Resources

The department has set a minimum resource exhaustion level of two engines/quints and two medic units as the point where off duty personnel will be called backed to duty. In the event that the initial emergency response proves to be inadequate, the department also has the capability to request additional resources from the Kansas City Metro Area fire departments. These additional units are available upon request through the normal communications channels. With the existing systems in place, it is possible to immediately deplete all of the available resources to respond to an incident within the jurisdiction. When the cache of local resources is depleted, the department can call upon the regional resources.

Historical Performance

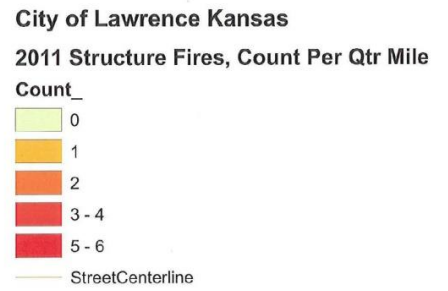
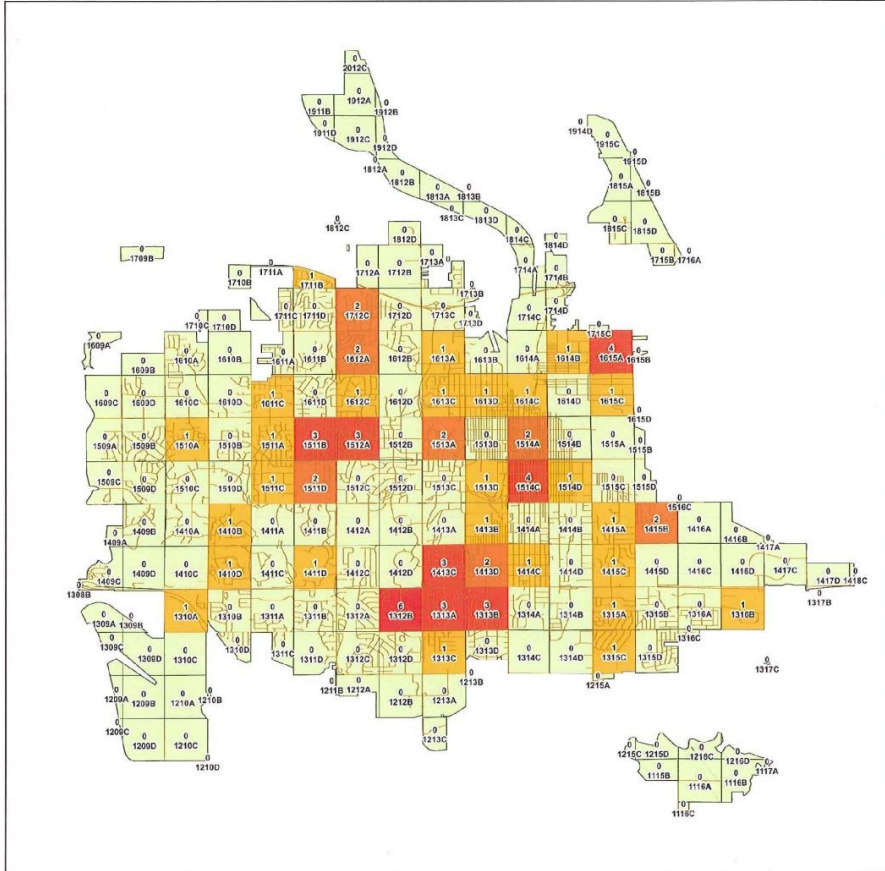
All Fire & Medical Responses Douglas County 2011

Lawrence Douglas County Fire and Medical



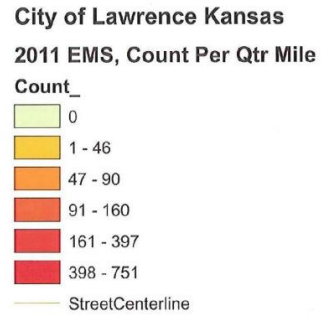
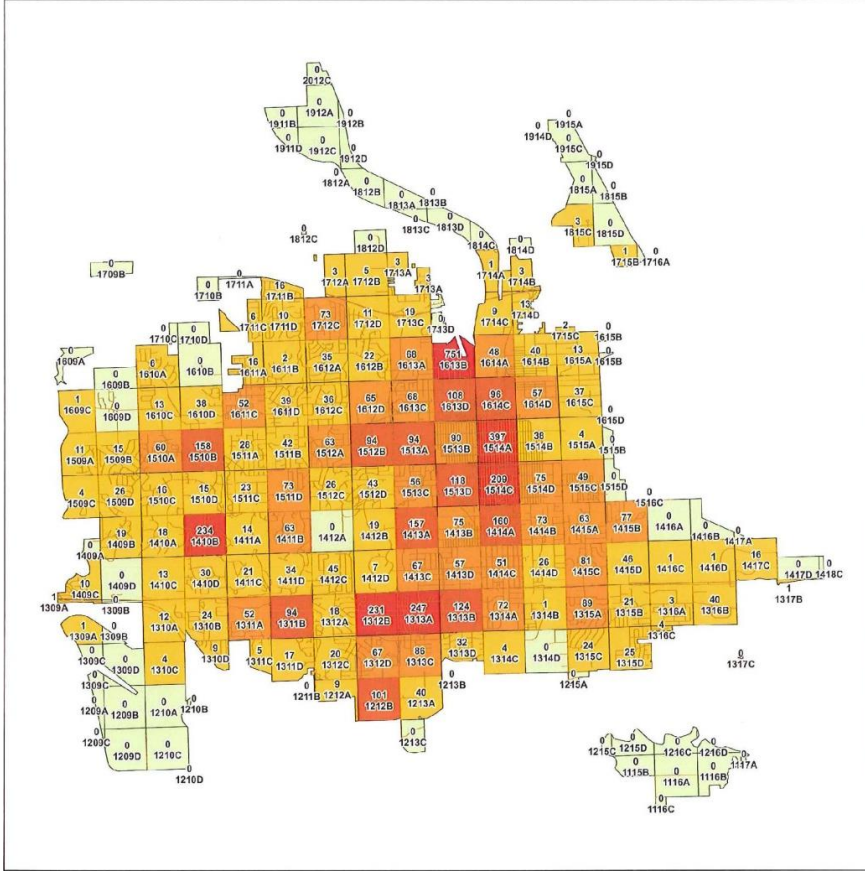
Structure Fires Lawrence 2011

Lawrence Douglas County Fire and Medical



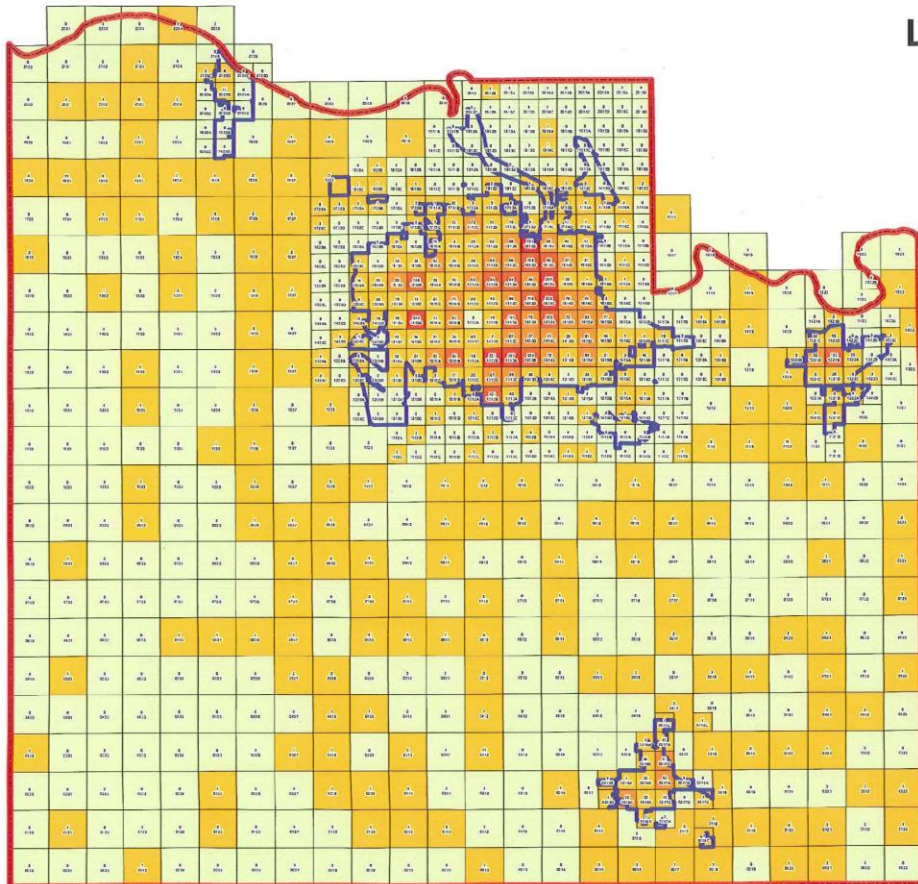
EMS Calls Lawrence 2011

Lawrence Douglas County Fire and Medical



EMS Calls Douglas County 2011

Lawrence Douglas County Fire and Medical



Douglas County

2011 EMS Run Counts Per Quadrant

Count_

0

1 - 46

47 - 90

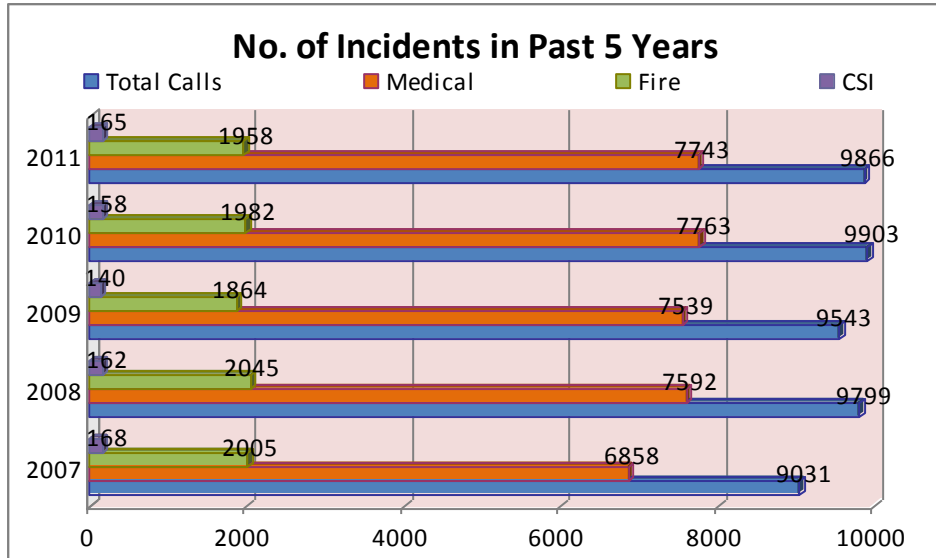
91 - 160

161 - 397

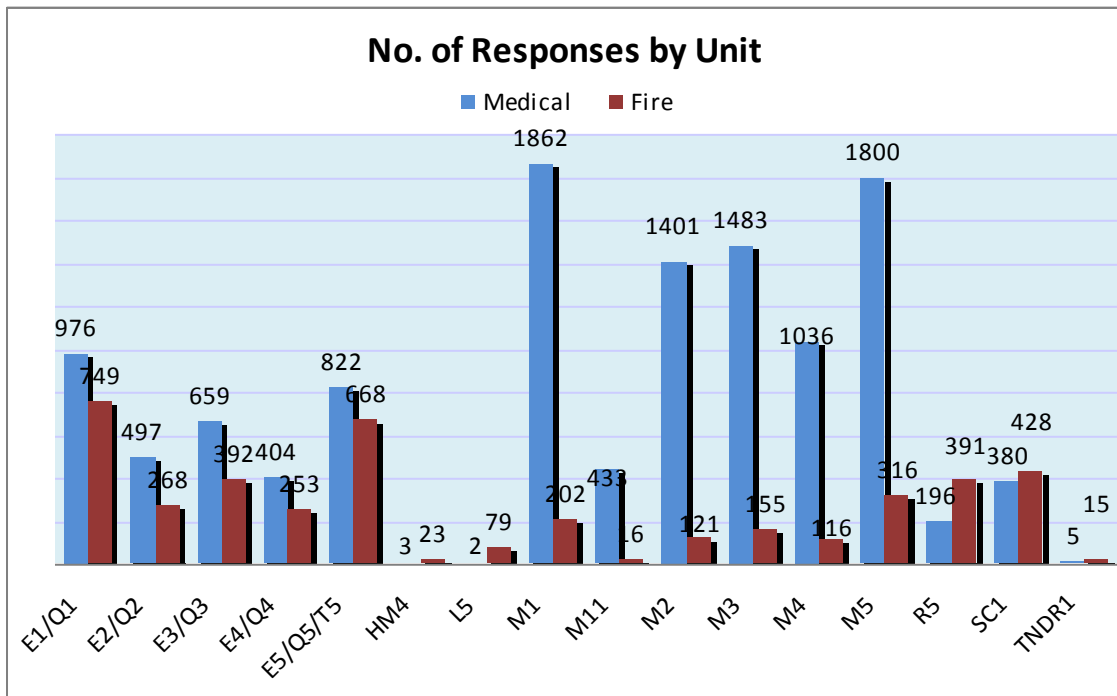
398 - 751

Incorporated_City_Limits

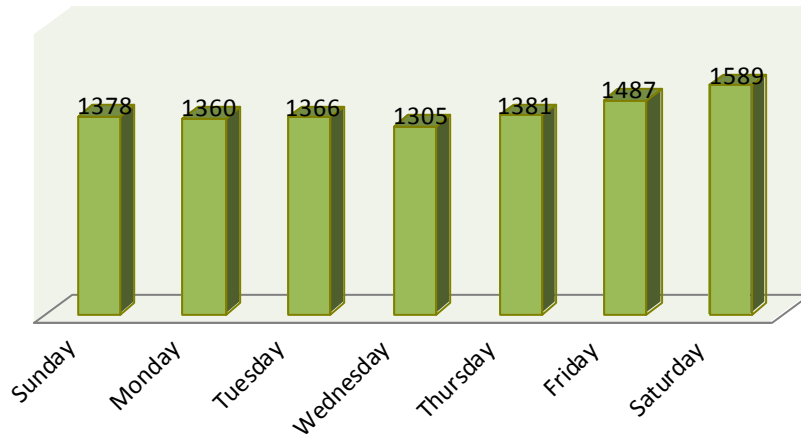
CountyLimits



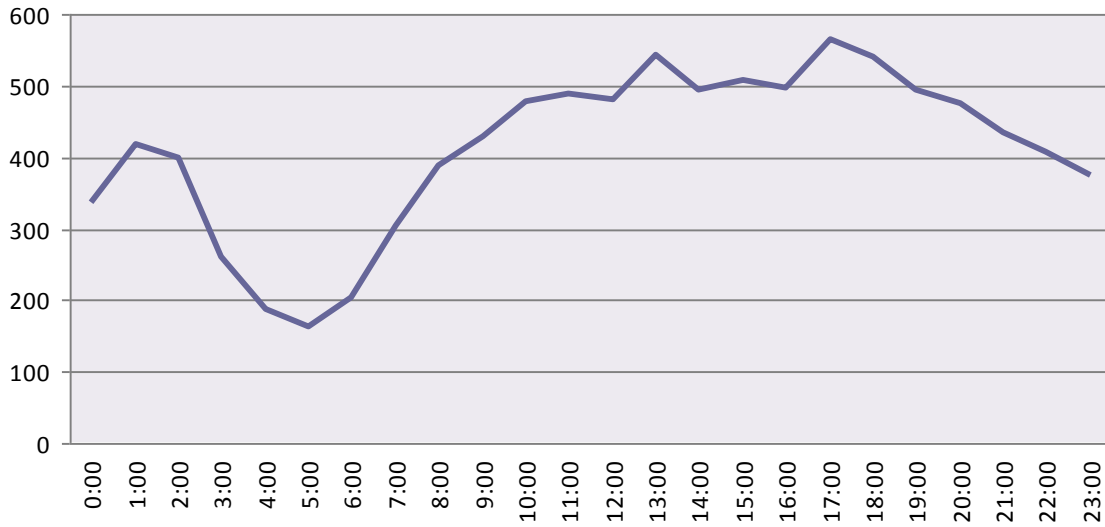
2011 Historical Data



No. of Incidents by Day of Week



Incidents by Hours of Day



Recommendations

In review of the department's goal in meeting the standard of cover policy statements added emphasis on detailed response statistics is a must. Factors that delay the first due company or have them out of district must be recorded in order to adequately analyze the data. The department strives to make the monthly review of the response data so that trends in response patterns can be monitored and used for not only minor adjustments but in planning for future change.

Future Needs, Recommendations and Service Improvement

Every quality organization must engage in continuous self-examination and must seize opportunities for improvement as they are identified. The department has identified several opportunities as a result of the continuous improvement model developed by CPSE.

- Work with the City's policy makers to ensure that Lawrence maintains a firefighting and emergency medical force adequately matched to the identified risks, hazards, and demands of the community.
- Incorporate recommendations highlighted in this document into the department's strategic plan as goals, strategies or performance measures, where financially and operationally feasible.
- Enhance the use of *Firehouse* and *Vinelight* to allow the trained company officers to monitor their baseline performance.
- Continue to seek technologies for delivering training to reduce the amount of time that companies are out of the first-due response zones for training.
- Implement a revised EMD system to reduce alarm handling times targeting a 60 second benchmark.

- Develop a documented systems approach for new fire station construction and staffing. This systems approach should ultimately focus on keeping the total response time benchmark targets as outlined in the SOC for growing areas of the community.






- Continue to evaluate alternatives to improve service delivery including the following:
 - Identification of new station locations
 - Adjust staffing during predicted or anticipated increased load times
 - Training coverage with staffed units
 - Adding additional resources to existing facilities

- Maintain four-person staffing on all engine/quint/truck companies as outlined in NFPA 1710 in order to meet critical tasking needs.

Fleet Guide

Primary Fleet

 <p>A red and white Pierce engine truck with 'LAWRENCE FIRE-MEDICAL' and 'ENGINE 1' markings.</p>	<p>Engine 1 Unit 646 Station 1</p>	<p>2010 Pierce 2000 GPM Pump 500 Gal. Water 30 Gal. Foam CAFS</p>
 <p>A red and white Pierce quint truck with 'LAWRENCE' and 'QUINT 2' markings.</p>	<p>Quint 2 Unit 642 Station 2</p>	<p>2009 Pierce 75' Aerial 2000 GPM Pump 500 Gal. Water 30 Gal. Foam CAFS</p>
 <p>A red and white Pierce quint truck with 'LAWRENCE' and 'QUINT 3' markings.</p>	<p>Quint 3 Unit 641 Station 3</p>	<p>2006 Pierce 75' Aerial 2000 GPM Pump 500 Gal. Water 30 Gal. Foam CAFS</p>
 <p>A red and white Pierce quint truck with 'LAWRENCE' and 'QUINT 4' markings.</p>	<p>Quint 4 Unit 643 Station 4</p>	<p>2009 Pierce 75' Aerial 2000 GPM Pump 500 Gal. Water 30 Gal. Foam CAFS</p>
 <p>A red and white Pierce truck with 'LAWRENCE' and 'TRUCK 5' markings.</p>	<p>Truck 5 Unit 647 Station 5</p>	<p>2011 Pierce 100' Aerial Platform 2000 GPM Pump 300 Gal. Water 30 Gal. Foam CAFS</p>
 <p>A red and white Pierce rescue truck with 'LAWRENCE RESCUE' and 'RESCUE 5' markings.</p>	<p>Rescue 5 Unit 645 Station 5</p>	<p>2009 Pierce Rescue 75 KW Generator Light Tower SCBA Fill</p>

 <p>A white ambulance with red and yellow stripes. The side of the ambulance is labeled "LAWRENCE 1" in large yellow letters, with "DOUGLAS COUNTY FIRE + MEDICAL" in smaller black letters below it.</p>	<p>Medic 1 Unit 690 Station 1</p>	<p>2005 AEV Freightliner M2</p>
 <p>A white ambulance with red and yellow stripes. The side of the ambulance is labeled "LAWRENCE 2" in large yellow letters, with "DOUGLAS COUNTY FIRE + MEDICAL" in smaller black letters below it.</p>	<p>Medic 2 Unit 680 Station 2</p>	<p>2011 AEV GMC 4500</p>
 <p>A white ambulance with red and yellow stripes. The side of the ambulance is labeled "LAWRENCE 3" in large yellow letters, with "DOUGLAS COUNTY FIRE + MEDICAL" in smaller black letters below it. The top of the ambulance is labeled "STATION No. 3".</p>	<p>Medic 3 Unit 693 Station 3</p>	<p>2010 AEV GMC 4500</p>
 <p>A white ambulance with green and blue stripes. The side of the ambulance is labeled "MEDIC 4" in large blue letters. There is a logo on the side of the ambulance.</p>	<p>Medic 4 Unit 679 Station 4</p>	<p>2004 AEV Freightliner M2</p>
 <p>A white ambulance with red and yellow stripes. The side of the ambulance is labeled "LAWRENCE 5" in large yellow letters, with "DOUGLAS COUNTY FIRE + MEDICAL" in smaller black letters below it.</p>	<p>Medic 5 Unit 691 Station 5</p>	<p>2005 AEV Freightliner M2</p>

	<p>Medic 11</p> <p>Unit 681 Station 11</p>	<p>2010 AEV GMC 4500</p>
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Cross Staffed Fleet

	<p>Tender 1</p> <p>Unit 626 Station 1</p>	<p>2006 Crimson 1000 GPM Pump 2000 Gal. Water 120 Gal. Foam</p>
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	<p>Brush 2</p> <p>Unit 651 Station 2</p>	<p>2006 Ford/Weis 100 GPM Pump 200 Gal. Water 12 Gal. Foam</p>
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	<p>Brush 4</p> <p>Unit 652 Station 4</p>	<p>2006 Ford/Weis 100 GPM Pump 200 Gal. Water 12 Gal. Foam</p>
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	<p>HazMat 4</p> <p>Unit 636 Station 4</p>	<p>1996 Hackney Hazmat</p>
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	Investigation 1	2006 Pierce SSV GMC 4500
	Unit 634 Investigation Center	Mobile Command Fire & Coroner Investigation

Secondary Fleet

	Engine 10	2002 American LaFrance
	Unit 627 Station 1	1500 GPM Pump 500 Gal. Water 30 Gal. Foam
	Quint 40	1996 Smeal
	Unit 612 Station 4	75' Aerial 1500 GPM Pump 500 Gal. Water 30 Gal. Foam
	Quint 50	1994 Smeal
	Unit 615 Station 5	75' Aerial 1500 GPM Pump 500 Gal. Water
	Ladder 20	1998 Pierce
	Unit 640 Station 2	100' Aerial
	Medic 10	2002 MedicMaster Ford E450
	Unit 685 Station 1	

	Medic 20 Old M20 Unit 677 Station 2	2005 AEV Freightliner M2
	Medic 30 Unit 678 Station 3	2005 AEV Freightliner M2
	Medic 40 Unit 687 Station 4	2001 Amtech Freightliner
	Medic 50 Old M20 Unit 684 Station 5	1998 Amtech Freightliner

New Not In-Service

	Engine 4 HazMat Unit 648 Station 4	2012 Pierce 1500 GPM Pump 500 Gal. Water 30 Gal. Foam CAFS
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Facilities Guide

Station One



Description:

Exterior is brick. Interior is sheetrock and metal studs in improved areas. 32,500 sq. ft.

Year Constructed:

Constructed in 1951

Condition Report:

The building is in poor overall condition. The roof is currently being replaced. The heating and cooling needs replaced. The entire building needs upgraded.

Completed Improvements:

1980 - There was a major renovation around 1980 when the Douglas County Senior Citizen program moved into the building. A new roof was also installed.

1983 – Renovation of Dayroom and station office area

1984 – Renovation of Dorms and office areas

1992 - A small roof area by the Fire/Med side was replaced

1995 - Restroom remodel and asbestos abatement CDBG/BM ADA update

2002 - New boiler for the heating system was installed, Carpet and flooring has been upgraded.

Upgraded electrical service and distribution panel

2003 - T-8 lighting installed to replace old F-40's.

2009 - Roof replacement for east half of building.

2012 – Roof repairs over west half of building

Station Two



Description:

Exterior is lap siding and corrugated metal. Interior is sheetrock and metal studs. 12,000 sq. ft.

Year Constructed:

Constructed in 2002

Condition Report:

The building is in good overall condition.

Completed Improvements:

2008 - Installed emergency generator system

Station Three



Description

Exterior is brick veneer over concrete block. Interior is a combination of concrete block walls and sheetrock and metal studs. Station 3 is 7784 sq. ft. the adjacent annex is 1470 sq. ft.

Year Constructed

Constructed in 1968

Annex constructed 2002

Condition Report

The building is in good overall condition.

Completed Improvements

- 2005 - There was a significant renovation and addition to this facility that improved fitness, office and dorm areas.
- 2008 - Infrared heating system was installed to replace forced air furnace for apparatus floor.
- 2008 Installed emergency generator system

Station Four



Description:

Exterior is lap siding and corrugated metal. Interior is sheetrock and metal studs. 12,000 sq. ft.

Year Constructed:

Constructed in 2006

Condition Report:

The building is in very good overall condition.

Completed Improvements:

There have been no improvements to this facility.

Station Five & Fire Administration



Description

Exterior is brick and concrete. Interior is sheetrock and metal studs. 25,000 sq. ft.

Year Constructed

Constructed in 2006

Condition Report

The building is in very good overall condition.

Completed Improvements

There have been no improvements to this facility.

Station Eleven



Description: Brick façade on outside with wood frame and sheetrock walls interior. The department purchased this building in 1998. It served as a residential home up to then. It houses one medic unit and two personnel.

Year Constructed: 1971

Condition Report: This building is in poor condition. It has major problems with the foundation/basement walls.

Completed Improvements: 1997 – Garage modification to fit Medic Unit.

Training Center



Description:

Exterior is brick veneer over concrete block. Interior is a combination of concrete block walls and sheetrock and metal studs. Training tower is steel frame with metal covering. Training Center 6000 sq. ft. Drill Tower 2465 sq. ft.

Year Constructed:

Training Center constructed in 1968
Drill Tower constructed 1988

Condition Report:

The building is in good overall condition. The training tower is in need of replacement.

Completed Improvements:

- 1988 - Training center roof was replaced. A minor addition was added to the south side and the entire building was covered in brick veneer.
- 2000 - Training center HVAC system for apparatus floor was replaced
- 2003 - Drill tower base refurbished
- 2003 - Trench training area constructed
- 2008 – Main Training room remodeled
- 2011 - Incoming water line repaired partially replaced.

Investigation Center



Description

Exterior is brick. Interior is sheetrock and wood studs. 3360 sq. ft.

Year Constructed

Constructed in 1928

Condition Report

The building is in fair overall condition. The entire building needs upgraded. It is a designated historical structure.

Completed Improvements

- 1955 - 2 - story addition was added to the rear of the building.
- 1983 - There was a major interior renovation by the Douglas County Ambulance Service who occupied the building until 1997.
- 1999 - New windows and exterior walk in doors were installed.
- 2008 - Minor remodeling of area designated as evidence room.
- 2008 - Front apron was replaced.

RAPTOR Listing Maximum & High Risk Occupancies October 2012

Occupancy Id	Name	Address				Apt/Rm	Map	RAPTOR Class
4365-0-0	First Step at Lakeview	3015	W	31ST	ST		1212A	Maximum
7192-0-0	A-1 MINI STORAGE	1717	W	31ST	ST		1213A	Maximum
11422-0-0	BRIDGE HAVEN CARE COTTAGE	3109	W	26TH	ST		1312A	Maximum
7777-0-0	Cottonwood Inc.	1740		KENT	TER		1313A	Maximum
7776-0-0	Cottonwood Inc.	2501		RIDGE CT.			1313A	Maximum
8085-0-0	A-1 MINI STORAGE	2900	S	IOWA	ST	SUITE A	1313C	Maximum
30004	HINU POWHATAN HALL	155		INDIAN	AVE	Bldg 53	1314A	Maximum
20067	KU JAYHAWK TOWER BLDG A	1603	W	15TH	ST		1413A	Maximum
20068	KU JAYHAWK TOWER BLDG B	1603	W	15TH	ST		1413A	Maximum
20069	KU JAYHAWK TOWER BLDG C	1603	W	15TH	ST		1413A	Maximum
20070	KU JAYHAWK TOWER BLDG D	1603	W	15TH	ST		1413A	Maximum
20075	KU TEMPLIN RESIDENCE HALL	1515		ENGEL	RD		1413A	Maximum
20072	KU LEWIS RESIDENCE HALL/EKDAHL DINING	1530		ENGEL	RD		1413A	Maximum
20066	KU HASHINGER HALL	1632		ENGEL	RD		1413A	Maximum
20064	KU ELLSWORTH RESIDENCE HALL	1734		ENGEL	RD		1413A	Maximum
20073	KU McCOLLUM RESIDENCE HALL	1800		ENGEL	RD		1413A	Maximum
20074	KU OLIVER RESIDENCE HALL	1815		NAISMITH	DR		1413A	Maximum
20035	KU WATKINS SCHOLARSHIP HALL	1506		LILAC	LN		1413B	Maximum
20034	KU MILLER SCHOLARSHIP HALL	1518		LILAC	LN		1413B	Maximum
1920-0-0	NAISMITH HALL	1800		NAISMITH	DR		1413B	Maximum
20046	KU HAWORTH HALL	1200		SUNNYSIDE	AVE		1413B	Maximum
20051	KU MALOTT HALL	1251		WESCOE HALL	DR		1413B	Maximum
11370-0-0	GOUP LIVING HOUSE	1536		TENNESSEE			1414A	Maximum
8701-0-0	CLO	2113		DELAWARE	ST		1414D	Maximum
11455-0-0	South Lawrence COOP	2001		MOODIE	RD	B	1414D	Maximum
9019-0-0	The Shelter Williams Facility	1615		LINDENWOOD	LN		1415B	Maximum
11385-0-0	ACCESSIBLE CARE RESIDENTIAL	1405	E	21ST	TER		1415C	Maximum
10154-0-0	CLO DUPLEX #5	1209		RANDALL	RD		1511B	Maximum
1293-0-0	Lawrence Presbyterian Manor	1429		KASOLD	DR		1511D	Maximum
4539-0-0	EXCALIBUR OF WESTMINSTER	2711	W	6TH	ST	SUITE D	1512B	Maximum
2450-0-0	VACANT 2004	1510		SIGMA NU	PL		1513A	Maximum
20065	KU GERTRUDE SELLARDS PEARSON (GSP)	500	W	11TH	ST		1513B	Maximum
2991-0-0	Phi Kappa Psi Fraternity	1602	W	15TH	ST		1513C	Maximum
517-0-0	Delta Gamma Sorority	1015		EMERY	RD		1513C	Maximum
2680-0-0	Delta Chi Fraternity	1245		WEST CAMPUS	RD		1513C	Maximum
2684-0-0	Sigma Kappa Sorority	1325		WEST CAMPUS	RD		1513C	Maximum
20063	KU CORBIN HALL	420	W	11TH	ST		1513D	Maximum
20024	KU BATTENFELD SCHOLARSHIP HALL	1425		ALUMNI	PL		1513D	Maximum
20043	KU DYCHE HALL	1345		JAYHAWK	BLV D		1513D	Maximum
20044	KU FRASER HALL	1415		JAYHAWK	BLV D		1513D	Maximum
20005	KU CAMPANILE	1450		MEMORIAL	DR		1513D	Maximum
20020	KU MEMORIAL STADIUM	1101		MISSISSIPPI	ST		1513D	Maximum
2873-0-0	OREAD HOTEL	1200		OREAD	AVE		1513D	Maximum

8358-0-0	Hope House Halfway House	834		KENTUCKY	ST		1514A	Maximum
7135-0-0	LAWRENCE COMMUNITY SHELTER	944		KENTUCKY	ST		1514A	Maximum
8411-0-0	Boarding House	1005		KENTUCKY	ST		1514A	Maximum
10812-3-0	Deciphera-- Bio lab	645		MASSACHUSETTS	ST	200	1514A	Maximum
1562-0-0	Eldridge Hotel Storage	701		MASSACHUSETTS	ST	3	1514A	Maximum
9392-1-0	901 New Hampshire Apartment/Mixed occupy	901		NEW HAMPSHIRE	ST		1514A	Maximum
8442-0-0	Congregate House	923		OHIO	ST		1514A	Maximum
10198-0-0	CONGREGATE RESIDENCE	930		OHIO	ST		1514A	Maximum
8443-0-0	HALCYON HOUSE	1000		OHIO	ST		1514A	Maximum
20033	KU STEPHENSON SCHOLARSHIP HALL	1404		ALUMNI	PL		1514C	Maximum
20031	KU PEARSON SCHOLARSHIP HALL	1426		ALUMNI	PL		1514C	Maximum
20032	KU SELLARDS SCHOLARSHIP HALL	1443		ALUMNI	PL		1514C	Maximum
11030-0-0	Boarding House	1213		KENTUCKY	ST		1514C	Maximum
20030	KU MARGARET AMINI SCHOLARSHIP HALL	1312		LOUISIANA	ST		1514C	Maximum
20028	KU K.K. AMINI SCHOLARSHIP HALL	1318		LOUISIANA	ST		1514C	Maximum
20027	KU GRACE PEARSON SCHOLARSHIP HALL	1335		LOUISIANA	ST		1514C	Maximum
20026	KU DOUTHART SCHOLARSHIP HALL	1345		LOUISIANA	ST		1514C	Maximum
11031-0-0	Congregate House	1223		OHIO	ST		1514C	Maximum
20029	KU KREHBIEL SCHOLARSHIP HALL	1301		OHIO	ST		1514C	Maximum
20025	KU DENNIS E. RIEGER SCHOLARSHIP HALL	1323		OHIO	ST		1514C	Maximum
10076-0-0	Congregate Residence	1211		RHODE ISLAND	ST		1514C	Maximum
2551-0-0	Kappa Alpha Theta Sorority	1433		TENNESSEE	ST		1514C	Maximum
1657-0-0	Comfort Inn	150		IOWA	ST		1613A	Maximum
10191-0-0	Congregate Apartment	1607	W	4TH	ST		1613C	Maximum
1869-0-0	The Shelter Winter Facility	342		MISSOURI	ST		1613D	Maximum
1436-0-0	OTTAWA COOP	325		LOCUST	ST		1614D	Maximum
10148-0-0	CLO DUPLEX #2	402	N	JOHN DOY	CT		1712A	Maximum
8740-0-0	ERTLE'S ECONO SELF STORAGE	412	N	IOWA	ST		1713C	Maximum
7792-0-0	Cottonwood Inc.	2421	W	31ST	ST		1212B	High
7792-1-0	Cottonwood Inc.	2421.5	W	31ST	ST		1212B	High
7775-0-0	COTTONWOOD INC.	2801	W	31ST	ST	Building 3	1212B	High
7494-0-0	RESIDENTIAL ALTERNATIVES	3617	W	24TH	ST		1311B	High
11173-0-0	RESIDENTIAL ALTERNATIVES	3804	W	24TH	TER		1311B	High
183-0-0	RESIDENTIAL ALTERNATIVES	2401		BROOKSIDE	DR		1311B	High
7041-0-0	RESIDENTIAL ALTERNATIVES	2405		BROOKSIDE	DR		1311B	High
10079-0-0	RENTAL HOUSE	3417	W	28TH	ST		1311D	High
7790-0-0	Cottonwood Inc.	2900	W	23RD	TER		1312A	High
10613-0-0	CLO Atchison House	3016		ATCHISON	WA Y		1312C	High
11717-0-0	USMAN ISAAKU ADULT CARE	2904		CRESTLINE	DR		1312D	High
10155-0-0	CLO DUPLEX #6	2701		HARRISON	PL		1312D	High
100-1-0	By Grace Home	2804		PEBBLE	LN		1312D	High
7778-0-0	Cottonwood Inc.	1513	W	25TH	CT		1313A	High
7785-0-0	Cottonwood Inc.	1739	W	26TH	ST		1313A	High
30002	HINU ROE CLOUD HALL	155		INDIAN	AVE	Bldg 130	1314A	High
30005	HINU BLALOCK HALL	155		INDIAN	AVE	Bldg 128	1314A	High
30000	HINU WINONA HALL	155		INDIAN	AVE	Bldg 109	1314B	High
30014	HINU POCAHONTAS HALL	155		INDIAN	AVE	Bldg 2	1314B	High

30017	HINU OSCEOLA KEOKUK HALL	155		INDIAN	AVE	Bldg 108	1314B	High
11172-1-0	MINIWAREHOUSE	808	E	28TH	ST		1314D	High
7786-0-0	COTTONWOOD INC.	1509	E	25TH	TER		1315A	High
10612-0-0	CLO Ponderosa House	1205	E	26TH	ST		1315A	High
10609-0-0	CLO Harper House	2769		HARPER	ST		1315C	High
10655-0-0	VACANT	3701		FRANKLIN PARK	CL	100-106	1316B	High
11320-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	B	1316B	High
11321-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	C	1316B	High
11322-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	D	1316B	High
11323-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	E	1316B	High
11324-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	F	1316B	High
11325-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	G	1316B	High
11398-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	H	1316B	High
11399-0-0	PROFESSIONAL MOVING AND STORAGE	3620		THOMAS	CT	I	1316B	High
7459-2-0	Rosewood Support Services	6341		CANDY	LN		1409C	High
11751-0-0	ROSEWOOD #2	6341		CANDY	LN		1409C	High
11526-1-0	Deciphera	1501		WAKARUSA	DR		1410A	High
7043-0-0	RESIDENTIAL ALTERNATIVES	2205		GREENBRIER	DR		1411C	High
8296-1-0	RESIDENTIAL ALTERNATIVES	2111		KASOLD	ST	BLDG D,101	1411D	High
7459-0-0	Rosewood Support Services	1925		HEATHERWOOD	DR		1412C	High
7459-1-0	Rosewood Support Services	1927		HEATHERWOOD	DR		1412C	High
20054	KU MOORE HALL (KSGS)	1930		CONSTANT	AVE		1412D	High
7515-0-0	Congregate House	1614		KENTUCKY	ST		1414A	High
1637-0-0	BABCOCK PLACE	1700		MASSACHUSETTS	ST		1414A	High
8761-0-0	PUBLIC STORAGE	2223		HASKELL	ST		1414D	High
10608-0-0	CLO Terrace House	1311	E	21ST	TER		1415C	High
11384-0-0	ACCESSIBLE CARE RESIDENTIAL	1401	E	21ST	TER		1415C	High
10105-0-0	Cottonwood Inc.	1027		DRUM	DR		1509B	High
10610-0-0	CLO Monterey House	1121		MONTEREY	WA Y		1511C	High
7791-0-0	Cottonwood Inc.	1013		ROGERS	PL		1512A	High
1116-0-0	QUALITY INN	801		IOWA	ST		1512B	High
515-0-0	Theta Chi Fraternity	1003		EMERY	RD		1513A	High
1113-1-0	Days Inn	730		IOWA	ST		1513A	High
1114-0-0	BAYMONT INN	740		IOWA	ST		1513A	High
8192-0-0	Alpha Chi Omega Sorority	1500		SIGMA NU	PL		1513A	High
2449-0-0	Sigma Nu Fraternity	1501		SIGMA NU	PL		1513A	High
10238-0-0	HILLEL HOUSE	940		MISSISSIPPI	ST		1513B	High
3295-0-0	Pi Beta Phi Sorority	1612	W	15TH	ST		1513C	High
518-0-0	Delta Upsilon Fraternity	1025		EMERY	RD		1513C	High
519-0-0	KAPPA SIGMA	1045		EMERY	RD		1513C	High
907-0-0	Kappa Delta Sorority	1602		HIGH	DR		1513C	High
2213-0-0	Alpha Delta Pi Sorority	1600		OXFORD	RD		1513C	High
2214-0-0	Delta Delta Delta Sorority	1630		OXFORD	RD		1513C	High
8244-0-0	Sigma Alpha Epsilon Fraternity	1301		WEST CAMPUS	RD		1513C	High
2685-0-0	Gamma Phi Beta Sorority	1339		WEST CAMPUS	RD		1513C	High
2686-0-0	Chi Omega Sorority	1345		WEST CAMPUS	RD		1513C	High
2846-0-0	Delta Tau Delta Fraternity	1111	W	11TH	ST		1513D	High
2852-0-0	Triangle Fraternity.	1144	W	11TH	ST		1513D	High

1082-0-0	Alpha Gamma Delta Sorority	1100		INDIANA	ST		1513D	High
1083-0-0	Alpha Epsilon Pi Fraternity	1116		INDIANA	ST		1513D	High
20048	KU KANSAS MEMORIAL UNION	1301		JAYHAWK	BLV D		1513D	High
11516	DOUTHART HALL	1345		LOUISIANA	ST		1513D	High
20047	KU JOSEPH R. PEARSON HALL	1122		WEST CAMPUS	RD		1513D	High
4772-0-0	Eldridge Hotel Annex	205	W	8TH	ST		1514A	High
11104-0-0	BOARDING HOUSE	1033		KENTUCKY			1514A	High
10812-2-0	Deciphera Pharmaceuticals	647		MASSACHUSETTS	ST		1514A	High
1561-5-0	Vacant	700		MASSACHUSETTS	ST	302	1514A	High
1561-10-0	APP	700		MASSACHUSETTS	ST	105	1514A	High
1561-1-0	HOBBS	700		MASSACHUSETTS	ST	100	1514A	High
1561-14-0	KATHY PERKINS LLC	700		MASSACHUSETTS	ST	303	1514A	High
1561-16-0	TLC FILMS	700		MASSACHUSETTS	ST	202	1514A	High
1561-11-0	Vacant	700		MASSACHUSETTS	ST	207	1514A	High
1561-15-0	Commercial Floorworks	700		MASSACHUSETTS	ST	304	1514A	High
1561-3-0	COMMERCIAL/FLOORWORKS	700		MASSACHUSETTS	ST	201	1514A	High
1561-18-0	Debbie Goldberg Office	700		MASSACHUSETTS	ST	208	1514A	High
1561-0-0	COMMONS AREA	700		MASSACHUSETTS	ST		1514A	High
1561-12-0	SOLBACH LAW OFFICE	700		MASSACHUSETTS	ST	203	1514A	High
1561-13-0	MARGARET THORP, ATTORNEY	700		MASSACHUSETTS	ST	206	1514A	High
1561-19-0	ROBERT FRAGA	700		MASSACHUSETTS	ST	301	1514A	High
1561-6-0	BRET DILLINGHAM OFFICE	700		MASSACHUSETTS	ST	305	1514A	High
1561-7-0	MARLYN HORSCH	700		MASSACHUSETTS	ST	306	1514A	High
1561-8-0	FLORA AND FAUNA SALON	700		MASSACHUSETTS	ST	307	1514A	High
1561-2-0	ANN MARIE GLODICH PHD.	700		MASSACHUSETTS	ST	103-4	1514A	High
1561-4-0	JUDY DUTTON	700		MASSACHUSETTS	ST	210-11	1514A	High
1561-17-0	STORAGE	700		MASSACHUSETTS	ST	209	1514A	High
1563-0-0	ELDRIDGE HOTEL	701		MASSACHUSETTS	ST		1514A	High
1564-0-0	Ten	701		MASSACHUSETTS	ST	1	1514A	High
9121-0-0	JAYHAWKER BAR	701		MASSACHUSETTS	ST	2	1514A	High
7768-1-0	RUDY'S PIZZERIA	704		MASSACHUSETTS	ST	B	1514A	High
7768-2-0	BLOOM, BATH, AND BODY	704		MASSACHUSETTS	ST	A	1514A	High
1563-1-0	Eldridge patio	705		MASSACHUSETTS	ST		1514A	High
7759-2-0	GOULD, EVANS PARTNERSHIP	706		MASSACHUSETTS	ST	200	1514A	High
7757-0-0	THE DUSTY BOOKSHELF	708		MASSACHUSETTS	ST		1514A	High
7794-0-0	SPECTATORS	710		MASSACHUSETTS	ST		1514A	High
7795-0-0	Mexquisito	712		MASSACHUSETTS	ST		1514A	High
10106-0-0	White House Black Market	714		MASSACHUSETTS	ST		1514A	High
10106-1-0	Apartments	714.5		MASSACHUSETTS	ST		1514A	High
8837-0-0		715	715	MASSACHUSETTS	ST		1514A	High
8837-1-0	Apartment	715.5		MASSACHUSETTS	ST		1514A	High
7796-0-0	ECCENTRICITY	716		MASSACHUSETTS	ST		1514A	High
7796-3-0	LOFT APARTMENT	716.5		MASSACHUSETTS	ST	UPSTAIRS	1514A	High
7796-2-0	vacant	716.5		MASSACHUSETTS	ST		1514A	High
1565-0-0	sweet	717		MASSACHUSETTS	ST		1514A	High
1566-0-0	BUFFALO BOB'S SMOKEHOUSE	719		MASSACHUSETTS	ST		1514A	High
8820-15-0	La Bella Vita	719.5		MASSACHUSETTS	ST	110	1514A	High
8820-6-0	LOIS WILKINS, PHD	719.5		MASSACHUSETTS	ST	128	1514A	High
8820-1-0	VACANT	719.5		MASSACHUSETTS	ST	114	1514A	High
8820-11-0	Ursula Gilkeson	719.5		MASSACHUSETTS	ST	124	1514A	High
8820-16-0	Amazing Skin	719.5		MASSACHUSETTS	ST	104	1514A	High

8820-17-0	Amazing Skin	719.5		MASSACHUSETTS	ST	105	1514A	High
8820-18-0	Simply wax	719.5		MASSACHUSETTS	ST	106	1514A	High
8820-19-0	Salon Blush	719.5		MASSACHUSETTS	ST	108	1514A	High
8820-2-0	CURTIS BARNHILL ATTORNEY	719.5		MASSACHUSETTS	ST	120	1514A	High
8820-20-0	Salon Blush	719.5		MASSACHUSETTS	ST	107	1514A	High
8820-21-0	Studio 11	719.5		MASSACHUSETTS	ST	103	1514A	High
8820-22-0	Vacant	719.5		MASSACHUSETTS	ST	111	1514A	High
8820-23-0	PETE ROWLAND OFFICE	719.5		MASSACHUSETTS	ST	112	1514A	High
8820-24-0	Simpson / Steffens	719.5		MASSACHUSETTS	ST	117	1514A	High
8820-25-0	CHRISTY EDWARDS OFFICE	719.5		MASSACHUSETTS	ST	118	1514A	High
8820-26-0	KECK - TRAVIS LLC	719.5		MASSACHUSETTS	ST	119	1514A	High
8820-27-0	Curtis G. Barnhill	719.5		MASSACHUSETTS	ST	121	1514A	High
8820-28-0	The Birdsong Parlour	719.5		MASSACHUSETTS	ST	109	1514A	High
8820-30-0	CYNTHIA R. WALKER OFFICE	719.5		MASSACHUSETTS	ST	123	1514A	High
8820-31-0	ALAN COWLES, MD	719.5		MASSACHUSETTS	ST	125	1514A	High
8820-32-0	SMITH LEGAL LLC	719.5		MASSACHUSETTS	ST	126	1514A	High
8820-33-0	Hoopes/Gowen	719.5		MASSACHUSETTS	ST	116	1514A	High
8820-34-0	SCHUMM OFFICES	719.5		MASSACHUSETTS	ST	101	1514A	High
8820-35-0	SCHUMM OFFICES (SEE #101)	719.5		MASSACHUSETTS	ST	102	1514A	High
8820-37-0	SMITH LEGAL	719.5		MASSACHUSETTS	ST	129/130	1514A	High
8820-7-0	JANICE MELLAND, PHD	719.5		MASSACHUSETTS	ST	127	1514A	High
8820-8-0	Kathy Wright, LSCSW	719.5		MASSACHUSETTS	ST	115	1514A	High
8820-9-0	ROSENTHAL LAW	719.5		MASSACHUSETTS	ST	122	1514A	High
8820-36-0	SCHUMM OFFICES (SEE SUITE 101)	719.5		MASSACHUSETTS	ST	113	1514A	High
8820-0-0	729.5 MASS BUILDING	719.5		MASSACHUSETTS	ST		1514A	High
1566-1-0	DYNAMITE SALOON	721		MASSACHUSETTS	ST		1514A	High
7734-0-0	SIGNS OF LIFE	722		MASSACHUSETTS	ST		1514A	High
8797-0-0	GOLDMAKERS	723		MASSACHUSETTS	ST		1514A	High
8797-1-0	APARTMENTS	723.5		MASSACHUSETTS	ST		1514A	High
9200-0-0	Tapas	724		MASSACHUSETTS	ST		1514A	High
1567-0-0	Nomads	725		MASSACHUSETTS	ST		1514A	High
1567-1-0	APARTMENTS	725.5		MASSACHUSETTS	ST		1514A	High
1568-0-0	CREATION STATION	726		MASSACHUSETTS	ST		1514A	High
8636-0-0	Vacant	727		MASSACHUSETTS	ST	A	1514A	High
8636-0-1	LAWRENCE METAPHYSICAL	727		MASSACHUSETTS	ST	B	1514A	High
7797-0-0	TONIC	728		MASSACHUSETTS	ST		1514A	High
1569-0-0	LIDS	729		MASSACHUSETTS	ST		1514A	High
8798-10-0	Vacant	729.5		MASSACHUSETTS	ST	211	1514A	High
8798-11-0	HAIR AND TANNING STUDIO	729.5		MASSACHUSETTS	ST	212	1514A	High
8798-12-0	VIRGINA MERRITT	729.5		MASSACHUSETTS	ST	214	1514A	High
8798-14-0	INSITE PHOTOGRAPHY	729.5		MASSACHUSETTS	ST	213	1514A	High
8798-8-0	BLUE HERON TYPESET	729.5		MASSACHUSETTS	ST	209	1514A	High
8798-0-0	729.5 MASS BUILDING	729.5		MASSACHUSETTS	ST		1514A	High
8798-1-0	THE 451 GROUP	729.5		MASSACHUSETTS	ST	201	1514A	High
8798-13-0	Risk Management Solutions	729.5		MASSACHUSETTS	ST	216	1514A	High
8798-15-0	Risk Management Solutions	729.5		MASSACHUSETTS	ST	215	1514A	High
8798-17-0	Helen Santi Office	729.5		MASSACHUSETTS	ST	200	1514A	High
8798-2-0	LUCKY PAWS BAKERY	729.5		MASSACHUSETTS	ST	202	1514A	High
8798-3-0	Massage Therapy	729.5		MASSACHUSETTS	ST	203	1514A	High
8798-4-0	DAVID HAIGH MASSAGE THERAPY	729.5		MASSACHUSETTS	ST	204	1514A	High
8798-5-0	BUILDING STORAGE	729.5		MASSACHUSETTS	ST	205	1514A	High

8798-6-0	Three Feathers Holistic Health	729.5		MASSACHUSETTS	ST	206	1514A	High
8798-7-0	CAROL FRANCIS	729.5		MASSACHUSETTS	ST	207-8	1514A	High
8798-9-0	Liz Black	729.5		MASSACHUSETTS	ST	210	1514A	High
8798-16-0	Casa Kids Studio	729.5		MASSACHUSETTS	ST	210 B	1514A	High
11228-0-0	CAFE BEAUTIFUL	730		MASSACHUSETTS	ST	B	1514A	High
11228-1-0	HOOKAH HOUSE	730		MASSACHUSETTS	ST	C	1514A	High
11228-2-0	LEBANESE FLOWER MINIMARKET	730		MASSACHUSETTS	ST	SUITE C	1514A	High
8812-0-0	FRANCIS SPORTING GOODS	731		MASSACHUSETTS	ST		1514A	High
7758-0-0	Spoons Yogurt	732		MASSACHUSETTS	ST		1514A	High
9178-0-0	APT	732.5		MASSACHUSETTS	ST		1514A	High
1570-0-0	SALON DE MARCO	733		MASSACHUSETTS	ST		1514A	High
1570-1-0	APARTMENTS A-D	733.5		MASSACHUSETTS	ST		1514A	High
1571-0-0	vacant	734		MASSACHUSETTS	ST		1514A	High
1571-1-0	APARTMENTS	734.5		MASSACHUSETTS	ST		1514A	High
8640-0-0	SALON DE MARCO	735		MASSACHUSETTS	ST		1514A	High
8796-2-0	ARIZONA TRADING CO	736		MASSACHUSETTS	ST		1514A	High
8796-1-0	APARTMENTS	736.5		MASSACHUSETTS	ST		1514A	High
8648-0-0	VACANT	737		MASSACHUSETTS	ST		1514A	High
7798-0-0	KIEU'S	738		MASSACHUSETTS	ST		1514A	High
9175-0-0	APARTMENT	738.5		MASSACHUSETTS	ST		1514A	High
8638-0-0	vacant	739		MASSACHUSETTS	ST		1514A	High
7799-0-0	WA RESTAURANT	740		MASSACHUSETTS	ST		1514A	High
7799-1-0	APARTMENT	740.5		MASSACHUSETTS	ST		1514A	High
7800-0-0	VACANT	742		MASSACHUSETTS	ST		1514A	High
7800-1-0	APARTMENT	742.5		MASSACHUSETTS	ST		1514A	High
1573-0-0	JEFFERSON'S	743		MASSACHUSETTS	ST		1514A	High
7056-0-0	TELLER'S	746		MASSACHUSETTS	ST		1514A	High
7801-0-0	Vacant	800		MASSACHUSETTS	ST		1514A	High
1574-0-2	ESQUINA	801		MASSACHUSETTS	ST		1514A	High
1574-2-0	Common Area	801.5		MASSACHUSETTS	ST		1514A	High
1574-0-0	Marx	801.5		MASSACHUSETTS	ST	C	1514A	High
1574-0-1	She's Crafty	801.5		MASSACHUSETTS	ST	D	1514A	High
1574-0-3	Vacant	801.5		MASSACHUSETTS	ST	B4	1514A	High
1574-1-0	Revolution Systems	801.5		MASSACHUSETTS	ST	A	1514A	High
7802-0-0	SUNFLOWER BIKE SHOP	802		MASSACHUSETTS	ST		1514A	High
1575-1-0	The Burger Stand	803		MASSACHUSETTS	ST		1514A	High
1575-2-0	WONDER FAIR GALLERY	803.5		MASSACHUSETTS	ST	A	1514A	High
8987-0-0	SUNFLOWER OUTDOOR	804		MASSACHUSETTS	ST		1514A	High
1576-0-0	THE BUCKLE	805		MASSACHUSETTS	ST		1514A	High
7803-0-0	WINK EYEWEAR	806		MASSACHUSETTS	ST		1514A	High
7803-1-0	APARTMENTS- 2 UNITS	806.5		MASSACHUSETTS	ST		1514A	High
7804-0-0	RILING, BURKHEAD @ NITCHER	808		MASSACHUSETTS	ST		1514A	High
9014-0-0	Fortuity	809		MASSACHUSETTS	ST		1514A	High
9272-0-0	ZEN ZERO	811		MASSACHUSETTS	ST		1514A	High
7805-0-0	JUICE STOP	812		MASSACHUSETTS	ST		1514A	High
1577-0-0	SHARKS SURF SHOP	813		MASSACHUSETTS	ST		1514A	High
7806-0-0	LA PARRILLA	814		MASSACHUSETTS	ST		1514A	High
7806-1-0	814.5 Massachusetts	814.5		MASSACHUSETTS	ST		1514A	High
9012-0-0	VACANT	815		MASSACHUSETTS	ST		1514A	High
7234-0-0	Doodlebugs	816		MASSACHUSETTS	ST		1514A	High
9487-0-0	APARTMENTS - 3 UNITS	816.5		MASSACHUSETTS	ST		1514A	High

9013-0-0	MARKS JEWELRY	817		MASSACHUSETTS	ST		1514A	High
1578-0-0	PICKLEMAN'S GOURMET CAFE	818		MASSACHUSETTS	ST		1514A	High
1578-1-0	APARTMENTS	818.5		MASSACHUSETTS	ST		1514A	High
9182-0-0	FRAME WOODS GALLERY	819		MASSACHUSETTS	ST		1514A	High
7807-0-0	GLOBAL CAFE	820		MASSACHUSETTS	ST		1514A	High
7807-2-0	APARTMENTS - 2 UNITS	820.5		MASSACHUSETTS	ST		1514A	High
9183-0-0	PRAIRIE PATCHES	821		MASSACHUSETTS	ST		1514A	High
10571-0-0	Love Garden Sounds	822		MASSACHUSETTS	ST		1514A	High
10571-1-0	GEORGE PALEY BUSINESS OFFICE	822.5		MASSACHUSETTS	ST		1514A	High
9015-0-0	Fox Trot	823		MASSACHUSETTS	ST		1514A	High
9015-1-0	APARTMENT	823.5		MASSACHUSETTS	ST		1514A	High
7270-1-0	DOWNTOWN BARBER	824		MASSACHUSETTS	ST		1514A	High
7270-3-0	APARTMENT	824.5		MASSACHUSETTS	ST		1514A	High
1580-0-0	Biao Designs	825		MASSACHUSETTS	ST	A	1514A	High
1580-1-2	Messanine Office	825		MASSACHUSETTS	ST		1514A	High
1580-1-1	Apartments	825		MASSACHUSETTS	ST	202,203,204	1514A	High
1580-1-0	Commons Area	825		MASSACHUSETTS	ST		1514A	High
1580-2-0	Pheonix Gallery	825		MASSACHUSETTS	ST	Suite B	1514A	High
1580-3-0	Lost Art	825		MASSACHUSETTS	ST	C	1514A	High
1581-0-0	ERNST AND SON HARDWARE	826		MASSACHUSETTS	ST		1514A	High
1581-1-0	APARTMENT	826.5		MASSACHUSETTS	ST		1514A	High
9184-0-0	BROWN'S SHOE FIT COMPANY	829		MASSACHUSETTS	ST		1514A	High
1582-0-0	ANTIQU MALL	830		MASSACHUSETTS	ST		1514A	High
9185-0-0	TRAVELLERS INC.	831		MASSACHUSETTS	ST	Suite A	1514A	High
9185-1-0	The Tan Company	831		MASSACHUSETTS	ST	Suite B	1514A	High
9285-0-0	KIZER CUMMINGS JEWELRY	833		MASSACHUSETTS	ST		1514A	High
9281-0-0	Downtown Lawrence Inc.	833.5		MASSACHUSETTS	ST		1514A	High
1574-0-4	Jellies Syrups & Fudge	835		MASSACHUSETTS	ST		1514A	High
9269-0-0	JON BLUMB PHOTOGRAPHY	835.5		MASSACHUSETTS	ST		1514A	High
9242-0-0	JOCK'S NITCH	837		MASSACHUSETTS	ST		1514A	High
7808-0-0	PRO PRINT	838		MASSACHUSETTS	ST		1514A	High
1583-0-0	Gary Gribble's Running Sports	839		MASSACHUSETTS	ST		1514A	High
10948-2-0	WIN CONSTRUCTION	839.5		MASSACHUSETTS	ST		1514A	High
7809-0-0	ANTIQU BAZAARS II	840		MASSACHUSETTS	ST		1514A	High
1584-1-0	BLUE DANDELION	841		MASSACHUSETTS	ST		1514A	High
1584-1-1	Apartment	841.5		MASSACHUSETTS	ST		1514A	High
1586-0-0	TOM AMYX BARBER SHOP	842		MASSACHUSETTS	ST		1514A	High
1587-0-0	BRITCHES	843		MASSACHUSETTS	ST		1514A	High
7233-0-0	GAME NUT	844		MASSACHUSETTS	ST		1514A	High
9068-0-0	vacant	845		MASSACHUSETTS	ST		1514A	High
9068-1-0	APARTMENT - 2 UNITS	845.5		MASSACHUSETTS	ST		1514A	High
7232-2-0	THE THIRD PLANET,INC.	846		MASSACHUSETTS	ST	A	1514A	High
1588-0-0	ACME	847		MASSACHUSETTS	ST		1514A	High
1588-1-0	APARTMENTS - 3 UNITS	847.5		MASSACHUSETTS	ST		1514A	High
7037-10-0	MARY FRANK MD	900		MASSACHUSETTS	ST	409	1514A	High
9756-0-0	STEVE LERNER, PHD	900		MASSACHUSETTS	ST	408	1514A	High
7037-13-0	RON SCHNEIDER	900		MASSACHUSETTS	ST	600	1514A	High
7037-5-0	LOWENTHAL, SINGLETON, WEBB & W	900		MASSACHUSETTS	ST	301	1514A	High
7037-6-0	Ameriprise Financial	900		MASSACHUSETTS	ST	403	1514A	High
9752-0-0	DG CNTY COMMUNITY FOUNDATION	900		MASSACHUSETTS	ST	406	1514A	High

7037-3-0	Lowerthal, Singelto, Webb and Wilson	900		MASSACHUSETTS	ST	303	1514A	High
7037-7-0	SKEPNEK LAW FIRM	900		MASSACHUSETTS	ST	601	1514A	High
7037-8-0	DOWNTOWN LAWRENCE	900		MASSACHUSETTS	ST	100	1514A	High
9755-0-0	RESOLUTION SERVICES LLC	900		MASSACHUSETTS	ST	603	1514A	High
7037-0-0	US BANK	900		MASSACHUSETTS	ST		1514A	High
7037-1-0	LINSCO PRIVATE LEDGER	900		MASSACHUSETTS	ST	602	1514A	High
7037-2-0	STEVENS AND BRAND	900		MASSACHUSETTS	ST	500	1514A	High
7037-4-0	GILLILAND AND HAYES, P.A.	900		MASSACHUSETTS	ST	201	1514A	High
9753-0-0	STEVENS AND BRAND, L.L.P.	900		MASSACHUSETTS	ST	400	1514A	High
9757-0-0	SIMPSON & CO	900		MASSACHUSETTS	ST	405	1514A	High
7037-12-0	900 MASS BUILDING	900		MASSACHUSETTS	ST	COM.	1514A	High
1589-0-0	WEAVERS DEPT. STORE	901		MASSACHUSETTS	ST		1514A	High
7496-0-0	MAD GREEK	907		MASSACHUSETTS	ST		1514A	High
7496-1-0	APARTMENT	907.5		MASSACHUSETTS	ST		1514A	High
1590-11-0	LAWRENCE LIFE FELLOWSHIP CHURCH	911		MASSACHUSETTS	ST	B2A	1514A	High
1590-2-0	LAWRENCE LIFE FELLOWSHIP CHURCH	911		MASSACHUSETTS	ST	B1B	1514A	High
1590-5-0	vacant	911		MASSACHUSETTS	ST	B2B	1514A	High
1590-6-0	LAWRENCE LIFE FELLOWSHIP CHURCH	911		MASSACHUSETTS	ST	B4	1514A	High
1590-3-0	SAFFEES	911		MASSACHUSETTS	ST	B	1514A	High
1590-1-0	CHIPOTLE MEXICAN GRILL	911		MASSACHUSETTS	ST	A	1514A	High
1590-4-0	LAWRENCE LIFE FELLOWSHIP CHURCH	911		MASSACHUSETTS	ST	B3	1514A	High
1590-9-0	ENVY	911		MASSACHUSETTS	ST		1514A	High
1590-8-0	APARTMENT	911		MASSACHUSETTS	ST		1514A	High
1590-0-0	FEDEX OFFICE AND PRINT CENTER	911		MASSACHUSETTS	ST		1514A	High
1590-10-0	Lawrence life fellowship church	911		MASSACHUSETTS	ST	B1A	1514A	High
1590-7-0	911 MASS BUILDING	911		MASSACHUSETTS	ST		1514A	High
7810-0-0	Billy Vanilly Cupcakes	914		MASSACHUSETTS	ST		1514A	High
7022-0-0	JOCKS NITCH	916		MASSACHUSETTS	ST		1514A	High
9310-1-0	APARTMENT	916.5		MASSACHUSETTS	ST	201	1514A	High
9310-0-0	miller meiers	916.5		MASSACHUSETTS	ST		1514A	High
7811-0-0	vacant	918		MASSACHUSETTS	ST		1514A	High
7811-1-0	Vacant	918		MASSACHUSETTS	ST	C	1514A	High
11403-0-0	vacant	918		MASSACHUSETTS	ST	B	1514A	High
1591-0-0	VACANT	919		MASSACHUSETTS	ST		1514A	High
1591-1-0	APARTMENT -3 UNITS	919.5		MASSACHUSETTS	ST	0.5	1514A	High
10541-2-0	YOGA CENTER	920		MASSACHUSETTS	ST	4	1514A	High
7812-0-0	MILTON'S	920		MASSACHUSETTS	ST		1514A	High
10541-3-0	COMMONS AREA	920		MASSACHUSETTS	ST	COMMON	1514A	High
10541-0-0	rides.com	920		MASSACHUSETTS	ST	A	1514A	High
10541-1-0	HERNLEY ARCHITECHS	920		MASSACHUSETTS	ST	2	1514A	High
10541-4-0	MILTON'S COFFEE OFFICE	920		MASSACHUSETTS	ST	3	1514A	High
7073-0-0	Kansas Sampler	921		MASSACHUSETTS	ST		1514A	High
7813-0-0	JIMMY JOHN'S	922		MASSACHUSETTS	ST		1514A	High
7814-0-0	LARRY'S BARBER SHOP	924		MASSACHUSETTS	ST		1514A	High
7814-1-0	Green Room Salon	924.5		MASSACHUSETTS	ST	A	1514A	High
8012-0-0	SARAH'S FABRICS @ COSTUMES	925		MASSACHUSETTS	ST		1514A	High
7815-0-0	STITCH ON NEEDLE WORK	926		MASSACHUSETTS	ST		1514A	High
1592-0-0	JAZZHAUS	926.5		MASSACHUSETTS	ST		1514A	High
1593-0-0	927 MASS BUILDING	927		MASSACHUSETTS	ST		1514A	High

1593-5-0	CALAMITY JANES	927		MASSACHUSETTS	ST	A	1514A	High
10139-0-0	VACANT	927.5		MASSACHUSETTS	ST	4	1514A	High
10140-0-0	VACANT	927.5		MASSACHUSETTS	ST	13	1514A	High
1593-10-0	VACANT	927.5		MASSACHUSETTS	ST	9	1514A	High
1593-11-0	VACANT	927.5		MASSACHUSETTS	ST	10	1514A	High
1593-13-0	VACANT	927.5		MASSACHUSETTS	ST	15	1514A	High
1593-14-0	VACANT	927.5		MASSACHUSETTS	ST	2A	1514A	High
1593-15-0	VACANT	927.5		MASSACHUSETTS	ST	12	1514A	High
1593-16-0	VACANT	927.5		MASSACHUSETTS	ST	2	1514A	High
1593-17-0	VACANT	927.5		MASSACHUSETTS	ST	11	1514A	High
1593-4-0	VACANT	927.5		MASSACHUSETTS	ST	5	1514A	High
1593-7-0	VACANT	927.5		MASSACHUSETTS	ST	7	1514A	High
1593-8-0	VACANT	927.5		MASSACHUSETTS	ST	6	1514A	High
8137-0-0	VACANT	927.5		MASSACHUSETTS	ST	1	1514A	High
1593-3-0	VACANT	927.5		MASSACHUSETTS	ST	3	1514A	High
1593-12-0	vacant	927.5		MASSACHUSETTS	ST	14	1514A	High
1593-9-0	VACANT	927.5		MASSACHUSETTS	ST	8	1514A	High
1595-0-0	ETC SHOP	928		MASSACHUSETTS	ST		1514A	High
8013-0-0	BRITS	929		MASSACHUSETTS	ST		1514A	High
7816-0-0	YARN BARN	930		MASSACHUSETTS	ST		1514A	High
10679-0-0	AU MARCHE	931		MASSACHUSETTS	ST		1514A	High
7837-9-0	CHAPPELL LAW OFFICE	932		MASSACHUSETTS	ST	306-7	1514A	High
7837-2-0	Yarn Barn	932		MASSACHUSETTS	ST		1514A	High
7837-5-0	SMITH/ANDERSON OPTICAL	932		MASSACHUSETTS	ST	302	1514A	High
1596-0-0	Yarn Barn	932		MASSACHUSETTS	ST	104	1514A	High
7837-10-0	Go Driving School	932		MASSACHUSETTS	ST	308	1514A	High
7837-0-0	932 MASS BUILDING	932		MASSACHUSETTS	ST		1514A	High
7837-3-0	GSR construction	932		MASSACHUSETTS	ST	304-305	1514A	High
7837-4-0	Kansas Head Start Association	932		MASSACHUSETTS	ST	301	1514A	High
7837-1-0	YARN BARN	932		MASSACHUSETTS	ST	101	1514A	High
7049-0-0	WHITE CHOCOLATE	933		MASSACHUSETTS	ST		1514A	High
7049-1-0	APARTMENTS	933.5		MASSACHUSETTS	ST		1514A	High
1598-1-0	Minsky's Pizza	934		MASSACHUSETTS	ST		1514A	High
1598-0-0	Minsky's Pizza	934		MASSACHUSETTS	ST		1514A	High
1599-0-0	JAYHAWK SPIRIT #1	935		MASSACHUSETTS	ST		1514A	High
1599-1-0	APARTMENT 1 UNIT-Studio	935.5		MASSACHUSETTS	ST	0.5	1514A	High
1600-0-0	TOY STORE	936		MASSACHUSETTS	ST		1514A	High
1600-1-0	Vacant	936.5		MASSACHUSETTS	ST		1514A	High
1602-0-0	Extra Virgin	937		MASSACHUSETTS	ST		1514A	High
1602-0-1	APARTMENT	937.5		MASSACHUSETTS	ST		1514A	High
7838-0-0	BIG DADDIES CADILLAC	938		MASSACHUSETTS	ST		1514A	High
1603-1-0	APT - ONE UNIT	939		MASSACHUSETTS	ST	0.5	1514A	High
1603-0-0	WILD MAN VINTAGE	939		MASSACHUSETTS	ST		1514A	High
7534-0-0	GENOVESE	941		MASSACHUSETTS	ST		1514A	High
1604-0-0	WILD TERRITORY	942		MASSACHUSETTS	ST		1514A	High
1605-0-0	JACKPOT SALOON	943		MASSACHUSETTS	ST		1514A	High
8193-0-0	Apartment	943.5		MASSACHUSETTS	ST		1514A	High
1606-0-0	RED LYON PUB	944		MASSACHUSETTS	ST		1514A	High
1608-1-0	I - BAR	945		MASSACHUSETTS	ST		1514A	High
1608-3-0	Apartments	945		MASSACHUSETTS	ST	2ND FLOOR	1514A	High
1607-0-0	REPLAY LOUNGE	946		MASSACHUSETTS	ST		1514A	High

1608-4-0	3RD FLOOR APARTMENTS	947		MASSACHUSETTS	ST	3RD FLOOR	1514A	High
1608-2-0	947 MASS BUILDING	947		MASSACHUSETTS	ST	COMMON	1514A	High
1608-0-0	INGREDIENT	947		MASSACHUSETTS	ST	1st floor	1514A	High
7839-4-0	Laugh Out Loud, Inc.	1000		MASSACHUSETTS	ST	D	1514A	High
7839-0-0	Army Career Center	1000		MASSACHUSETTS	ST		1514A	High
7839-1-0	Delete Record	1000		MASSACHUSETTS	ST	A	1514A	High
8128-0-0	VACANT	1001		MASSACHUSETTS	ST		1514A	High
8128-1-0	Last Stop Snack Shop LLC	1001		MASSACHUSETTS	ST		1514A	High
8029-0-0	Encore Cafe	1007		MASSACHUSETTS	ST		1514A	High
8029-1-0	Apartments	1007.5		MASSACHUSETTS	ST		1514A	High
8329-0-0	Shots	1008		MASSACHUSETTS	ST		1514A	High
8762-0-0	LOUISES BAR	1009		MASSACHUSETTS	ST		1514A	High
7453-0-0	PITA PIT	1011		MASSACHUSETTS	ST		1514A	High
1615-14-0	Vault United	1012		MASSACHUSETTS	ST	217	1514A	High
1615-7-0	Vacant	1012		MASSACHUSETTS	ST	207	1514A	High
10057-0-0	BUFFALO WILD WINGS	1012		MASSACHUSETTS	ST	100	1514A	High
1615-9-0	Julia Schafermeyer,LPC	1012		MASSACHUSETTS	ST	211	1514A	High
1615-10-0	Jan Jordan	1012		MASSACHUSETTS	ST	213	1514A	High
1615-12-0	Leigh A Shella LCMFT<CHT	1012		MASSACHUSETTS	ST	215	1514A	High
1615-2-0	Healthy Solutions	1012		MASSACHUSETTS	ST	202	1514A	High
1615-8-0	Common Room	1012		MASSACHUSETTS	ST	209	1514A	High
9889-0-0	Dennis L Detweiler	1012		MASSACHUSETTS	ST	208	1514A	High
1615-15-0	Wheatland Financial	1012		MASSACHUSETTS	ST	219	1514A	High
1615-4-0	Carleen Franz Phd	1012		MASSACHUSETTS	ST	203	1514A	High
1615-6-0	JOHN ROBERTSON, PH.D.	1012		MASSACHUSETTS	ST	206	1514A	High
1615-11-0	Gilman Law Office	1012		MASSACHUSETTS	ST	214	1514A	High
1615-13-0	Fun with German	1012		MASSACHUSETTS	ST	216	1514A	High
1615-5-0	Choices	1012		MASSACHUSETTS	ST	201	1514A	High
1615-0-0	1012 MASS BUILDING	1012		MASSACHUSETTS	ST		1514A	High
1615-1-0	Susan Eyman Phd	1012		MASSACHUSETTS	ST	204	1514A	High
1616-0-0	SYLAS AND MADDYS ICE CREAM	1014		MASSACHUSETTS	ST		1514A	High
7059-0-0	Fatso's	1016		MASSACHUSETTS	ST		1514A	High
1618-0-0	CRANDON AND CRANDON OPTOMETRY	1019		MASSACHUSETTS	ST		1514A	High
1618-1-0	APARTMENT	1019.5		MASSACHUSETTS	ST	A	1514A	High
1619-0-0	THE GRANADA	1020		MASSACHUSETTS	ST		1514A	High
7482-0-0	ALADDIN CAFE	1021		MASSACHUSETTS	ST		1514A	High
7482-3-0	ALADDIN HOOKAH LOUNGE	1021.25		MASSACHUSETTS	ST		1514A	High
7482-2-0	VACANT	1021.5		MASSACHUSETTS	ST	C	1514A	High
7482-1-0	VACANT	1021.5		MASSACHUSETTS	ST	B	1514A	High
9453-0-0	VACANT	1021.5		MASSACHUSETTS	ST	A	1514A	High
1620-0-0	SUPERSONIC MUSIC	1023		MASSACHUSETTS	ST		1514A	High
1621-0-0	STRONG'S ANTIQUES	1025		MASSACHUSETTS	ST	B	1514A	High
1621-3-0	AIMEES CAFE AND COFFEE HOUSE	1025		MASSACHUSETTS	ST	A	1514A	High
1621-1-0	APARTMENT	1025.5		MASSACHUSETTS	ST		1514A	High
1622-0-0	EINSTEINS BROS.BAGELS/SHOP	1026		MASSACHUSETTS	ST		1514A	High
7451-0-0	PYRAMID PIZZA	1029		MASSACHUSETTS	ST		1514A	High
1623-0-0	HARBOUR LIGHTS	1031		MASSACHUSETTS	ST		1514A	High
1624-0-0	REXS STADIUM BARBER SHOP	1033		MASSACHUSETTS	ST		1514A	High
1624-1-0	CREATIVE STYLE HAIR SHOP	1033.5		MASSACHUSETTS	ST		1514A	High

7567-0-0	PAPA KENO'S PIZZA	1035		MASSACHUSETTS	ST		1514A	High
9201-1-0	APARTMENT	1035.5		MASSACHUSETTS	ST	A	1514A	High
9201-0-0	PAPA KENO'S BUSINESS OFFICE	1035.5		MASSACHUSETTS	ST		1514A	High
7237-0-0	ALLEN PRESS PAPER WAREHOUSE	1040		MASSACHUSETTS	ST		1514A	High
7432-0-0	WATKINS MUSEUM	1047		MASSACHUSETTS	ST		1514A	High
7058-1-0	Fuzzy's Taco Shop	1115		MASSACHUSETTS	ST		1514A	High
1937-0-0	VACANT	700		NEW HAMPSHIRE	ST		1514A	High
10692-6-0	KU HILLEL	722		NEW HAMPSHIRE	ST	112	1514A	High
1938-1-0	BARREL HOUSE	729		NEW HAMPSHIRE	ST		1514A	High
10692-0-0	HOBBS TAYLOR LOFTS	730		NEW HAMPSHIRE	ST		1514A	High
10692-2-0	SJ CRAIG COMPANIES	730		NEW HAMPSHIRE	ST	206	1514A	High
10692-5-0	SPORTSOUND	730		NEW HAMPSHIRE	ST	212	1514A	High
11288-0-0	SABATINI OFFICES	730		NEW HAMPSHIRE	ST	20-Aug	1514A	High
10692-10-0	VACANT	730		NEW HAMPSHIRE	ST	205	1514A	High
10692-4-0	Fagan Emert & Davis	730		NEW HAMPSHIRE	ST	201	1514A	High
11273-0-0	Acumen	730		NEW HAMPSHIRE	ST	222	1514A	High
10692-7-0	Acumen	730		NEW HAMPSHIRE	ST	222	1514A	High
7867-0-0	Light Lyre	731		NEW HAMPSHIRE	ST		1514A	High
7753-0-0	LA FAMILIA RESTAURANT	733		NEW HAMPSHIRE	ST		1514A	High
1939-0-0	ARMOUR AMUSEMENT	735		NEW HAMPSHIRE	ST		1514A	High
1939-1-0	Vacant	735.5		NEW HAMPSHIRE	ST	A	1514A	High
1940-0-0	THE BOTTLENECK	737		NEW HAMPSHIRE	ST		1514A	High
10692-1-0	CAPITOL CITY BANK	740		NEW HAMPSHIRE	ST		1514A	High
10692-3-0	CAPITOL CITY BANK/AFLAC	740		NEW HAMPSHIRE	ST	110	1514A	High
1941-8-0	Mirth Internet Cafe	745		NEW HAMPSHIRE	ST	7	1514A	High
1941-2-0	Mirth Cafe Office	745		NEW HAMPSHIRE	ST	4-Jan	1514A	High
1941-9-0	Mirth Cafe Office	745		NEW HAMPSHIRE	ST	4B	1514A	High
1941-1-0	SPATIAL DATA RESEARCH	745		NEW HAMPSHIRE	ST	3A @ 3B	1514A	High
1941-3-0	SPATIAL DATA RESEARCH	745		NEW HAMPSHIRE	ST	8A	1514A	High
1941-4-0	MIRTH CAFE KITCHEN	745		NEW HAMPSHIRE	ST	6	1514A	High
1941-5-0	Vacant	745		NEW HAMPSHIRE	ST	5	1514A	High
1941-6-0	Allied Staffing	745		NEW HAMPSHIRE	ST	2	1514A	High
1941-0-0	745 NEW HAMPSHIRE BUILDING	745		NEW HAMPSHIRE	ST		1514A	High
1941-7-0	Spatial Data Research	745		NEW HAMPSHIRE	ST	8	1514A	High
7868-0-0	PACHAMAMA'S	800		NEW HAMPSHIRE	ST		1514A	High
7868-1-0	Banquet Facility at Pachamama's	800		NEW HAMPSHIRE	ST		1514A	High
8428-0-0	Calahan Creek	805		NEW HAMPSHIRE	ST	A	1514A	High
9215-0-0	Calahan Creek	805		NEW HAMPSHIRE	ST		1514A	High
9214-0-0	CALLAHAN CREEK	805		NEW HAMPSHIRE	ST	D	1514A	High
9216-0-0	Calahan Creek	805		NEW HAMPSHIRE	ST	B	1514A	High
9216-1-0	Collier	805		NEW HAMPSHIRE	ST	C	1514A	High
7869-0-0	Yokohoma Sushi Bar	811		NEW HAMPSHIRE	ST		1514A	High
1943-0-0	CIELITO LINDO	815		NEW HAMPSHIRE	ST		1514A	High
7870-0-0	Bittersweet Floral	841		NEW HAMPSHIRE	ST		1514A	High
7075-0-0	New Hampshire Street Law Office	843		NEW HAMPSHIRE	ST		1514A	High
9507-0-0	THE FIX SALON	845		NEW HAMPSHIRE	ST		1514A	High
9392-0-0	PARKING GARAGE	927		NEW HAMPSHIRE	ST		1514A	High
10648-0-0	LAWRENCE TRANSIT	933		NEW HAMPSHIRE	ST		1514A	High
10649-0-0	LPD ANIMAL/PARKING CONTROL	935		NEW HAMPSHIRE	ST		1514A	High
10565-0-0	LAWRENCE ARTS CENTER	940		NEW HAMPSHIRE	ST		1514A	High

10276-1-0	Lawrence Arts Center Daycare	940		NEW HAMPSHIRE	ST	A	1514A	High
1945-0-0	SALVATION ARMY	946		NEW HAMPSHIRE	ST		1514A	High
10008-4-0	Wellspring School of Allied Health	947		NEW HAMPSHIRE	ST	100	1514A	High
10008-3-0	LAWRENCE PARKS & RECREATION	947		NEW HAMPSHIRE	ST	200B	1514A	High
10008-2-0	vacant	947		NEW HAMPSHIRE	ST	200A	1514A	High
10008-1-0	PEPPERJAX GRILL	947		NEW HAMPSHIRE	ST	120	1514A	High
10008-0-0	947 NEW HAMPSHIRE BUILDING	947		NEW HAMPSHIRE	ST		1514A	High
7166-0-0	GPW Associates	1001		NEW HAMPSHIRE	ST		1514A	High
7872-0-0	SUNFIRE CERAMICS	1002		NEW HAMPSHIRE	ST		1514A	High
1947-0-0	MUNICIPAL COURT	1006		NEW HAMPSHIRE	ST		1514A	High
9194-0-0	Cromwell Environmental	1008		NEW HAMPSHIRE	ST	300	1514A	High
9194-1-0	City of Lawrence Human Relations	1008		NEW HAMPSHIRE	ST	100	1514A	High
9194-2-0	MAR-LAN CONSTRUCTION	1008		NEW HAMPSHIRE	ST	200	1514A	High
10740-0-0	Recovery & Hope Network	1009		NEW HAMPSHIRE	ST	D	1514A	High
7873-1-0	CASA	1009		NEW HAMPSHIRE	ST	A/B	1514A	High
9308-0-0	recovery & hope network	1009		NEW HAMPSHIRE	ST	C	1514A	High
10740-1-0	Apartment	1009		NEW HAMPSHIRE	ST	E	1514A	High
10740-2-0	Apartment	1009		NEW HAMPSHIRE	ST	F	1514A	High
1948-4-0	COTTONWOOD RETIREMENT SERVICES	1029		NEW HAMPSHIRE	ST	D	1514A	High
1948-3-0	COTTONWOOD RETIREMENT SERVICES	1029		NEW HAMPSHIRE	ST	C	1514A	High
1948-2-0	SCOTCH INDUSTRIES	1029		NEW HAMPSHIRE	ST	B	1514A	High
1948-1-0	SCOTCH LAUNDRY & CLEANERS	1029		NEW HAMPSHIRE	ST	A	1514A	High
7160-0-0	MACELIS COMMERCIAL KITCHEN ANQ	1031		NEW HAMPSHIRE	ST		1514A	High
7224-0-0	1040 PROFESSIONAL BUILDING	1040		NEW HAMPSHIRE	ST		1514A	High
1949-0-0	Vacant	1041		NEW HAMPSHIRE	ST		1514A	High
8136-0-0	ASHLAR L. C.	1046		NEW HAMPSHIRE	ST		1514A	High
10046-0-0	Congregate Residence	928		OHIO	ST		1514A	High
10240-0-0	Congregate Residence	1042		TENNESSEE	ST		1514A	High
10713-0-0	DFC Company of Lawrence	706		VERMONT	ST		1514A	High
2599-0-0	LAWRENCE PUBLIC LIBRARY	707		VERMONT	ST		1514A	High
2600-1-0	LOCAL BURGER	714		VERMONT	ST	A	1514A	High
2600-5-0	Old Record	714		VERMONT	ST		1514A	High
2600-7-0	Earnie's Mechanical	714		VERMONT	ST		1514A	High
2600-3-0	Vacant	714		VERMONT	ST	100	1514A	High
2600-2-0	Drink Eat Well	714		VERMONT	ST	201	1514A	High
2600-0-0	COMMON AREA	714		VERMONT	ST		1514A	High
2600-4-0	Hughes Consulting Engineering	714		VERMONT	ST	200	1514A	High
9037-0-0	AT&T	734		VERMONT	ST	101	1514A	High
9037-2-0	AT&T	734		VERMONT	ST	102	1514A	High
9037-1-0	AT&T	734		VERMONT	ST	103-104	1514A	High
2601-0-0	DOUGLAS CO SENIOR SERVICES	745		VERMONT	ST		1514A	High
2601-0-1	VETERAN'S ADMINISTRATION	745		VERMONT	ST		1514A	High
7970-0-0	terrebonne	805		VERMONT	ST		1514A	High
2603-0-0	GREAT HARVEST BREAD	807		VERMONT	ST		1514A	High
7972-0-0	HEADMASTERS	809		VERMONT	ST		1514A	High
7897-0-0	SEDONA STAFFING SERVICES	825		VERMONT	ST	B	1514A	High
7973-0-0	Vacant	825		VERMONT	ST	A	1514A	High
7894-0-0	DOBBINS-POHL OPTOMETRIST	831		VERMONT	ST	E	1514A	High
7894-1-0	WILKERSON, ANDERSON, ANDERSON	831		VERMONT	ST	D	1514A	High
2604-0-0	INTRUST BANK	901		VERMONT	ST		1514A	High

2605-0-0	WHEATFIELDS	904		VERMONT	ST		1514A	High
7256-0-0	PLYMOUTH CONGREGATIONAL CHURCH	925		VERMONT	ST		1514A	High
7256-1-0	Headstart at Plymouth	925		VERMONT	ST	A	1514A	High
7557-1-0	FIRST UNITED METHODIST CHURCH	946		VERMONT	ST		1514A	High
2606-0-0	D AND D TIRE INC	1000		VERMONT	ST		1514A	High
7427-0-0	TRINITY EPISCOPAL CHURCH	1011		VERMONT	ST		1514A	High
7430-0-0	TRINITY EPISCOPAL CHURCH OFFIC	1027		VERMONT	ST		1514A	High
7147-3-0	TO TO TRAINS	1031		VERMONT	ST	A	1514A	High
8254-0-0	vacant	1031		VERMONT	ST	F	1514A	High
7147-1-0	vacant	1031		VERMONT	ST	C	1514A	High
7147-2-0	PENDLETON/SUTTON LAW OFFICE	1031		VERMONT	ST	B	1514A	High
7147-4-0	community work inc.	1031		VERMONT	ST	D	1514A	High
7147-0-0	1031 VERMONT BUILDING	1031		VERMONT	ST	COMMON	1514A	High
7147-5-0	FREE STATE BUSINESS	1031		VERMONT	ST	E	1514A	High
7137-0-0	SWIMS & SWEEPS	1033		VERMONT	ST		1514A	High
2608-0-0	HEDGES INSURANCE, INC.	1035		VERMONT	ST		1514A	High
7251-0-0	HEDGES REAL ESTATE	1037		VERMONT	ST		1514A	High
7145-0-0	VACANT	1040		VERMONT	ST		1514A	High
2609-0-0	CAPITOL FEDERAL SAVINGS	1046		VERMONT	ST		1514A	High
11285-0-0	MISSIONARY APT OF JESUS	215	W	14TH	ST		1514C	High
481-0-0	Phi Delta Theta Fraternity	1621		EDGEHILL	RD		1514C	High
482-0-0	Sigma Delta Tau Sorority	1625		EDGEHILL	RD		1514C	High
815-0-0	Kappa Kappa Gamma Sorority	1		GOWER	PL		1514C	High
1463-0-0	Phi Gamma Delta Fraternity	1540		LOUISIANA	ST		1514C	High
1625-0-0	DOUGLAS COUNTY COURTHOUSE	1100		MASSACHUSETTS	ST		1514C	High
7207-0-0	ENGLEWOOD FLORIST	1101		MASSACHUSETTS	ST		1514C	High
7207-1-0	RED DESIGN	1101.5		MASSACHUSETTS	ST	SUITE 201	1514C	High
7207-2-0	Shelter Family Services	1101.5		MASSACHUSETTS	ST		1514C	High
7207-3-0	Shelter Family Services	1101.5		MASSACHUSETTS	ST		1514C	High
7216-0-0	THE SACRED JOURNEY	1103		MASSACHUSETTS	ST		1514C	High
7209-0-0	BROTHERS`	1105		MASSACHUSETTS	ST		1514C	High
7210-0-0	Curry In a Hurry	1111		MASSACHUSETTS	ST		1514C	High
1626-0-0	VACANT	1113		MASSACHUSETTS	ST		1514C	High
7058-0-0	Fuzzy's Taco Shop	1117		MASSACHUSETTS	ST		1514C	High
9685-0-0	Ad Astra Acupuncture	1119		MASSACHUSETTS	ST		1514C	High
1628-0-0	SOUTH PARK RECREATION CENTER	1141		MASSACHUSETTS	ST		1514C	High
1083-1-0	ALPHA GAMMA DELTA	1121		OHIO	ST	SEE NOTES	1514C	High
10073-0-0	Boarding House	1232		OHIO	ST		1514C	High
8503-0-0	BOARDING HOUSE	1334		OHIO	ST		1514C	High
10078-0-0	Boarding House	1109		TENNESSEE	ST		1514C	High
2542-0-0	SUNFLOWER HOUSE	1406		TENNESSEE	ST		1514C	High
2550-0-0	Beta Theta Pi Fraternity	1425		TENNESSEE	ST		1514C	High
2552-0-0	SIGMA CHI	1439		TENNESSEE	ST		1514C	High
2554-0-0	Pi Kappa Phi Fraternity	1537		TENNESSEE	ST		1514C	High
2555-0-0	Sigma Phi Epsilon Fraternity	1645		TENNESSEE	ST		1514C	High
2611-0-0	VERMONT TOWERS	1101		VERMONT	ST		1514C	High
7513-0-0	Apt.	1129		VERMONT	ST		1514C	High
7771-0-0	vacant	1245		CONNECTICUT			1514D	High
11440-0-0	DELAWARE COMMON HOUSE	1222		DELAWARE			1514D	High

10614-0-0	CLO Elmwood House	1424		ELMWOOD	ST		1515C	High
11693-0-0	COTTONWOOD INC. (PRIVATELY OWNED)	229		CAMPBELL	DR		1610A	High
11692-0-0	Cottonwood Inc.	5205		CARSON	PL		1610C	High
10007-0-0	CAMSON VILLAS	430		EISENHOWER	DR	F	1610C	High
10611-0-0	CLO Overland House	3912		OVERLAND	DR	A,B, & C	1611C	High
11696-0-0	Lawrence Community Innkeepers	3933		OVERLAND	DR		1611C	High
11697-0-0	Lawrence Community Innkeepers	3935		OVERLAND	DR		1611C	High
4590-1-0	The Basil Leaf Cafe	3300	W	6TH	ST	SUITE B	1612C	High
7980-0-0	PRINGLE DENTAL LAB	543		LAWRENCE	AVE	SUITE A	1612C	High
7980-2-0	Vacant	543		LAWRENCE	AVE	SUITE D	1612C	High
4505-0-0	HOWARD JOHNSON	2222	W	6TH	ST		1612D	High
4523-0-0	Vacant	2512	W	6TH	ST	SUITE A	1612D	High
8804-0-0	WESTMINSTER INN SUITES	549		GRAYSTONE	DR		1612D	High
1663-0-0	Super 8	515		MCDONALD	DR		1612D	High
1659-0-0	HOLIDOME	200		MCDONALD	DR		1613A	High
7864-0-0	Cottonwood Inc.	110		MICHIGAN	ST		1613B	High
4492-0-0	COLLEGE MOTEL	1703	W	6TH	ST		1613C	High
1842-1-0	Cottonwood Inc.	330		MINNESOTA	ST	APT. 1	1613C	High
1842-2-0	Cottonwood Inc.	330		MINNESOTA	ST	APT. 2	1613C	High
1842-3-0	Cottonwood Inc.	330		MINNESOTA	ST	APT. 3	1613C	High
1842-4-0	Cottonwood Inc.	330		MINNESOTA	ST	APT. 4	1613C	High
3497-0-0	VACANT	624	N	2ND	ST		1614A	High
9020-0-0	WAXMAN CANDLES	609		MASSACHUSETTS	ST		1614C	High
1554-0-0	QUINTON'S BAR & DELI	615		MASSACHUSETTS	ST		1614C	High
1554-1-0	QUINTON'S UPSTAIRS	615		MASSACHUSETTS	ST		1614C	High
1555-0-0	Vacant	619		MASSACHUSETTS	ST		1614C	High
8518-0-0	M & M OFFICE SUPPLY	623		MASSACHUSETTS	ST	A	1614C	High
9166-0-0	APARTMENTS 5 UNITS, 3-N, 2-S PARSON & KRING FLOOR COVERING	634		MASSACHUSETTS	ST	0.5	1614C	High
7793-0-0	FREE STATE BREWERY	636		MASSACHUSETTS	ST		1614C	High
1556-0-0	LA PRIMA TASA	638		MASSACHUSETTS	ST		1614C	High
7443-0-0	LIBERTY HALL	642		MASSACHUSETTS	ST		1614C	High
9224-0-0	THE GAP	643		MASSACHUSETTS	ST	101	1614C	High
10269-0-0	COMMONS AREA	643		MASSACHUSETTS	ST		1614C	High
9141-0-0	CHICOS	643		MASSACHUSETTS	ST		1614C	High
9312-0-0	Fall Creek Farms	643		MASSACHUSETTS	ST	301	1614C	High
9888-0-0	GENE FRITZEL CONSTRUCTION	643		MASSACHUSETTS	ST	300	1614C	High
9141-1-0	Meritrust	643		MASSACHUSETTS	ST	SUITE A	1614C	High
10181-0-0	Deciphera	643		MASSACHUSETTS	ST	200	1614C	High
1557-0-0	LIBERTY HALL VIDEOS	646		MASSACHUSETTS	ST		1614C	High
9026-0-0	vacant	647		MASSACHUSETTS	ST	300	1614C	High
10812-0-0	COLD STONE CREAMERY	647		MASSACHUSETTS	ST	101B	1614C	High
1560-0-0	STARBUCKS	647		MASSACHUSETTS	ST	10-Apr	1614C	High
1558-0-0	Vacant	647		MASSACHUSETTS	ST	1	1614C	High
9027-1-0	DECIPHIRA	647		MASSACHUSETTS	ST	2nd floor	1614C	High
10902-0-0	CLAIRE'S	647		MASSACHUSETTS	ST	101 C	1614C	High
9027-0-0	COMMON AREA	647		MASSACHUSETTS	ST	COMMON	1614C	High
11007-0-0	Vacant	647		MASSACHUSETTS	ST	29-Jul	1614C	High
7225-0-0	JOURNAL-WORLD	609		NEW HAMPSHIRE	ST		1614C	High
7167-0-0	612 New Hampshire	612		NEW HAMPSHIRE	ST		1614C	High
7020-0-0	The World Company	644		NEW HAMPSHIRE	ST		1614C	High

1936-0-0	JOURNAL WORLD NEWS BUILDING	645		NEW HAMPSHIRE	ST		1614C	High
7417-0-0	The Runaway Pony Bed and Breakfast	603		TENNESSEE	ST		1614C	High
2544-0-0	GIRLS ACHIEVEMENT HOME	637		TENNESSEE	ST		1614C	High
2593-0-0	FIRST STATE BANK AND TRUST	609		VERMONT	ST		1614C	High
2595-0-0	LUMINOIS NEON, INC.	615		VERMONT	ST		1614C	High
2596-0-0	MCFADDEN OFFICE GROUP	616		VERMONT	ST	A	1614C	High
2596-1-0	PROFESSIONAL ENGINEERING CONSU	616		VERMONT	ST	B	1614C	High
7971-0-0	New Life in Christ	619		VERMONT	ST		1614C	High
2597-0-0	Dempsey's Irish Pub	623		VERMONT	ST		1614C	High
9113-0-0	BARTLETT & WEST ENGINEERS	628		VERMONT	ST		1614C	High
9223-0-0	Joseph A Bank	646		VERMONT	ST		1614C	High
9223-1-0	Lawrence Chamber of Commerce	646		VERMONT	ST	UPSTAIRS	1614C	High
10156-0-0	CLO DUPLEX #7	3512		MORNING DOVE	CIR		1711B	High
10156-1-0	CLO DUPLEX #9	3514		MORNING DOVE	CIR		1711B	High
11656-0-0	Cottonwood Inc.	3943		ASTER	ST		1711C	High
11656-1-0	Cottonwood Inc.	406		BLAZING STAR	DR		1711C	High
11761-0-0	CLO DUPLEX #8	509	N	JOHN DOY	CT		1711D	High
10147-0-0	CLO DUPLEX #1	400	N	JOHN DOY	CT		1712A	High
10150-0-0	CLO DUPLEX #4	511	N	JOHN DOY	CT		1712A	High
10149-0-0	CLO DUPLEX #3	408	N	JOHN DOY	CT		1712C	High
11762-0-0	CLO DUPLEX #12	621	N	WRIGLEY	LN		1713A	High
4211-0-0	JAYHAWK MOTEL	1004	N	3RD	ST		1714D	High
4243-0-0	Motel 6	1130	N	3RD	ST		1714D	High