Category VI: Physical Resources

Physical resources are defined as fire stations, training facilities, fire apparatus, and other capital expenditures and outlays that make up the property assets of an agency. Special attention is required to obtain and maintain appropriate quality physical resources.

Facilities that are leased and/or jointly operated may also be considered for agency use if this is accomplished in accordance with properly adopted and clearly established policies.

If work is contracted outside the agency and/or to another department within the parent agency, it is incumbent on the agency to ensure that facilities, equipment, staff, record keeping, and procedures are consistent with the performance indicators and core competencies listed herein.
Criterion 6A: Physical Resources Plan

Development and use of physical resources is consistent with the agency’s established plans. A systematic and planned approach to the future development of facilities is in place.

Summary:
The department has a strategic plan in place. This provides some of the basis for assessing and planning future physical resource needs. The City of Lawrence reviews these needs and prioritizes them along with other City departments on an annual basis. In the department’s strategic planning session, it was determined that a task force would need to be developed to assess resource needs. The governing body is discussing plans for acquiring grounds and future expansion funding with us. We have identified the need to work closely and be more involved in the City’s projected growth to be better prepared to plan for future development and locations of facilities.
Performance Indicators:

6A.1 The development, construction, or purchase of physical resources is consistent with the agency’s goals and the strategic plan.

Description
The short and long-range goal of planning for and implementing the purchase of stations and equipment is ongoing. A plan for future stations to accommodate the growth of the City based on projected population growth and maintenance of standardized response times exists in the form of the city’s capital improvement plan (CIP) and the SOC.

Appraisal
The department’s current CIP has identified target years for consideration of new stations and for future equipment and apparatus needs. We have identified the need for an addition to the risk management tool that would incorporate the CIP and include measurable criteria for determining when station funding must begin. The needs of the community would be more accurately targeted using this additional information.

Plan
The Executive Team will continue to review the CIP on an annual basis to ensure it will adequately meet the future needs of the community. The department will develop criteria to use with the risk management tool to aid in identifying timing and location of new stations.

References
CIP Request Fire Station Number 6
2018-2022 Capital Improvement Plan
SOC
**Description**

The process described above adequately incorporates involvement from administration, staff and the governing bodies. The use of project teams provides diverse input and feedback in the planning for physical facilities.

**Appraisal**

The Department begins the planning process for future facilities by studying the projected growth of the City as determined by the city’s CIP and long-range planning. We participate in the multi-department forum to review the comprehensive list of planned developments. The department members assigned study the plan and determine how the SOC would be impacted and what the personnel and facility costs will be to mitigate the impact. The multi-department forum then presents a recommendation first to the administration and then to the governing body.

The department utilized project teams to coordinate planning for physical facilities. Fire Station Number 1 remodel project team consists of three Captains from Station 1, Public Works Building and Structures Managers, City/County Sustainability Coordinator, Director of Douglas County Senior Resource Center, Division Chief of Operations X Shift, Division Chief of Operations Y Shift, the Fire Chief and other department members.

**Plan**

The Fire Chief and the Executive Team will continue to participate in the planning process to ensure that the governing body has information regarding the necessary physical facilities within growth areas to enable us to provide adequate levels of service.

**References**

SOC

2016-2021 Lawrence-Douglas County Fire Medical Strategic Plan
Monthly Activity Report Example

**Criterion 6B: Fixed Facilities**

The agency designs, maintains, and manages fixed facility resources that meet the agency’s goals and objectives.

**Summary:**

The Department’s buildings meet its established mission, goals and objectives, as well as those of City and County through design, maintenance, and management strategies. Buildings comply with required standards and codes. Stations have been strategically located to satisfy geographic, population and response needs. The Department’s CIP addresses expansion and growth to including locations of future stations. The crews assigned to the stations provide care of the grounds, cleaning, snow removal, and minor repairs and maintenance. The City Public Works Department and outside contractors assists in facilities maintenance and upkeep.
Performance Indicators:

6B.1 Each function or program has adequate facilities and storage space. (e.g., operations, community risk reduction, training, support services, and administration).

Description
The department currently operates out of five stations located within the City of Lawrence, plus an additional EMS station located in Baldwin City and Eudora City to provide EMS response to the County.

The Administrative Offices Building opened in 2006 attached to Station No. 5. The Administration Office houses four divisions: Prevention, Training, Administrative and Emergency Medical Services. There are individual offices for the Chief of Department, Division Chiefs, the Accreditation Manager, and the Medical Billing Manager. There are eleven workstations with computers and filing capabilities for support employees for the various divisions. There is a supply storage area, a break room, and three conference rooms capable of holding eight, 12 or 48 persons with audio and video equipment.

Station No. 1 currently is using a temporary modular facility adjacent to the original building, which opened in 1950. Station one is being renovated with an estimated completion date of July 2018. The station has three floors of usable area, with a conference room and workout room in the basement and the apparatus bay, living quarters with dayroom, kitchen/dining area and office on the main level. Off the apparatus bay is a Captains’ office, workshop, and an SCBA workshop/office. The offices are supplied with multiple computer stations and filing capabilities. The final level of the station is the dorm areas. There is a large locker room with bathroom/shower facilities, a large bunkroom for eight with pole access to the apparatus floor and a small dorm room with bathroom/shower facilities two. There are also three offices on this level; one used by department GIS personnel, one houses the network connectivity for the station, and the other is vacant.
Station No. 2 opened in 2002. The building has one office with multiple computers and filing capabilities. A small office area is for personnel to work on projects. A kitchen/dining area leads into the day room. There is a workout room, 2 full facility shower/restrooms and 12 individual bedrooms with four lockers each. The apparatus bay area has three long bays, a hose dryer, an SCBA compressor, a laundry room, and gear storage and storage area.

Station No. 3 opened in 1968. The station has a study room, office with multiple computers and filing capabilities, workout room, dayroom, kitchen/dining area, two shower/bathrooms and ten individual bedrooms with four lockers per room. Remodeling of the kitchen occurred in 2000, and a full remodel with the addition of the bedroom area occurred in 2005. A detached garage constructed in 2002 houses additional apparatus and equipment.

Station No. 4 opened in November of 2007 and the layout and features of this facility mirror station 2.

Station No. 5 opened in 2006 and included the adjacent Administrative Offices. There is one large office with multiple computers and filing capacity. A conference room, workout room, large kitchen/dining area, day room and 16 individual bedrooms with four lockers make up this building. It also has two shower/bathrooms and a laundry room. The apparatus bay has a hose dryer, an SCBA compressor, a gear storage room and two utility rooms.

Station No. 11 is located in Baldwin City and opened in 1997. Its primary mission is to handle EMS calls in the southern portion of Douglas County. A converted three-bedroom ranch home with a full basement houses the vehicle and crew. A former bedroom houses the office with computer and filing capabilities. The basement has two storage areas and the physical fitness room. The modified garage houses one Medic Unit.
Station No. 12 is located in Eudora City at the City of Eudora Public Safety building. Its primary mission is to handle EMS calls in the northeastern portion of Douglas County. The City of Eudora owns this building, and the department utilizes the facilities’ apparatus bay, kitchen, day room, individual bunkrooms, physical fitness room and office.

The Training Center is a former operations station that originally opened in 1968 and includes the original training tower and drill field. With the opening of the new Station 2 in 2002, the existing station converted to a full training center and maintenance facility. In 2007, the department vehicle maintenance merged with city vehicle maintenance and the entire facility became the training center. The building houses no operations personnel and has no fixed apparatus. The kitchen and dayroom area is now a large multipurpose room with tables, chairs, audio/visual capabilities and a fully functional kitchen. There is a large locker room with shower/bathroom area. There is also a former small dorm area with a full bath. The large parking area accommodates apparatus during training evolutions. The three-story training tower has a burn room, sprinklers and standpipes. The facility also has training props for Haz-Mat, confined space and trench rescue training.

The Investigations Center originally is a former fire station constructed in 1928, and converted into an investigations facility in 2007. The building houses an office for Fire Investigators and Coroner Scene Investigators, and includes interview rooms and a secure evidence room.

Appraisal
The remodeling of Station No. 1 scheduled for 2007 to give personnel updated areas and consolidate working space has been postponed until 2017. Station Nos. 2, 4 and 5 should be sufficient with proper maintenance for personnel well into the future. An additional remodel of Station No. 3 in 2005 provided an adequate amount of working and living area. The Training Center has some space limitations and there is a need to construct a new training tower that to meet other space needs. Station No. 11 is in need of some necessary repairs but is sufficient for the realm of its responsibilities for the department. The Prevention Division has 2 offices located at the City’s Neighborhood Resources
Department located in former the Riverfront Mall building. The Division Chief of Prevention is located in the administrative offices. This separation of the division makes it possibly less efficient, but with the City’s “one stop shopping” for building contractors, the City’s development process is enhanced by the location of offices in the Riverfront.

**Plan**
The CIP identifies additional stations, and the Fire Chief will continue to work with the governing body and administration to ensure the identified funds will construct an adequate size station.

**References**
Capital Improvement Plan
6B.2 Buildings and outbuildings are clean and in good repair, and the surrounding grounds are well kept. Maintenance is conducted in a systematic and planned manner.

**Description**

The department relies on crews stationed at the facilities to clean and maintain them daily. SOPs direct personnel in the daily cleaning duties. The crews are responsible for simple maintenance projects that are within their abilities. The Division Chief of Operations or a member of the Executive Staff and facilities program manager receive email or phone notification of maintenance projects that are beyond the abilities of the crews. The City intranet contains the building maintenance form for requesting repairs by the City’s Public Works - Facilities Maintenance Division. When maintenance projects are beyond the Facilities Maintenance Division capabilities outside organizations have the opportunity to contract with the department.

**Appraisal**

Most of the issues sent to the city’s Public Works - Facilities Maintenance Division are resolved within a reasonable time. In an emergency the station officer can contact the City Facilities Maintenance supervisor directly, or if necessary station officers may contact a vendor directly for emergent situations. The Facility Maintenance Problems and Reporting policy directs the actions to be taken for emergency and non-emergency issues.

The current plan that the department has in place is, at times, ineffective. The daily cleaning keeps the stations in a livable state and presentable to the public. Time constraints place on the crews for other agency goals and obligations result in inconsistency in following the cleaning schedules. The department has one facility with lawn care provided by city crews, lawn care for two facilities provided by private contractors, and station personnel provide for the remaining.

The department needs additional station maintenance funding to cover repairs before they become a necessity. Minimum maintenance funding requires requests for additional funding for such repairs.
Plan
A comprehensive report of needed facility maintenance, repairs, and upgrades has been developed by the facilities program manager. This report will help future planning for repairs, upgrades, prioritization of projects, and requesting additional funding for facility maintenance. The report will be a living document and updated annually by the facilities program manager.

References
403.21 Facility Maintenance Problems and Reporting
Facility needs assessment document
Facilities comply with federal, state/provincial, and local codes and regulations at the time of construction, required upgrades for safety are identified, and where resources allow, addressed. For those items that warrant further attention, a plan for implementation is identified in the agency's long term capital improvement plan (i.e. fire alarm systems, sprinkler system, seismic, vehicle exhaust system, asbestos abatement, etc.).

Description
The department makes every effort to ensure that facilities comply with applicable government regulations. The department strives to comply with current building codes, fire codes, and the Americans with Disabilities Act. There are no state regulations for these facilities. All facilities comply with local zoning requirements. Annual inspection of stations ensures compliance with local fire codes.

Appraisal
The department facilities, with the exception of Station No. 1 and the Investigations Center comply with all relevant federal and local regulations. Both of these stations have either upper levels or areas that do not meet accessibility requirements.

Plan
Funding for the upgrading to required code levels for Station No.1 and the Investigations Center is pending and not yet scheduled. When possible, the department will continue to comply with regulations, codes and standards as they apply for all existing facilities.

References
Sample fire inspection (Available on site)
Criterion 6C: Apparatus and Vehicles

Apparatus resources are designed, purchased, and maintained to adequately meet the agency’s goals and objectives.

Summary:
The department recognizes that apparatus and vehicles are vital resources to the accomplishment of its mission, goals and objectives. The apparatus project team uses City budgetary and purchasing guidelines and any information on current proven technologies for fire service safety and operation to develop apparatus specifications. The County provides capital funding for medic units. An apparatus schedule based upon an objective point system involving factors such as engine hours, miles, and age determines apparatus replacement. The department’s Executive Staff adjust the plan to determine when to schedule apparatus purchases, and station location in order to achieve objectives and coverage goals and objectives.
Performance Indicators:

CC 6C.1 **Apparatus types are appropriate for the functions served (e.g., operations, staff support services, specialized services, and administration).**

**Description**
The apparatus types that the department currently has are adequate and serve the needs of the community well. The vehicles are located to meet the response needs of the area served.

**Appraisal**
Agency primary apparatus consists of Engines, Rescue, Quints, Trucks (platform) and Medic Units. Specialty apparatus consists of a water tender, brush trucks, rescue boats, Gator ATV’s, Hazmat support trailer, search and rescue trailer, mass casualty trailer, command unit, and crew cab pickups, and a host of staff vehicles. The apparatus types are appropriate to support all services and programs of the department.

**Plan**
The Executive Team will continue to evaluate its apparatus needs at least annually following established plans and guidelines.

**References**
Vehicle Listing 600 Series
Sample apparatus specifications
6C.2 A current replacement schedule exists for all apparatus and support vehicles based on current federal and state/provincial recognized standards, vehicle condition, department needs, and requirements.

Description
An apparatus replacement schedule implemented in 2008 identified a 12-year life cycle for most apparatus. Replacement of other department vehicles is on an approximately 10-year schedule. Factors included in the replacement determination include apparatus age, year of purchase, purchase price, current value, number of engine hours, number of miles driven, life expectancy, and a projection of when apparatus moves to reserve status and when it should exit the system. The Department work with Central Maintenance Garage on the replacement schedule for apparatus and support vehicles.

Appraisal
The current replacement plan identifies when a particular apparatus is due for replacement. Current budget constraints result in an extension of the 10-year replacement plan for non-fire and medical apparatus. However, the department continues to request vehicles utilizing the replacement plan schedule.

Plan
The Executive Team and Central Maintenance Garage will continue to follow the established plans and guidelines for apparatus and vehicle replacement. The Department will coordinate with the Central Maintenance garage on the vehicle and apparatus replacement schedule.

References
Capital Improvement Plan Apparatus Replacement Evaluations
Apparatus Replacement plan
Apparatus Replacement Map
6C.3 A process is in place for writing apparatus replacement specifications that allows for employee input.

Description
The department utilizes an apparatus project team to develop apparatus specifications. Members from all levels of the department and central maintenance garage personnel are involved in the specifications. A consideration of personnel expressing a desire to participate on the project team results in a review of performance output prior to approval for participation.

Appraisal
The current system of utilizing a project team in place for writing fire and medical apparatus specifications has worked well. The goal of the project team is to design apparatus from base specifications for future apparatus purchases.

Plan
The department will continue to utilize apparatus project teams for establishing base specifications for all apparatus in use by the department. The project team meets to finalize specifications for purchase upon receipt of authorization to purchase apparatus.

References
Sample Apparatus Specifications
Email Project team
Criterion 6D: Apparatus Maintenance

The inspection, testing, preventive maintenance, replacement schedule, and emergency repair of all apparatus are well established and meet the emergency apparatus service and reliability needs.

Summary:

The department has an apparatus maintenance program that incorporates routine maintenance and inspection, preventative maintenance, and an emergency repair procedure. Until 2007, the department directly supervised two employees who handled fleet management duties. An attempt to increase efficiency resulted in the elimination of the department’s maintenance division and the transfer of the two employees to the City’s Public Works-Central Maintenance Garage (CMG). The department has a comprehensive apparatus maintenance program to ensure apparatus maintenance is in accordance with industry and NFPA standards. This process includes three separate inspection processes: 1) daily apparatus inspection by operational personnel, 2) “calendar” inspection at specified intervals (time or mileage interval) by CMG personnel, and 3) detailed inspections at specified total vehicle hours, miles, and/or elapsed time period.
Performance Indicators:

CC 6D.1 An apparatus maintenance program is established. Apparatus maintenance, preventative maintenance, inspection, testing, and emergency repair is conducted by trained and certified technicians in accordance with the manufacturer’s recommendations, and federal and/or state/provincial regulations. Attention is given to the safety, health, and security aspects of equipment operation and maintenance.

Description
The multi-level apparatus inspection program outlined above adequately addresses safety, readiness, NFPA standards (where applicable), and accepted industry and maintenance guidelines.

Appraisal
The department has a comprehensive maintenance program to ensure apparatus is maintained in accordance with manufacturer, industry and NFPA standards as well as its SOP’s. This process includes three separate inspection processes: 1) daily apparatus inspection by operational personnel, 2) “calendar” inspection at specified intervals (time or mileage interval) by CMG personnel, and 3) detailed inspections at specified total vehicle hours, miles, and/or elapsed time period. Maintenance guidelines and intervals are in accordance with fleet management best practices of the Diesel Engine Manufacturers Association. Engine oil analysis occurs on a routine basis. Apparatus receive annual testing in accordance with NFPA standards, with annual aerial testing conducted by a third party. A third party vendor and the central maintenance garage conduct annual pump testing.

Department members utilize a citywide vehicle maintenance program called Asset Works for sending service request information and reporting problems. This software tracks vehicle service requests. Emergency repairs are immediately reported to the Division Chief of Operations- X, Y, or Z Shift and Central Maintenance Garage.
Plan
The department will maintain the current tiered inspection and maintenance program, with revisions to address changes in NFPA standards and industry practices as applicable. This process will be reviewed by the Executive Staff and Vehicle Maintenance Program Manager on an annual basis at the Monthly Manager’s Meeting.

References
SOP 401.30 Apparatus Inventory and Cleaning
Apparatus Daily Inspection Form (Available on site)
Asset Works database example (Available on site)
SOP 401.10 Apparatus Inspection and Maintenance
6D.2 The maintenance and repair facility is provided with sufficient space and equipped with appropriate tools.

**Description**

The CMG is the primary maintenance and repair location. The facility has multiple bays for performing various tasks on everything from lawn mowers to the largest of fire apparatus. Technicians are required to furnish their own “general” tools, with specialty tools purchased by the City.

**Appraisal**

The current repair facilities lack space to raise cab and aerials in all bays, but does allow appropriate access. Current space is also limited in bay width, which compromises efficient operations. The Public Works Director submitted a twenty million dollar capital improvement request for a central operations facility housing division field crews from Public Works, Utilities, and Parks and Recreations. The facility request would provide efficiencies and additional space to the central maintenance garage. However, the plan is unfunded.

**Plan**

The department will continue to work with the CMG to ensure appropriate tools are available for specialized apparatus and equipment.

**References**

Central Maintenance Garage website screen shot

CIP Operations Facility Request
6D.3 An adequate number of trained and certified maintenance personnel are available to meet the program needs.

Description
The garage maintains several hundred types of vehicles citywide and resulting in maintenance delays due to staffing. The department has always maintained a strong relationship with the CMG and finds CMG responsive when emergencies and priority repairs are necessary.

Appraisal
The CMG is open and staffed from 6 A.M. to 4:30 P.M. Monday through Friday. A mechanic is on stand-by on weekends. A supervisor is on-call after normal working hours to assess and facilitate necessary emergency repairs. CMG technicians carry Double Master ASE Certification. The Fleet Manager and department encourage and support Emergency Vehicle Technician (EVT) certification for technicians; many of the techs hold EVT certifications. The department became a designated EVT national testing site to help encourage local and regional EVT certification testing.

Plan
The Fire Chief will continue to work with the Public Works Department management and Central Maintenance Garage supervisor on ensuring that there are enough personnel to meet our apparatus maintenance and repair needs. We will also continue to support and encourage EVT certification by CMG technicians.

References
Fleet Manager Job Description
Mechanic I Job Description
Mechanic II Job Description
Field Supervisor / Garage Job Description
6D.4 The level of supervision is adequate to manage the program.

**Description**

The CMG is a division of the City Public Works Department and operates under the supervision of the Fleet Manager. Two shop supervisors adequately manage the daily workloads for the ten technicians in the CMG. The CMG provides maintenance for all city vehicles regardless of their purpose. The CMG works on all fire apparatus as well as the medic units, utility vehicles and trailers for the department. The Executive Staff manages the department apparatus program and coordinates apparatus maintenance with the CMG.

**Appraisal**

The ratio of mechanics to supervisors at the CMG has worked well and no changes anticipated. The span of control is 1:5.

**Plan**

The Executive Staff will work with the Public Works Executive Staff to continue to maintain the appropriate supervisor to worker ratio.

**References**

Fleet Manager Job Description  
Field Supervisor / Garage Job Description  
Public Works Department Org Chart
6D.5 The reserve vehicle fleet is adequate or a documented contingency plan is in place for the event that apparatus must be taken out of service.

**Description**

The department has a reserve vehicle fleet identified as secondary apparatus for use in the event a primary apparatus is out of service. The department has four reserve fire apparatus, three of them being seventy-five foot quints, five ambulances, and one reserve command vehicle. These secondary apparatuses are equipped to be almost identical with primary apparatus. They are utilized by off duty personnel called back to assist in adequate response coverage, events, and large or multiple incidents.

**Appraisal**

The current secondary apparatus numbers minimized the need for frequent utilization of on call mechanics every time a unit goes out of service. The increase in the reserve fleet also reduces system stress by having an adequate number of apparatus for large incidents and multiple EMS standby events occurring at the same time. When the technical rescue apparatus is not available, there is no adequate apparatus in the reserve fleet. Currently, the gear is unloaded in the station and selected extrication equipment placed in the station utility vehicle or the technical rescue trailer.

**Plan**

The department will maintain the current number of secondary apparatus. The Executive Staff will continue evaluating the best way to manage equipment when the rescue unit is out of service.

**References**

SOC – Fleet Guide
CC  6D.6  The inspection, testing, preventive maintenance, replacement schedule, and emergency repair of all apparatus is well established and meets the emergency apparatus service and reliability of the agency.

Description
All primary response apparatus, utilities and single resource units are inspected daily. The daily inspection includes visual inspection, mechanical inspection, engine fluids maintained, tire pressure and wear and emergency warning systems check. Any deficiencies found during the daily vehicle inspection is reported to the Central Maintenance Garage (CMG) via electronic ticket. Depending on the severity of the deficiency the CMG will either schedule the apparatus for maintenance, fix the problem during normal preventive maintenance or request the apparatus be brought to the CMG for immediate attention. Preventive maintenance is scheduled and based on hour and/or mile usage. This information is gathered when apparatus fuels up and data is input to the fuel station.

With the process of continued review and evaluation along with the established relationship with the CMG the current processes in place works in providing safe and reliable apparatus to meet the demands of daily activities for responses.

Department utilizes standard operating procedures outlined in SOP 104.41, Apparatus Inspection and Cleaning, to provide guidance for personnel when performing vehicle cleaning. The method of recording and documenting daily/weekly Apparatus Inspections into Firehouse for more accurate data retrieval.

Appraisal
The CMG has updated to new software, Asset Works, which will enhance apparatus maintenance/repair by providing timely feedback on the status of repairs. Utilizing the current evaluation system for apparatus replacement and repair the Department strives to keep up to date and functional apparatus in service to meet the service delivery demands.
Plan
Continuing to include Departmental and CMG personnel in the fire and medical apparatus design process, reviewing and updating apparatus maintenance policies, and keeping abreast of current technology in apparatus improvements will continue to provide a safe and reliable fleet of apparatus. Funding for apparatus replacement is a concern; continual monitoring and evaluation of funding sources will continue to be pursued.

References
Email of apparatus planning group, Engine 40

Updated 600 fleet list

Apparatus Inspection SOP 401.10

Apparatus Inventory and Cleaning SOP 401.30

Activity Calendar displaying maintenance scheduled and cleaning (Available on site)

Apparatus replacement evaluation documentation

Asset Works Screen Shot
Criterion 6E: Tools and Small Equipment

Equipment and supplies are adequate and designed to meet the agencies goals and objectives.

Summary:

The department maintains an adequate supply of functional tools and equipment to perform its operational mission. Apparatus storage compartments contain tools and equipment shown to be appropriate to insure the personal safety of firefighters and proven effective in fire suppression, rescue, etc.
Performance Indicators:

6E.1 Tools and equipment are distributed appropriately, are in sufficient quantities, and meet the operational needs of the specific functional area or program (e.g., fire suppression, community risk reduction, investigations, hazmat, etc.).

Description
An apparatus equipment inspection form guides the daily inspection of the primary fire apparatus including verification of equipment and supplies compartments, and allows for notes of discrepancies. NFPA 1901 and ISO guidelines have established the minimum equipment for equipping fire apparatus. The Kansas Board of EMS outlines basic equipment for medic units. Risk analysis and equipment purchase authorization contribute to apparatus equipment decisions.

Appraisal
The department maintains an adequate supply of functional tools and equipment to perform its day-to-day operations. The department will continue to equip apparatus to meet the response needs of identified risks, and to ensure appropriate distribution of tools and equipment. Training, program evaluation, and project teams allow the department to stay abreast of technological advances in tools and equipment.

Plan
Engineers and crews will continue the daily practice of monitoring of its tools and equipment. Continually re-evaluate the equipment carried on the apparatus and determine the need to either remove or replace equipment as necessary

References
Apparatus Inventory Lists
NFPA 1901
ISO
Kansas Board of EMS Inventory Checklist
6E.2 Tools and equipment replacement is scheduled, budgeted, implemented, and is adequate to meet the agency’s needs.

Description
The department currently reviews manufacturer recommendations for replacement of tools and equipment. The department does not have a replacement schedule for tools and equipment unless required by a standard or the manufacturer. Replacement and repair of tools and equipment is on an as needed basis. All new apparatus purchases trigger a more thorough review of the tools and equipment for the new apparatus. Each program in the department requires the use of specialized equipment.

Appraisal
The current system allows us to maintain equipment that is in good condition. We have a budget line item for small tools and equipment as well as a repair line item. We prioritize repairs to essential tools or equipment to avoid expenditures that exceed budgetary allocations. This results in a possible delay to equipment or tool upgrades and/or replacement.

Plan
Program managers continue to use of the Firehouse database for the ability to identify tool/equipment replacement dates. Equipment replacement and certification will continue to be an integral part of the on-going, at least annually, program reviews.

References
Budget example for equipment (Nozzles, quickie saws, hose, PPE)
CC 6E.3 Equipment maintenance, testing, and inspections are conducted by qualified personnel, following manufacturer's recommended schedules.

Description
Department personnel, CMG (central maintenance garage) personnel, and outside contractors provide maintenance on equipment.

The department has four personnel certified by the manufacturer to fully maintain and repair the SCBAs. One firefighter assigned to the hazmat program maintains all the air monitoring equipment, including calibration and parts replacement. The department member has received training from the manufacturer for this purpose. Station personnel maintain hand tools such as shovels, rakes, axes, pike poles, and closet hooks. Station personnel perform weekly operational checks on small equipment and report discrepancies.

Shift personnel, outside contractor, and CMG personnel maintain all fuel powered equipment, ventilation fans, generators, saws, hydraulic power units, etc., as needed. The CMG personnel have the manufacturer provided training as required to maintain and service selected equipment.

An independent ladder-testing vendor tests all aerial and ground ladders annually and provides certification for those ladders that pass. Department members remove from service ladders that fail and determine repair or replacement need. An outside vendor provides hose repair to all hose, which is subsequently service tested prior to being placed back in service. Outside vendors perform cardiac monitor maintenance and repair as well as cot maintenance and repair.

Appraisal
The department personnel CMG, and outside contractors provide necessary inspection, maintenance and repairs by qualified personnel per the manufacturer’s recommendations.
Plan
The department personnel CMG, and outside contractors will continue to maintain the current equipment inspection, maintenance and repair program. The department will also continue to seek out the most efficient and economical method for maintaining equipment by using a combination of inside personnel and outside vendors.

References
Mechanic I Job Description
Mechanic II Job Description
SOP 111.11 SCBA Incentive
Firehouse maintenance and inventory records (Available on site)
Third party certification letter (Aerial and ladder testing)
Apparatus Inspection form
Department training and certification records (Available on site)
6E.4 An inventory control and maintenance tracking system is in place and current.

**Description**

The department utilizes an equipment inspection form for daily inspection and identification of discrepancies or failure of the primary fire apparatus including tools, equipment and compartments. Firehouse software has an inventory module that the department continues to expand with the goal of replacing most of the inventory list to track status of all tools.

The department maintains inventory list for its apparatus on the Firemed intranet. The inventory lists ensure the appropriate type and quantity of tools and equipment on each apparatus. Hand tools such as Halligan tools and axes are color coded to indicate their respective station assignment. Repair or replacement occurs on damaged, non-working or lost tools and equipment.

Email is the current method for reporting and monitoring what stage of repair/replacement a particular piece of equipment or apparatus is in.

**Appraisal**

The current inventory system is not being utilized to its fullest capacity; the system adequately meets the needs of the department. Email is the primary form of communication to obtain repair or replacement of a tool or other equipment. Follow up as to the status of repair or replacement for a tool or piece of equipment is also by email.

There is difficulty in utilizing firehouse for printed list for inventorying apparatus.

**Plan**

The Chief of Administration, Technology Team, and Program Managers will continue looking at technology using tablets or scanners to assist in quicker more accurate inventory tracking on an annual basis. The department will explore technology as a way to help maintain inventory and tracking and continue to monitor peer agencies for best practices.
References

Master Inventory Lists

Kansas Board of EMS Inspection Forms
6E.5 Supplies and materials allocation is based on established objectives and appropriate to meet the operational needs of the specific functional area or program (e.g., fire suppression, community risk reduction, investigations, hazmat, etc.), and is compliant with local, state/provincial, and national standards.

**Description**
Supplies and materials are compliant with state and national standards and monitored by program managers. The supplies and materials for each program are available to carry out deployment objectives to all incidents.

**Appraisal**
The process for managing supplies and materials is adequate for meeting the established objectives and appropriate to meet the operational needs of the program.

Program Managers for fire suppression, community risk reduction, investigations, coroner scene investigations, emergency medical services, tactical medic, and hazmat are responsible for reviewing the operational needs, purchasing, inventory and ensuring the supplies and materials are available.

**Plan**
The program managers will continue to monitor compliance with local, state/provincial and national standards.

**References**
Sample copies of inventories
ISO Standards
Criterion 6F: Safety Equipment

Safety equipment is adequate and designed to meet agency goals and objectives. For the purposes of this criterion, safety equipment includes personal protective equipment (PPE) and related equipment (e.g., self-contained breathing apparatus).

Summary:
The department issues safety gear that is consistent with industry standards. The Health & Safety Program Team (HSPT) reviews gear to ensure that it is adequate for the intended use. Department SOPs identify the goals and corresponding response objectives of an emergency. The appropriate selection of available equipment results in fulfillment of objectives.
Performance Indicators:

CC 6F.1  **Safety equipment is identified and distributed to appropriate personnel.**

**Description**
The department provides safety equipment necessary to allow members to work efficiently and safely.
The department utilizes safety equipment ranging from exam gloves to high-tech rescue equipment, thermal imagers and gas and electrical detection devices. A department Captain serves as the program manager for uniforms and protective clothing supported by a firefighter serving as the clothing clerk. HSPT members research and recommend safety equipment and procedures for department use.

Department members receive personal protective equipment consisting of structural firefighting gear and personal protective EMS equipment. Specialized protective clothing (i.e. Hazmat, Water Rescue, and Technical Rescue) is available based on the task assigned. Personnel receive SCBA facemasks and each apparatus riding position has an SCBA.

**Appraisal**
SOPs and the MOU reflect labor and management’s commitment to employee safety. New members received an initial equipment distribution list.
The department utilizes safety equipment ranging from exam gloves to high-tech rescue equipment, thermal imagers and gas and electrical detection devices. A department Captain serves as the program manager for uniforms and protective clothing supported by a firefighter serving as the clothing clerk. HSPT members research and recommend safety equipment and procedures for department use.

Department members receive personal protective equipment consisting of structural firefighting gear and personal protective EMS equipment. Specialized protective clothing (i.e. Hazmat, Water Rescue, and Technical Rescue) is available based on the task
assigned. Personnel receive SCBA facemasks and each apparatus riding position has an SCBA.

Plan
The Program Managers and Technicians will continue to expand the use of the *Firehouse* RMS inventory system for issued equipment and maintenance. Annual evaluation by the HSPT will review compliance with regulations and standards, as well as identify the latest innovations.

References
Memorandum of Understanding
Health and Safety Team Program minutes
6F.2 Distributed safety equipment is sufficient for the functions performed.

**Description**

The department maintains sufficient quantities of disposable safety equipment items to ensure availability for all members. SCBA technicians fit test members annually using their assigned mask and re-issue different size mask as need to ensure proper fit and comfort. The uniforms and protective clothing manager ensures members have adequate protective clothing and related safety equipment. The uniform and protective clothing manager evaluates new gear on an ongoing basis to ensure the level of protection meets or exceeds the current NFPA standard and recommends gear for purchase as necessary.

Members report non-functioning equipment to company officers and request replacement. The department expects all members to use on operationally effective safety equipment. The HSPT regularly reviews equipment, following any injuries related to the operation of the equipment, and any issues related to safety equipment.

The EMS Division Chief oversees risk management and investigates all incidents of injury or exposure. Members are required to file an Injury/Damage Workers Compensation Employee Report for any accident. Supervisors are required to file a Workers Compensation Supervisor’s and Safety Committee Investigation Report Supervisor’s Incident Report as well. This review determines if any equipment shortcomings or failures were involved.

**Appraisal**

The safety equipment distributed functions well for its intended use. The current process of distribution works well to ensure safety equipment is functioning and available. Annual training and in house fit testing of SCBA masks are an example of the department’s commitment to safety. Annual inspection of structural firefighting gear repairs and replacement as needed. Recently the emphasis on cancer in the fire service has developed a need for a secondary set of PPE to be used while the primary set of PPE is being cleaned or maintained.
Plan
The department members will continue to utilize safety equipment that meets or exceeds industry standards. Due to the contract for PPE expiring in 2017, the department met with PPE vendors to determine what significant changes have been made in the gear since 2011. Officers will ensure compliance to SOPs pertaining to safety, and reporting and removal from service of non-functioning equipment. Officers will complete annual inspection of each assigned members gear once a year. Completion of inspection records will continue to be entered into FireHouse™.

References
Sample SCBA maintenance records
SCBA Maintenance Repair Form
Example of annual fit test for SCBA face piece
Protective clothing inspection packet
FireHouse Inventory for PPE staff (Available on site)
6F.3 Safety equipment replacement is scheduled, budgeted and implemented, and is adequate to meet the agency’s needs.

Description
The department’s operating budget includes regular purchase of protective clothing to replace worn or damaged gear. A sufficient quantity safety equipment items ensure refitting of personnel as needed. Replacement of safety equipment is the responsibility of all personnel and company officers. The company officer and shift commander promptly arrange for repairs/replacements when notified by members of deficiencies.

Department SCBA technicians maintain adequate supplies to ensure all SCBAs are tested and in good working order. Careful planning and inventory control ensure that the department maintains safety equipment. The department maintains a minimal amount of extra protective clothing for emergency replacement if needed because of the need for proper fit.

The department in 2011 selected new protective clothing through an approximate year-long evaluation and wear testing. The department has been working on a five-year target for replacing gear and ultimately providing members two sets of gear. Currently, the department is on a seven-year replacement of gear. The uniform and protective clothing manager has an annual budget of $100,000 for personal protective gear purchases. There are additional budget line items for daily uniforms and repairs.

The Operating Budget for 2017, has $75,000 budgeted for 2018 for Gear Extractors for each station. The Capital Improvement Plan has $540,000 budgeted for 2019 for an additional set of Bunker gear for each member.

Appraisal
Agency procedures for budgeting, scheduling and implementing safety equipment has proven to be sufficient. The department has identified readily accessible vendors and suppliers should a need for immediate acquisition arise.
The current processes and procedures for replacement of safety equipment are adequate.

Plan
Program managers will continue to follow City procedures to budget the necessary stocking and supply of equipment.

References
Protective clothing Replacement & Repair Funding Request
Purchase Orders (Protective Clothing)
FireHouse Inventory PPE staff
2018- 2022 Capital Improvement Plan
6F.4 Safety equipment maintenance, testing, and inspections are conducted by trained qualified personnel and appropriate records are kept.

Description
Manufacturer certified personnel in the department maintain and overhaul SCBA. These firefighters repair and test the SCBA and conduct annual fit test for face pieces. Computerized records on individual units track repairs and upgrades. The department utilizes the CMG (Central Maintenance Garage Staff) staff to repair equipment such as nozzles, chainsaws and other mechanical equipment. A local manufacturer authorized radio vendor services all radios. Trained personnel conduct inspections of PPE. A trained hazmat team member tests and repairs combustible gas monitors. Each department division maintains records regarding the maintenance, testing and inspections of safety equipment for their area of responsibility.

Appraisal
Whenever possible, the department conducts maintenance in-house using qualified personnel. When in-house personnel lack the necessary skills, equipment goes to manufacturers or a contractor. Authorization is necessary for all repairs and maintenance. All PPE Bunker Gear is entered into Fire House after it is cleaned and inspected.

Plan
The Executive Team will continue to be responsible for making decision on this program with support of the PPE and Clothing Manager for implementation. Authorization for the testing, maintenance and repair of safety equipment by qualified personnel will continue. The department will document and maintain adequate records of maintenance and repairs. The department will continue to utilize certified in-house repair when able and contract out other maintenance and repair to qualified service centers.

References
SCBA repair certification
SCBA maintenance record
Protective clothing inspection sheets
FireHouse Inventory PPE staff
6F.5 A safety equipment inventory control and maintenance tracking system is in place and current.

Description
Program managers within the department share the responsibility to purchase and distribute safety equipment for their respective area of responsibility. These individuals determine the necessity and the method of recording data concerning inventory maintenance related to their area of responsibility. The department maintains sufficient quantities to supply the needs of agency members. Firehouse has a current inventory of PPE, Bunker Gear and helmets for all members. The SCBA program uses on-off-line software to manage the inventory and maintenance called PosiChek3 USB from Honeywell Analytics.

Appraisal
Delegation of inventory control and maintenance to those responsible for a given area results in a variety of methods to inventory, track and store data. The department does a good job to both maintain an adequate inventory of safety equipment, and to ensure the equipment operational capabilities. The department continues to expand the use of Firehouse™ software as the primary inventory control system.

Plan
The department will continue to make all inventories available via the intranet or Firehouse. The SCBA Technicians will explore technology solutions for transitioning the PosiChek3 USB Software to the network for redundancy. Firehouse has a new barcode inventorying system the Executive Team and Technology will explore opportunities for implementation. The department will also continue to explore the use of tablet or Smartphone for inventory control and tracking.

References
Firehouse™ (Available on site)
PPE Inspection packet