

## **Category 6: 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, 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 in this category.

### **Criterion 6A: Physical Resources Plan**

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

#### **Summary:**

The Meridian Fire Department's physical resources and logistical needs are ascertained through strategic planning and the community risk assessment. The *Meridian Fire Department Community Risk Assessment/Standards of Cover* document used a combination of population and demographic data, risk analysis, incident heat mapping, and future development plans to identify the community's planning zones. These zones, coupled with input from citizens and the Meridian Rural Fire District, will help guide the development of future stations. The department works with the city to capture all long-term capital needs in the Comprehensive Financial Plan.

## **Performance Indicators:**

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

### **Description**

The department works with the City of Meridian Finance Department to create short- and long-term comprehensive financial plans that guide the development, construction, and purchase of physical resources. The current City of Meridian Comprehensive Financial Plan (CFP) includes the completion of two new stations, the purchase of a new engine and ladder truck, and land purchases, design, and construction of two additional stations. The *Meridian Fire Department Community Risk Assessment/Standards of Cover (CRA/SOC)* risk analysis helps to determine current and future physical resource needs.

### **Appraisal**

The development, construction, and purchase of physical resources has not always met the department's needs or kept up with the city's growth. However, the development of the CRA/SOC helped guide the department's input into the CFP. The department has already begun planning for Stations 9 & 10 and has used data from the CRA/SOC, as well as Idaho Surveying and Rating Bureau (ISRB) requirements, to guide the purchase and placement of new apparatus, specifically a new quint truck purchase. The *Meridian Fire Department Strategic Plan 2022-2024* did not specifically mention physical resources, however the goals in the strategic plan did focus on risk assessment and the creation of the current CRA/SOC in order to synchronize physical resources with known risk assessments.

### **Plan**

The department will continue to work with the city finance department to guide the CFP and address any future physical resource needs of the department. As the department brings two new stations online, the department will evaluate the impact of those stations and apparatus on response times, coverage and performance. That data will be used to evaluate and update the CRA/SOC to guide physical resource needs. The department will consider purchasing analytical software to help guide future station locations and land

purchases. The department will include more specific goals regarding physical resources in the next iteration of the strategic plan to be published in 2025, and those needs will be guided by annual updates to the CRA/SOC.

### **References**

- Comprehensive Financial Plan, pg. 11-15
- *Meridian Fire Department Community Risk Assessment/Standards of Cover*, pg. 62-79
- Meridian Fire Department Strategic Plan 2022-2024, pg. 26

**CC 6A.2      The governing body, administration, and staff are involved in the planning for physical facilities.**

**Description**

The department works with the City of Meridian Public Works Department, Parks Department, Planning Department, and Meridian Rural Fire District to plan physical facilities. The fire chief submits a proposal for new facilities to the public works division of capital projects and facilities (CPF). The Meridian City Council approves budgets, designs and permits for new facilities. The process for the planning of new city projects through the CPF division is outlined in public works policy.

**Appraisal**

The department successfully gained approval for the construction of two new fire stations and the construction of the Public Safety Training Center (PSTC) and “Scenario Village,” joint training facilities with the Meridian Police Department, in the last 5 years. The planning process for Stations 7 and 8 were accelerated by several years to meet the growth and needs of the city through cooperative planning meetings with internal stakeholders and the city council. Station 8 was built and designed cooperatively with the police department to include a police substation on the property, and Station 7 and 8 were both built with input from Ada County Paramedics to add additional dorm rooms and bay space to co-house an ambulance.

**Plan**

The department will continue to involve stakeholders from public works, the parks department, police department, Ada County Paramedics, and the rural district to plan and develop future facilities. The department will also identify any future stakeholders that may be able to be involved in the planning process as the city and department grow. The division chief of logistics will create a more formalized process to receive input from line personnel for the planning of new stations, including the possible creation of a facilities or station committee.

**References**

- Modified CFP Replacement Schedule

- CW-1 - Design and Review of City Project Plans

## Criterion 6B: Fixed Facilities

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

### **Summary:**

The Meridian Fire Department has eight fire stations (6 active, 2 under construction to be completed in September and October 2023, respectively), administrative offices located at Meridian City Hall, a training tower located at Station 1, a Public Safety Training Center (PSTC) and Scenario Village shared with the Meridian Police Department, and a Public Safety Fire Center. All fire stations are equipped with sprinkler systems, diesel exhaust management systems, smoke and CO detectors, and station alerting systems. All stations meet fire and building code requirements, and older stations have been brought up to code as needed. Maintenance of all facilities is shared by the City of Meridian Public Works Department and the fire department.

## **Performance Indicators:**

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

### **Description**

The department has eight fire stations (6 active, 2 under construction to be completed in September and October 2023, respectively), administrative offices located at Meridian City Hall, a training tower located at Station 1, a Public Safety Training Center (PSTC) and Scenario Village shared with the Meridian Police Department, and a Public Safety Fire Center. Each station has space for front-line apparatus and personnel with individual bunkrooms. All stations feature storage for medical supplies, station supplies, turnout gear, a dedicated tool room, and additional fire equipment storage. Several of the stations also house reserve apparatus or dual-staffed brush rigs or water tenders, and newer stations (stations 6, 7 and 8) feature separate bunker gear rooms and PPE decontamination spaces. Training offices are located at City Hall and the PSTC. The PSTC contains several large classrooms and a lecture hall. Additional storage space currently consists of a 20'x20' storage shed and two used industrial shipping containers at Station 1, two storage cages at Station 6, and a room in the basement of City Hall.

### **Appraisal**

With growth in staff over the past 15 years, all facilities have been consistently at capacity. Reserve apparatus have been stored in front-line stations as there is no other dedicated facility for them. Storage space has been lacking at all locations and all storage spaces have consistently been at maximum capacity. All administrative offices have been full and extra work spaces have been created in reception and conference rooms to house more personnel. Training facilities have been fully booked, making it difficult for crews to train, especially during academies.

### **Plan**

The department will partner with the capital projects and facilities (CPF) division of the public works department to assess the space and facility needs of the department, including the possibility of a logistics/facilities building to include a centralized storage



facility, as well as the remodel and or/relocation of stations to suit the needs of the department. The division chief of logistics will work with the CPF division to commission a site and space study for future fire stations, as well as for current facilities.

### **References**

- *Meridian Fire Department Community Risk Assessment/Standards of Cover (CRA/SOC) pg. 85-93*
- CW-1 - Design and Review of City Project Plans
- Station 6 Floor Plan
- Stations 1-5 Floor Plans

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's buildings are clean and in good repair. The capital projects and facilities division of public works commissions a facility condition assessment every 5 years for each fire department facility. Station crews clean each station on day two of their 48-hour shift, as well as clean and maintain other specific areas throughout the week such as cleaning the apparatus bay floors or disinfecting the showers. The company officers are responsible for ensuring that daily and weekly chores are complete. The City of Meridian Public Works department completes general building maintenance on all stations, and the parks department manages ground maintenance. Other types of repairs may be handled by outside contractors. Scheduled maintenance is placed on the Operations Calendar through Microsoft Outlook. Minor facility issues and repair requests can be submitted through the City of Meridian Support website. The public works and water departments both have on-call personnel for after-hours facilities emergencies.

### **Appraisal**

The station facility condition assessments were completed in 2020 and reported that the stations were generally in good condition. All facilities maintenance has been completed according to the calendar schedule. The current process for scheduling maintenance and repairs is effective. Keeping as many regular maintenance items in house has improved communications and partnerships with the city.

### **Plan**

The division chief of logistics will continue to monitor the maintenance of all stations and ensure that regular maintenance is scheduled. The division chief of logistics will work with the public works department to see if more station maintenance and repairs can be brought in house. The public works department will work with the department to define the scope, priorities, and needs of the fire department for city maintenance, as well as continue to schedule regular facility conditions assessments.

## **References**

- HVAC Maintenance on Ops Calendar Screen shot
- Support Ticket Screenshot
- Station Cleaning Schedule
- Station 2 Facility Condition Assessment
- Public Works Reoccurring Maintenance Items – Fire Department

**CC 6B.3** 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**

All department facilities comply with federal, state, and local codes. All fire stations have sprinkler systems, fire alarm systems, and vehicle exhaust management systems which are inspected annually. The Meridian Fire Department prevention division inspects facilities regularly to ensure compliances with International Fire Code (IFC) and International Building Code (IBC). Planned maintenance and building improvements are identified each budget cycle. Stations are all well maintained and kept up to date with the latest safety upgrades including the vehicle exhaust system addition in 2019.

### **Appraisal**

All department facilities complied with IFC and IBC requirements at the time of their construction and have continued to pass inspections on a regular basis. Any safety or regulatory issues have been addressed and mitigated.

### **Plan**

The department will keep all facilities compliant with the latest adopted fire and building codes and continue to operate facilities that apply with all local, state, and federal. The division chief of logistics will continue to budget and plan for future maintenance and upgrades and monitor any needed upgrades and repairs to meet compliance.

### **References**

- Station 1 Fire Code Inspection
- Station 5 Vehicle Exhaust Management System Service
- Station 1 Fire Alarm Inspection

- Station 1 Sprinkler System Inspection
- Station 1 Inspection
- Diesel Exhaust Systems Project Overview Report

## Criterion 6C: Apparatus and Vehicles Maintenance

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

### **Summary:**

The Meridian Fire Department Logistics Division maintains an apparatus fleet which meets the departments operational needs. The department's fleet includes 7 front-line engines, 2 front-line trucks, 2 cross-staffed type 6 brush rigs, a cross-staffed 3,000-gallon water tender, and a battalion chief SUV. All front-line rigs are designed to mitigate the risks common to the City of Meridian and provide for mutual aid to surrounding departments. The department also maintains 4 reserve fire engines, 1 reserve truck, 1 reserve battalion SUV, and 22 administrative vehicles. All response apparatus are replaced according to National Fire Protection Association (NFPA) 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles* and are budgeted for as part of the City of Meridian's Comprehensive Financial Plan.

## **Performance Indicators:**

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

### **Description**

The department's apparatus are appropriate to mitigate the risks germane to the City of Meridian. The department operates five front-line engines, two front-line ladder trucks with 100' platforms, two cross-staffed type-6 brush engines, a cross-staffed 3,000-gallon water tender, two four-wheel drive battalion chief SUVs, and a fleet of vehicles for the department's administrative staff. The reserve fleet includes four type-1 engines and one reserve ladder truck. The apparatus reflect the risks of the community identified in the *Meridian Fire Department Community Risk Assessment/Standards of Cover (CRA/SOC)* as well as the operational needs of the department. All front-line engines and trucks are capable of addressing structure fire risks and EMS risk needs. All front-line apparatus carry appropriate equipment to mitigate the most common low-risk hazmat calls and are equipped with extrication equipment appropriate to the risk of the area. All administrative and staff vehicles are equipped as appropriate for the position. Chief-level and fire investigator position vehicles are equipped with emergency response technology such as lights and sirens and automatic vehicle locators, as well as basic fire and EMS equipment. Other vehicles are equipped according to the needs of the position.

### **Appraisal**

Apparatus types have been able to appropriately manage the risks that the department has responded to. The most common risks identified in the CRA/SOC were structure fires, EMS calls, vehicle extrication, and low-risk hazmat calls. All front-line engines and trucks have been designed and equipped with those risks in mind. Apparatus have been replaced in accordance with the comprehensive financial plan, with some exceptions due to slow manufacturer turnarounds and low inventory due to the COVID-19 pandemic. Apparatus placement has been guided by the *Meridian Fire Department Community Risk Assessment/Standards of Cover (CRA/SOC)* and Idaho Surveying and Ratings Bureau (ISRB) rating requirements. Recently a new water tender was ordered to replace the old

water tender with a larger cab to accommodate a 3-man crew and maintain crew continuity and accountability.

### **Plan**

The division chief of logistics will participate in the annual review and update of the CRA/SOC to ensure that the department's fleet is able to mitigate the risks identified. New apparatus type needs will be identified in these reviews and planned for accordingly in future Comprehensive Financial Plan meetings. The annual review of the strategic plan will also take apparatus needs and types into account, as will regular meetings with surrounding partner agencies to consider the risks in mutual and automatic aid response areas.

### **References**

- Comprehensive Financial Plan, pg. 11-15
- *Meridian Fire Department Community Risk Assessment/Standards of Cover*, pg. 98
- Vehicle Replacement Tracker



6C.2 A current replacement schedule exists for all apparatus and support vehicles based on current federal and state/provincial standards, vehicle condition, department needs and requirements.

### **Description**

The department has a replacement schedule based on National Fire Protection Association (NFPA) 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles*. Currently the department schedules front-line engines and trucks for replacement every 15 years and water tender for replacement every 20 years. Administrative vehicles and battalion chief SUVs are scheduled for replacement on 10-year cycles. Apparatus older than 15 years are sent into reserve status when they are replaced with new apparatus, and maintained until they reach their end of life at 25-years or sooner, if warranted by apparatus condition.

### **Appraisal**

The department's vehicle replacement schedule has been based on NFPA guidelines and suited the needs of the department. Occasionally apparatus have been replaced sooner or later than originally planned due to condition, maintenance issues, or logistical delays (especially during the COVID 19 pandemic). Otherwise, all apparatus and vehicles have been replaced according to the replacement schedule.

### **Plan**

The division chief of logistics will continue to monitor the condition and age of all apparatus and place them into reserve status accordingly. The division chief of logistics will create a formalized process outlining criteria for replacing, retiring, or relabeling apparatus as reserve, based on the department's current practices and NFPA standards. The division chief of logistics will work with the finance department during the comprehensive financial plan update to ensure that the replacement process and schedule can be adhered to.

### **References**

- NFPA 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles*

- Vehicle Replacement Tracker
- Modified CFP Replacement Schedule

6C.3 A process exists for writing apparatus and vehicle replacement specifications with employee input.

### **Description**

The department uses an apparatus and equipment committee to allow employee input in apparatus specifications. The apparatus and equipment committees are defined as project-specific committees by department policy AP-218 Meetings and Committees, meaning that they will meet for the duration of a project but do not recur on a regular basis outside of an individual project. When assembled, the committee is made up of two representatives from each shift (A, B, and C), a battalion chief, and the division chief of logistics.

### **Appraisal**

The use of an apparatus and equipment committee has allowed for input and buy-in from all levels of the organization. During the last apparatus committee for the purchase of 3 new engines, an issue identified by both committee members and line crews was the height of the rear hose bed. As a result of the committee's work, the height of the rear hose bed was lowered in all new engines. The committee for the new Truck 31 determined the cabinet space needs and equipment needed based on their operational experience, department need, and Idaho Surveying and Rating Bureau (ISRB) requirements. All apparatus purchased have had employee input, and line personnel have also been able to travel with the division chief of logistics to inspect and test apparatus as they reach their final build stage.

### **Plan**

The department will assemble an apparatus committee every time a new apparatus is approved for purchase. The equipment committee will be an ongoing committee that will receive input from line personnel. The division chief of logistics will continue to chair the committee and ensure that proper notes and minutes are taken during meetings to improve record keeping.

### **References**

- Apparatus Committee Application Form

- Truck Committee Email Screenshot
- AP-218 Meetings and Committees
- Truck Committee Meeting Minutes 10-15-2019

**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 division chief of logistics is responsible for coordinating the maintenance and repair of apparatus. The logistics captain is certified as a Fire Apparatus EVT Level II and can complete many minor repairs in-house using a mobile logistics apparatus equipped with appropriate tools. The Meridian Fire Department contracts with the Star Fire Protection District for apparatus maintenance and repairs beyond the scope of the logistics captain or requiring more specialized equipment. The department also uses Hughes Fire Equipment for warranted repairs or when turnaround time for Star is longer. All apparatus have been well maintained and met the operational needs of the department.

## **Performance Indicators:**

### **CC 6D.1 An apparatus maintenance program is established.**

#### **Description**

The department contracts with Star Fire Protection District (SFPD) for apparatus maintenance and repairs. The contract with SFPD states that all service providers must meet National Fire Protection Association (NFPA) 1071: *Standard for Emergency Vehicle Technician Professional Qualifications*. All maintenance is scheduled through Star Fire and placed on the operations calendar. Daily vehicle inspections are performed at the start of every 48-hour shift by on duty crews and logged into *Vector Check It*. Crews also perform detailed weekly checks and inventory apparatus weekly. The department also contracts with other outside vendors for specialized or advanced maintenance, such as tires, pump testing, and aerial testing and inspections. The department uses NFPA 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles* and manufacturers recommendations as a guide for its vehicle maintenance program. All administrative vehicles are maintained according to the Vehicle Responsibilities document.

#### **Appraisal**

Daily and weekly apparatus checks have been consistently performed by crew members. Issues identified during apparatus checks have been immediately sent to the division chief of logistics and managed according to severity. All vehicles have received their scheduled maintenance and testing. Issues outside of regular testing have been logged and tracked in *Check It*. All emergency repairs have been conducted in a timely manner. Third party contractors have completed aerial testing, ground ladder testing, pump testing and hose testing, and maintain records of their technicians' certifications.

#### **Plan**

The department will maintain its contract with SFPD for apparatus maintenance. The division chief of logistics will monitor repair turnaround times as the department grows and continue to evaluate the maintenance needs of the department. The division chief of logistics will continue organizing all maintenance records into digital format in *Check It* in

2024 so that maintenance records for all apparatus can be more easily tracked to determine long term repair trends.

### **References**

- NFPA 1071: *Standard for Emergency Vehicle Technician Professional Qualifications*
- NFPA 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles*
- Amended JPR Star Fire Maintenance Agreement January 2019
- Operations Calendar Screenshot
- Vendor List
- Hose Test Records

6D.2 The maintenance and repair facility has adequate space and is equipped with appropriate tools.

**Description**

The department does not currently own or operate a maintenance and repair facility. The department contracts with Star Fire Protection District’s (SFPD) maintenance repair facility. Per the contract with SFPD, the service provided must comply with National Fire Protection Association (NFPA) 1071 *Standard for Emergency Vehicle Technician Technical Qualifications* and maintain “equipment and supplies capable of providing Apparatus Maintenance and Repair Services.”

**Appraisal**

The contract with Star Fire Protection District has been effective and vehicle repairs and maintenance have been completed in a regular and timely manner.

**Plan**

The department will continue to contract with Star Fire Protection District for repairs and maintenance. The division chief of logistics will monitor all repair and maintenance turnaround times and assess any future needs.

**References**

- Amended JPA Star Fire Maintenance Agreement Jan 2019
- NFPA 1071: *Standard for Emergency Vehicle Technician Technical Qualifications*



6D.3 The program is adequately staffed, supervised, trained and certified to meet the agency's needs.

### **Description**

The department contracts with Star Fire Protection District's (SFPD) maintenance repair facility. Per the contract with SFPD, all vehicle technicians working on Meridian's apparatus must meet National Fire Protection Association (NFPA) 1071 *Standard for Emergency Vehicle Technician Technical Qualifications*. Any repairs beyond the capabilities of the Star Fire Protection District are conducted through third party vendors.

### **Appraisal**

The contract with SFPD has been effective and vehicle repairs and maintenance have been completed in a regular and timely manner. SFPD has been responsible for determining that all of their technicians are compliant with NFPA 1071 and the contract.

### **Plan**

The department will continue to contract SFPD for repair and maintenance service. The division chief of logistics will ensure that SFPD remains compliant with the terms of the contract and request confirmation of all SFPD's employees' certifications when appropriate.

### **References**

- Amended JPA Star Fire Maintenance Agreement Jan 2019
- NFPA 1071: *Standard for Emergency Vehicle Technician Technical Qualifications*

6D.4 The reserve vehicle fleet is adequate, or a documented contingency plan is in place for when an apparatus must be taken out of service.

### **Description**

The department has an adequate fleet of reserve apparatus, which includes three engines, one truck, one battalion chief SUV and one spare administrative vehicle. The department has a goal of maintaining 1 reserve engine for every 3 front line engines.

### **Appraisal**

The department has sufficient reserve apparatus to suit its operational needs. There have been no known instances in the last 5 years in which a front-line apparatus was taken out of a service and a reserve apparatus was not available. However, there have been instances in which all reserve engines were being used, or when the reserve ladder truck was unavailable and the truck company was placed on a reserve engine.

### **Plan**

The department will continue to work with the City of Meridian through the budgeting and finance process to meet the goal of 1 reserve engine for every 3 front line apparatus. The department will transfer front line apparatus to reserve status according to the vehicle replacement schedule. The division chief of logistics will continue to monitor the use and availability of reserve apparatus. The department will develop a continuity of operations contingency plan to address a scenario in which all reserve apparatus are in use.

### **References**

- Vehicle Replacement Tracker

**CC 6D.5      The inspection, testing, preventive maintenance, replacement schedule, and emergency repair of all apparatus are well established and meets the needs of the agency.**

**Description**

The department has a well-defined program for inspection, preventative maintenance, replacement, and repair of apparatus. Daily and weekly preventative inspections are performed by on-duty crews and logged into *Vector Check It* fleet management software. The division chief of logistics reviews checks daily and any discrepancies that are noted are dealt with on a case-by-case basis. Issues needing repair or immediate attention are written up as “tickets” in *Check It* and addressed by the division chief of logistics. The division chief of logistics communicates directly with the captain of the apparatus to determine if the apparatus needs to be taken out of service for emergency repairs. If so, the crew is moved to a reserve apparatus and the out-of-service apparatus is taken to the Star Fire Protection District’s maintenance and repair facility. Annual pump testing is based on manufacturer’s recommendation and National Fire Protection Association 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus*, which also serves as the guide for apparatus replacement. The department and the City of Meridian have an established vehicle replacement tracker.

**Appraisal**

Since transitioning to *Check It* in 2020, the department has been able to track inspections, maintenance, and repairs using a single digital platform. Because of the digital integration with the department’s email, the battalion chief and division chief of logistics have received immediate notifications of completed inspections, as well as of any deficiencies, missing inventory items, or needed repairs. The division chief of logistics has been able to track repairs status and costs and log it into a single system for ease of access.

**Plan**

*Vector Check It* has proved to be a valuable tool to the department and the department will continue to utilize the platform as its primary inspection and maintenance logging system. The division chief of logistics will work on transitioning all pump, hose, ladder, and aerial testing records to *Check It*.

## References

- NFPA 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus*
- 2023 Pump Testing Calendar Screenshot
- *Check It* – Daily Check E36
- *Check It* - Weekly Check E36
- *Check It* - Ticket Screenshot

## **Criterion 6E: Tools, Supplies and Small Equipment**

Equipment and supplies are adequate and designed to meet the agency's goals and objectives.

### **Summary:**

All Meridian Fire Department facilities, apparatus, and stations are furnished with tools and equipment to meet the operational needs of the department. Apparatus inventories meet or exceed National Fire Protection Association (NFPA) 1901: *Standard for Automotive Fire Apparatus* and Idaho Surveying and Ratings Bureau (ISRB) requirements. The department also carries appropriate quantities of specialized equipment for risks such as water rescue, vehicle extrication, and Advanced Life Support emergency medical care.

## **Performance Indicators:**

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

### **Description**

The department has tools and equipment that are distributed to meet the operational needs of the department. Front-line engines carry equipment and tool compliments based on National Fire Protection Agency (NFPA) 1901: Standard for Automotive Fire Apparatus and Idaho Surveying and Ratings Bureau (ISRB). Equipment is placed in almost the same cabinet and place on each apparatus of the same type, with some exceptions due to minor variations in compartment size and configuration. Front-line apparatus also all carry water rescue (PFDs, throw bags, helmets), extrication (battery operated cutters and spreaders, as well as struts, chocks and cribbing), and ALS medical equipment (Zoll X-series monitors, IV medications, advanced airway kits, etc.). All apparatus are inventoried weekly through *Vector Check It*. Specialized apparatus (water tender, brush rigs, ladder trucks, battalion chief vehicles) all have their own specific equipment inventories documented in *Check It*.

### **Appraisal**

All apparatus and personnel have had appropriate tools and equipment to perform their job functions. The equipment committee has met regularly throughout the year to address any small tool needs. All tools have been tracked in *Vector Check It* in apparatus inventory checks. The department budgeted for adequate tools and equipment during the annual budget process, and all new apparatus have been budgeted to include new tools and equipment.

### **Plan**

The department will budget annually for adequate tools and equipment. The division chief of logistics will be responsible for monitoring tool needs and replacements, and will utilize the apparatus and equipment committees to research and provide recommendations for future equipment. The division chief of logistics will work with the operations chief to

ensure that tools and equipment continue to suit the operational needs and are appropriate to the identified risks of the department.

### **References**

- Inventory Exported from *Check It*
- Apparatus Equipment Purchasing Worksheet
- TC Equipment Request
- NFPA 1901: *Standard for Automotive Fire Apparatus*
- ISRB Ladder Company Equipment
- ISRB Engine Company Equipment and Hose

6E.2 Tool and equipment replacement is scheduled, budgeted and implemented, and is adequate to meet the agency's needs.

**Description**

Replacement of major tools and equipment (SCBAs, thermal imaging cameras, hydraulic tools, etc.) is budgeted for and implemented according to the Comprehensive Financial Plan. Replacement schedules are developed based on manufacturers' recommendation and anticipated wear and tear. Minor tools and supplies are replaced as needed and included in the logistics division budget.

**Appraisal**

Tools and equipment have been replaced according to the Comprehensive Financial Plan. The budgeting process in the comprehensive financial plan has worked well for the department and ensured aging equipment has been replaced on schedule.

**Plan**

The department will continue to use the Comprehensive Financial Plan to budget for the replacement of major equipment. The division chief of logistics will ensure that equipment replacement schedules are meeting the needs of the department.

**References**

- Comprehensive Financial Plan, pg. 11-15



**CC 6E.3      Equipment maintenance, testing and inspections are conducted by qualified personnel, following manufacturer's recommended schedules.**

**Description**

The department uses line personnel and third-party vendors to conduct equipment maintenance, testing, and inspections. Line personnel conduct daily and weekly inspections and do minor maintenance on small engine tools such as chainsaws and circular saws, as well as fans, battery operated equipment, SCBAs, and hose. Annual in-depth testing on items such as hose, ladders, and SCBAs is performed by third party vendors. All testing and maintenance records are logged in *Vector Check It* or with the division chief of logistics. The logistics captain is qualified to maintain, test, and repair Scott SCBAs, TNT and Hurst extrication equipment, and Bauer air compressors.

**Appraisal**

Department ladders, SCBAs, hydraulic tools, hose, and small tools have been maintained, tested, and inspected according to department standards. Crews are compliant with daily and weekly testing schedules, and annual ladder, hose, and SCBA testing has been successfully completed. The addition of a full-time logistics captain in 2022 has allowed the department to bring more specialized equipment maintenance and testing in-house, which has allowed for faster turnaround times.

**Plan**

The department will continue to test, inspect and maintain equipment according to manufacturers' recommendations. The division chief of logistics will continue to ensure that crews are compliant with daily and weekly maintenance and inspections, and that third-party vendor testing is regularly scheduled. The division chief of logistics will work with the logistics captain to see what other in-house repairs and maintenance are reasonable to achieve.

**References**

- Logistics Captain Job Description
- Hose Test Summary Report

- Screen Shot of Ops Calendar for SCBA Flow Testing

6E.4 Inventory control and maintenance tracking systems are in place and current.

**Description**

The department uses *Vector Check It* for apparatus inventory and maintenance tracking. Crews perform daily and weekly inventories on department apparatus, and any missing items are flagged in the inventory report. Other department inventory, such as computers, are tracked by the City of Meridian using an asset number. Daily and weekly maintenance inspections for equipment are logged in *Check It*. More extensive maintenance is currently logged by the division chief of logistics but many items are being transitioned to *Check It*.

**Appraisal**

*Check It* has worked well for inventory tracking in the department. *Check It* generates a weekly expiring and missing inventory report for each apparatus which is automatically emailed to all engineers and captains. The division chief of logistics receives a check report on all apparatus daily to ensure compliance with the system and follows up with crews. The department has historically kept paper logs for maintenance tracking, but has been working to transition many inspection and maintenance tracking items to *Check It*.

**Plan**

The department will continue to use *Vector Check It* as its primary inventory tracking system. The division chief of logistics and logistics captain will continue to work on transitioning more maintenance and inspection records to *Check It*.

**References**

- *Check It* Expiring Inventory Report
- Inventory Exported from *Check It*
- Maintenance Report E35 Screenshot

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, prevention, investigations, hazmat, etc.), and is compliant with local, state/provincial, and national standards.

### **Description**

The department operates an all-hazards response model and has sufficient supplies and materials allocated to meet all operational program needs. All vehicle inventories are based on National Fire Protection Association (NFPA) 1901: *Standard for Automotive Fire Apparatus* and Idaho Surveying and Ratings Bureau (ISRB) recommendations. In addition to standard equipment inventories, all front-line engines and trucks carry ALS medical equipment, basic water rescue equipment including helmets, personal flotation devices, and throw bags, and battery or hydraulic powered vehicle extrication equipment. Trucks also carry more equipment for specialized auto extrications and “man-vs-machine” style entrapments. The department has mutual and automatic aid agreements with partner agencies that carry equipment for specialized emergencies such as large-scale hazmat events or technical rescues.

### **Appraisal**

The allocation of supplies and materials has sufficiently met the operational needs of the department. Supplies and materials are consistent across all front-line apparatus and between stations. The department has been able to mitigate all risks in its response area with the supplies and materials carried by the department or its partner agencies. Apparatus inventories have been compliant with department needs. The equipment committee has also made equipment recommendations to the department such as mustang suits for ice water rescue, based on the experiences of line personnel. In some cases, certain equipment has been removed due to lack of use using surveys sent out to line personnel from the equipment committee.

### **Plan**

The division chief of logistics will use the *Meridian Fire Department Community Risk Assessment/Standards of Cover* as the guide for what types of risks the department needs to respond to, and base future supply and material allocations based on risks. The

equipment committee will continue to meet and gauge the equipment needs of the department using feedback from line personnel.

### **References**

- ISRB Fire Equipment and Hose
- ISRB Ladder Company
- NFPA 1901: *Standard for Automotive Fire Apparatus*
- *Meridian Fire Department Community Risk Assessment/Standards of Cover*, pg. 62-79
- Equipment Committee Survey Screenshot

## **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 and related equipment (e.g., self-contained breathing apparatus).

### **Summary:**

All Meridian Fire Department line personnel are supplied with two sets of structure firefighting turnouts, appropriate wildland PPE, and SCBA mask and regulator. SCBA packs and bottles are assigned to every riding seat in each structure fire response apparatus. All turnouts and SCBAs are replaced on a regularly scheduled basis that meet or exceed NFPA standards, and are budgeted for in the City of Meridian's Comprehensive Financial Plan. Other disposable safety equipment such as medical PPE (masks, gloves, gowns, eye protection), hearing protection, and traffic safety vests are carried in adequate amounts on every engine and kept in backstock at every station.

## **Performance Indicators:**

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

#### **Description**

The department provides appropriate safety equipment and Personal Protective Equipment (PPE) to all personnel based on their job description. All line personnel are given two sets of National Fire Protection Association (NFPA) 1971: *Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting* compliant turnout gear which is replaced on a regular cycle, as well as brush fire boots, coats, hats and helmets. In 2022 the department purchased all new Scott SCBA packs and regulators. In addition, all front-line apparatus are equipped with specialized PPE such as personal flotation devices and helmets for water rescue, ballistic vests for hostile event response, and infection control PPE for EMS calls. Brush apparatus and water tenders are equipped with wildland fire shelters. Administrative roles such as division chiefs and fire inspectors are also assigned turnout gear and appropriate medical PPE if they are qualified to respond to medical calls.

#### **Appraisal**

All personnel on the department have been consistently provided with appropriate safety equipment. Structure fire turnouts are replaced every 3 years, so that all personnel have at least 2 sets of gear with the oldest being no more than 6 years old. This replacement schedule has ensured that all firefighters have two sets of turnouts and that the department has an adequate stock of reserve turnouts that still meet NFPA 1971 standards. Due to the recent hiring of 30 new firefighters, reserve turnout stocks have been depleted. All firefighting personnel have also been issued their own SCBA mask and regulator to prevent cross contamination of respiratory protection. Following the COVID-19 pandemic, all apparatus have been stocked with N95 masks, surgical masks, infection control gowns, and more eye protection for medical calls. All safety equipment meets or exceeds NFPA 1971 standards.

#### **Plan**

The department will continue to supply its personnel with the most appropriate PPE and safety equipment to support the mission of the department. The division chief of logistics will work with the division chief of health and safety, the equipment committee, and the health and safety committee to monitor the needs of the department and solicit recommendations for future equipment.

### **References**

- NFPA 1971: *Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*
- Turnout List Group B Morning Pride
- Turnout List Group C Morning Pride
- Inventory Exported from Check IT



6F.2 Distributed safety equipment is adequate for the functions performed.

### **Description**

Safety equipment and personal protective equipment (PPE) is distributed in adequate quantities to meet the operational needs of the department. All line personnel are issued two sets of structural turnout gear so that a firefighter can always have at least one set of clean gear available. All personnel are issued their own SCBA masks and regulators, and extras are kept on the battalion chief rig and in backstock. The battalion chief and safety officer apparatus also carry extra structural gloves, particulate hoods, and leather gloves for easy access on scenes. All apparatus are well stocked with medical PPE and a large backstock of infection control PPE is managed by the division chief of EMS. The division chief of logistics manages spare structural and wildland turnout gear.

### **Appraisal**

All personnel have had adequate amounts of safety equipment to meet their operational needs. With the addition of 30 new firefighters in the last year, the backstock of turnout equipment has diminished. Turnout availability has been further hampered by supply chain and backorder issues with vendors, so new personnel on the line have had to work with only one set of gear until orders have been filled. The division chief of EMS has been responsible for the stockpile of medical PPE and has used the PPE burn rate calculator to determine adequate backstock needs.

### **Plan**

The department will continue to distribute adequate amounts of PPE for its personnel. The division chief of logistics will continue to monitor the back order and supply chain issues from turnout suppliers and adjust vendors and specifications as needed. The division chief of logistics will establish a minimum backstock supply inventory of turnouts, hoods, gloves, SCBA parts, and create a system to monitor inventories on a regular basis through *Target Solution Check It*.

### **References**

- Turnout List Group B Morning Pride
- Turnout List Group C Morning Pride

- PPE Burn Rate Calculator

6F.3 Safety equipment replacement is scheduled, budgeted and implemented, and adequate to meet the agency's needs.

### **Description**

The department maintains an adequate budget for the regularly scheduled replacement of safety equipment in the City of Meridian Comprehensive Financial Plan (CFP). Turnouts are replaced on a 6-year cycle. SCBA air packs are replaced every 7-10 years. All safety equipment replacement schedules meet or exceed National Fire Protection Association (NFPA) 1851: *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*. Consumable safety equipment such as eye and ear protection and medical personal protective equipment (PPE) are stocked in adequate supply at all stations and reordered monthly as needed to maintain minimum par levels. Battalion chiefs and safety officers carry extra turnout gloves and hoods on their response vehicles for on-scene replacement. The department keeps a large backstock of hoods, gloves, helmets, boots, and wildland gear in storage for immediate replacement needs.

### **Appraisal**

The department has successfully budgeted for the replacement of safety equipment. New Scott SCBA air packs were purchased in 2022 and the older packs, now 7 years old, are being used by the training division. Turnout gear has been replaced on schedule, although supply chain issues and backorders due to the COVID-19 pandemic have increased turnaround time for purchasing new turnouts for recruit firefighters. Consumable safety equipment and PPE are kept in stock at all stations and on all apparatus and are inventoried and replaced monthly.

### **Plan**

The department will continue to budget for the replacement of safety equipment and PPE through the Comprehensive Financial Plan. The division chief of logistics will be responsible for replacing equipment by the end of its lifespan or earlier if warranted.

### **References**

- NFPA 1851: *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*
- SCBA inventory Screenshot
- Turnout List Group B Morning Pride
- Turnout List Group C Morning Pride
- Comprehensive Financial Plan, pg. 11-15
- Medical Supply Order Form

6F.4 Safety equipment maintenance, testing and inspections are conducted by trained and qualified personnel, and appropriate records are kept.

### **Description**

The logistics captain position is responsible for testing, inspecting and maintaining all SCBA packs, bottles, masks and regulators. Records of all SCBA repairs are kept by the division chief of logistics. Repairs or hydrostatic tests beyond the capabilities of the logistics captain are performed by third-party vendors. SCBA fit testing occurs annually. Air compressors are maintained by a third-party vendor. Line personnel are responsible for inspecting and maintaining their personal safety equipment such as structural turnouts and other issued PPE. All stations are equipped with PPE extractors and Station 6 is equipped with specialized SCBA pack washers for decontamination. Any repairs needed to turnout gear are performed by a qualified third-party vendor.

### **Appraisal**

All SCBAs have been maintained, inspected, and tested in accordance with manufacturers recommendations. SCBA bottles have been hydrostatically tested every 5 years. Personnel have regularly inspected and cleaned their gear; however, the department has not had a formalized process for tracking personal PPE inspections. All logs of SCBA inspections, including fit testing, have been kept by the logistics chief.

### **Plan**

The division chief of logistics will create a plan to digitize all maintenance, testing, and inspection records and work with the division chief of health and safety to create a more formalized process for regular PPE inspections and fit testing by 2025. The logistics captain will continue to be responsible for maintenance of all SCBA and associated records keeping.

### **References**

- Sample SCBA maintenance log
- SCBA Flow testing Screenshot

6F.5 Safety equipment inventory control and maintenance tracking system are in place and current.

### **Description**

All SCBA components are currently tracked in *Vector Check It*. Maintenance logs for SCBAs are kept digitally and are currently being transferred to the *Check It* platform. The division chief of logistics keeps an inventory list of all firefighter turnout gear and wildland gear. Maintenance of turnout gear and wildland gear is tracked through invoices for repairs.

### **Appraisal**

The department has successfully monitored the inventory and maintenance for all SCBAs and SCBA components through *Vector Check It*. The department began using the *Check It* platform to track apparatus maintenance and has been transitioning other maintenance items to the platform as well, such as SCBA repairs and testing. Turnout inventory has been kept by the division chief of logistics in a spreadsheet and has not been transitioned to the *Check It* platform yet. Turnout maintenance repair logs are kept as invoices and not tracked in *Check It*.

### **Plan**

The division chief of logistics will plan to transition all maintenance and inventory logs for safety equipment, especially turnouts, to the *Vector Check It* system by 2025. The division chief of health and safety will assist in this process.

### **References**

- Turnout Repair Invoice
- SCBA Inventory Screenshot
- Turnout List Group B Morning Pride