Mount Weather Emergency Operations Center (MWEOC) Capital Infrastructure Investment Plan

November 3, 2017
Fiscal Year 2017 Report to Congress

Federal Emergency Management Agency
Foreword from the Administrator

November 3, 2017

I am pleased to present the following “Mount Weather Emergency Operations Center (MWEOC) Capital Infrastructure Investment Plan,” which has been prepared by the Federal Emergency Management Agency (FEMA).

This document has been compiled pursuant to language set forth in the Joint Explanatory Statement and House Report 114-668, both accompanying the Fiscal Year (FY) 2017 Department of Homeland Security (DHS) Appropriations Act (P.L. 115-31).

Pursuant to congressional requirements, this report is being provided to the following Members of Congress:

The Honorable John R. Carter
Chairman, House Appropriations Subcommittee on Homeland Security

The Honorable Lucille Roybal-Allard
Ranking Member, House Appropriations Subcommittee on Homeland Security

The Honorable John Boozman
Chairman, Senate Appropriations Subcommittee on Homeland Security

The Honorable Jon Tester
Ranking Member, Senate Appropriations Subcommittee on Homeland Security

Inquiries relating to this report may be directed to me at (202) 646-3900 or to the Department’s Acting Chief Financial Officer, Stacy Marcott, at (202) 447-5751.

Sincerely,

Brock Long
Administrator
Federal Emergency Management Agency
Executive Summary

The Joint Explanatory Statement and House Report 114-668, which accompany the FY 2017 DHS Appropriations Act, continue the reporting requirement listed in House Report 114-215 that requires FEMA to provide the MWEOC capital infrastructure investment plan for FY 2017 through FY 2021. In addition, the request is to show previous year obligations beginning in FY 2011 through FY 2016.

To fulfill this requirement, MWEOC submits this report containing completion and funding execution information on the identified projects from FYs 2011–2016, and the execution and request for projects from FYs 2017–2021. This report addresses the capital investment for major renovations of two historic buildings and new construction to replace buildings constructed in the 1950s and 1960s, and the demolition of the old buildings.
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I. Legislative Language


The Joint Explanatory Statement includes the following provision:

FEMA shall provide an updated capital infrastructure investment plan for fiscal years 2017 through 2021, consistent with the direction in House Report 114-215.

House Report 114-668 states:

Not later than 60 days after the date of the enactment of this Act, FEMA shall provide an updated capital infrastructure investment plan for fiscal year 2016 through fiscal year 2021, consistent with the direction in House Report 114-215.

House Report 114-215 states:

Further, not later than 60 days after the date of enactment of this Act, FEMA shall provide a capital infrastructure investment plan for fiscal year 2016 through fiscal year 2020 that also reports capital investment funding previously obligated beginning in fiscal year 2010 through fiscal year 2015. At a minimum, the plan must include: a schedule of resource needs by year; an alternatives analysis that includes a review of renovation as compared to new construction options; a timeline that includes major milestones; and a projection of annual maintenance costs.
II. Background

The Joint Explanatory Statement and House Report 114-668, which accompany the FY 2017 DHS Appropriations Act (P.L. 115-31), continue the reporting requirement listed in House Report 114-215 that requires the Federal Emergency Management Agency (FEMA) to provide the Mount Weather Emergency Operations Center (MWEOC) capital infrastructure investment plan. The plan is updated for FY 2017 through FY 2021. In addition, the requirement is to show previous year obligations beginning in FY 2011 through FY 2016 consistent with the direction in House Report 114-215.

MWEOC is a 564-acre DHS FEMA facility located approximately 60 miles west of Washington, D.C., which is split into two areas on the basis of its mission: Area A, which is the unclassified, above-ground portion, and Area B, which is the classified, below-ground portion. MWEOC provides reliable support, redundant infrastructure, and resilient capabilities to support Executive Branch continuity of operations, incident management, and classified programs for multiple federal departments and agencies (D/A). In addition to upholding FEMA’s mission to support citizens and first responders to prepare for, protect against, respond to, recover from, and mitigate all hazards, MWEOC has a mission to be ready to support its partners at all times, under all conditions. In order to achieve these missions and organizational goals, it is imperative that MWEOC maintain situational awareness ahead of evolving threats and hazards.

During FY 2016, MWEOC commissioned several independent assessments of existing site infrastructure in order to obtain an accurate picture of the site’s capabilities compared to present-day mission partner (i.e., tenant) requirements. Assessments included an urban planning and site development study, power assessment, and an information technology (IT) assessment. One of the key findings indicated that failure to replace or upgrade antiquated MWEOC buildings will hinder onsite readiness.

The assessments highlight persistent occupational safety and health hazards. In particular, the occupants of Building 413 (B413), a designated historic building, were relocated to B733 2 years ago because of health hazards caused by extensive mold growth. Like B413, many of the older buildings on site contain water pipes made of cast iron or clay, which have a maximum design life of 50 years. For onsite buildings constructed in the 1950s and 1960s, the water pipes already are past this period and experience recurring leaks. Recurring leaks lead to increased moisture and mold growth, both of which may lead to upper respiratory issues in otherwise healthy individuals. Other issues posed by some of the older onsite buildings include health hazards caused by lead paint and asbestos. The renovation of old buildings considered historical (only three buildings) and construction of new buildings is intended to correct and mitigate these types of life-safety risks.

Currently, the MWEOC is in the process of developing a master plan based on the results of the assessments. The plan is intended to address the potential consequences and proposed solutions as identified by those assessments; the plan also identifies the resources required to upgrade and maintain MWEOC as a modern facility to meet critical mission requirements. Since the
assessments were conducted in FY 2016, this is the first attempt to align the identified needs with resources as well as mission partner requirements.

The new master plan and roadmap will outline the next phase of MWEOC’s planned infrastructure refurbishment, building on existing improvement plans. Much of the present infrastructure at MWEOC dates back to the early- or mid-20th century, and significant changes—such as construction, renovation, modernization, and improvements—are needed. Executing the necessary capital infrastructure investment will allow MWEOC to meet present-day requirements, maintain current continuity operations, enable and maintain new technologies, and maintain a vigilant readiness posture.
III. Capital Infrastructure Investment Obligation History (FY 2011–FY 2016)

The MWEOC appropriation is 2-year money for capital improvement projects. MWEOC’s historical obligation plan has slipped because of delayed timelines due to changing requirements in design and acquisition schedules. For example, approximately $24 million was carried over from FY 2016 to FY 2017; this figure was for a combination of funding for Office Building #1 Construction, IT site improvements, and IT operations and maintenance (O&M). Changes in design requirements, planned project sequencing, and scheduled O&M requirements necessitated the carryover. Moving forward in the master plan, MWEOC plans to obligate the majority of its funding in the year that it is appropriated.

Appropriated funds expended during FYs 2011–2016 for construction and infrastructure total approximately $131.3 million; this includes, but is not limited to, the following activities:

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<td>River Line Pumps</td>
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<td>$28,672,203</td>
<td>$29,730,802</td>
<td>$5,351,175</td>
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**FYs 2011–2016 Key Milestone Events**

- Executed electric infrastructure upgrades: Replaced electrical generators, made electromagnetic protection enhancements, replaced the electrical distribution system, modernized the control room, and upgraded the facility fire alarm system.
- Executed Area B (i.e., below-ground, classified area) mechanical infrastructure upgrade.
- Improved Area A (i.e., above-ground, unclassified area) power/infrastructure, to include all new underground power distribution, substations, backup power plant, and water distribution.
• Designed, constructed, and activated a 100,000 square-foot multipurpose building (B433) that includes a full-service cafeteria, dual-purpose meeting/training space, the first 100-person classified conference center, administrative and leasable office space, a computer lab, and a workout facility.

• Designed and constructed the 23,000 square-foot public safety building that integrates the capabilities of the MVEOC Fire and Rescue Department and Health Unit into one location; activated in FY 2017.

• Designed and constructed the 18,000 square-foot remote logistics center; activated in FY 2017.

• Designed and initiated construction of a new sewage treatment plant; activated in FY 2017.

• Began executing the mandate to implement the four IT modernization projects:
  – Project 1 (Complete): Construction and delivery of highly available government-owned connectivity.
  – Project 2 (96-percent complete): Repair and upgrade of existing outside plant (OSP) cabling infrastructure.
  – Project 3 (96-percent complete): Design/build facility optical transport system (OTS) to support communications circuit delivery.
  – Project 4 (75-percent complete): Facility system enhancement and integration.
IV. Capital Infrastructure Investment Plan (FY 2017–FY 2021)

MWEOC is undergoing a significant infrastructure upgrade, which includes demolishing and replacing out-of-date buildings in order to address public health and safety concerns as well as enabling the facilities to continue supporting modern technology and present-day federal D/A requirements. The MWEOC capital improvement plan prioritizes projects that support the national continuity missions of DHS, FEMA, and other D/As that are responsible for addressing critical health, safety, and security issues. The project timelines incorporate a logical approach to repairing and rebuilding facilities and to addressing cascading project requirements. Through significant process improvement efforts, MWEOC has streamlined many of its internal financial and acquisition processes to allow more rapid use of and accountability over larger projects while maintaining operational capabilities. The FY 2019–FY 2021 projections are approximately $37.4 million per year. These projections will be assessed during the annual budget process and are subject to change.

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Priority</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019 - 2021</th>
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<td>Construct Ofc. Bldg. #1</td>
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<td>1,400,000</td>
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<td>Renovate for Code Compliance B413</td>
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<td>Design/Renovate for Code Compliance B405</td>
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<td><strong>Total</strong></td>
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<td><strong>41,243,722</strong></td>
<td><strong>112,344,000</strong></td>
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</tbody>
</table>

**FY 2017 Key Milestone Events**
- Activated sewage treatment plant
- Activated logistics building
- Activated public safety building (B921)
- Designed/constructed new office building (B437)
- Designed renovation of historic building (B405)
- Designed/constructed maintenance building
- Completed repair and upgrade to existing OSP cabling infrastructure
- Completed design/build facility OTS to support communications circuit delivery
- Installed private branch exchange
- Installed base for land mobile radio

**FY 2018 Planned Key Milestone Events**
- Construct new office building (B437)
- Design renovation of historic building (B413)
• Design and begin construction/renovation of historic office building (B405)
• Design and begin construction of maintenance building
• Execute upgrades to the MWEOC IT and communication systems infrastructure
• Complete facility system enhancement and integration
• Initiate roadway/infrastructure/security (perimeter fence) project

FY 2019 Planned Key Milestone Events
• Complete construction/renovation of historic building (B413)
• Continue construction/renovation of historic office building (B405)
• Continue construction of maintenance building
• Design security/police building
• Complete IT O&M
• Design office building #2
• Continue roadway/infrastructure/security (perimeter fence) project
• Implement classified requirements

FY 2020 Planned Key Milestone Events
• Complete construction/renovation of historic office building (B405)
• Continue construction of maintenance building
• Construct security/police building
• Construct office building #2
• Design office building #3
• Continue roadway/infrastructure/security (perimeter fence) project
• Implement classified requirements

FY 2021 Planned Key Milestone Events
• Complete construction of maintenance building
• Complete construction of security/police building
• Complete construction of office building #2
• Construct office building #3
• Continue roadway/infrastructure/security project
• Implement classified requirements
V. Conclusion/DHS Action Plan

MWEOC is planning for the resources (i.e., people, equipment, and funding) required to enable the next phase of its infrastructure investment. Failing to execute the proposed master plan improvements risks hindering onsite readiness for supported D/As, as well as maintenance and support operations. Additional health and life-safety risks are posed to mission partners and staff if outdated buildings are not replaced or sufficiently upgraded. If the requested power and technology improvements are not implemented in the timeframes outlined, the continued use of outdated systems may compromise the mission. The power infrastructure request is particularly time-sensitive, given the power requirements of new technology.

Much of the MWEOC infrastructure that was constructed in the 1950s and 1960s has exceeded its service life. Additionally, the scope of the MWEOC mission has changed from being predominantly supportive of Area B to being more holistic and inclusive of Area A. This mission provides active support to federal programs critical to national security, homeland security, and the safety of the American people. In order to fulfill its mission, MWEOC must replace its antiquated infrastructure with modern, energy-efficient facilities that are capable of handling new and rapidly changing technologies.

The priority between FY 2011 and FY 2016 was primarily to update critical infrastructure (modernization of technology), as well as to build some of the critical facilities. The next phase will focus on repairing or replacing the remaining infrastructure with an emphasis on modernization and sustainment of the current capacity. Funding is necessary to upgrade MWEOC’s essential infrastructure and is critical to maintaining current national continuity operations, enabling new technologies, and maintaining a vigilant national readiness posture.