



Hazardous Materials Emergency Preparedness (HMEP) Grant Gap Analysis



U.S. Department
of Transportation
Pipeline and
Hazardous Materials
Safety Administration

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Executive Summary

Summary

The Pipeline Hazardous Materials Safety Administration (PHMSA) Hazardous Materials Emergency Preparedness (HMEP) grant program funds and promotes enhanced outreach and training efforts to support state, territories and local government organizations and federally recognized Tribal nations. PHMSA is committed to working with grantees to ensure that the planning and training emergency response needs for hazmat incidents are fulfilled through this grant program. The HMEP grant program helps recipients attain the tools and knowledge needed to carry out emergency response planning and training efforts. As part of PHMSA's broader plan to develop a more robust emergency preparedness response capability throughout our nation, this report identifies areas of best practices for the HMEP grant program to address the threat from hazardous material transportation incidents. This report provides examples of feedback on the impact this program is making on the nation's ability to respond to incidents involving transportation of hazardous materials to reduce impacts.

The evidence gathered during this assessment validated that the HMEP grant program provides essential funds to state, local, tribal, and territorial (SLTT) grantees to support preparedness, training, and response tools to ensure that emergency responders have the ability to protect nearby persons, property, and the environment from the effects of accidents or incidents involving the transportation of hazardous materials. The findings in this report validated that the funds are being utilized well and that program improvements (such as the 3-year HMEP grant cycle, combining the training and preparedness activities, flexible options for soft matching and increased support and engagement from the HMEP Grant program staff at PHMSA) have increased the ability to use funds to support response capability improvements. During this assessment there were some opportunities for improvement identified to enhance the national hazmat response and the HMEP grant program itself.

PHMSA should ensure that the HMEP grant funds continue to support preparedness and response capabilities to address gaps identified in recent high profile hazardous materials transportation incidents. Some of the HMEP funded activities that could be expanded include:

- Commodities flow studies can be utilized to help communities and tribal nations understand the types of hazardous materials flowing through their lands.
- Provide rural or frontier locations with training and tools to ensure they are prepared to identify the Emergency Response Guidebook recommendations to implement protection actions and mitigate impacts of a hazmat transportation incident. Provide a special focus on locations that have volunteer organizations.
- The HMEP grant program could help address a national gap by funding multi-agency hazmat response exercises with multiple states to practice responses to hazmat transportation incidents across state boundaries.
- Crisis communications training for public information officers and emergency management agencies to ensure the public is aware of activities related to transportation hazmat incidents.
- Increased participation in existing training to include underserved communities and at-risk areas to include rural and frontier locations. Continue to ensure that communities are including all

members of the hazardous materials response emergency response community (including emergency management, fire department, law enforcement and industry partners) to participate in HMEP-funded training and exercises. Ensure that law enforcement agencies are encouraged to participate in HMEP-funded training and exercises.

- Continue to provide venues such as the HMEP Grant workshops and working groups to share information on new threats, hazardous commodities response tactics and best practices for grant management. These venues also provide good platforms for mentoring and coaching of new grant management staff.

Overview

Purpose

To conduct outreach and interviews with the Department of Transportation's PHMSA Hazardous Materials Emergency Preparedness HMEP Grantee community to identify challenges and capture best practices on the utilization of grant funding. This gap analysis report is being prepared to share best practices in utilization within HMEP programs to provide communities with preparedness and response tools to ensure that the program provides emergency responders with the ability to protect nearby persons, property, and the environment from the effects of accidents or incidents involving the transportation of hazardous materials. The HMEP program evaluation will include researching, observing, and analyzing activities funded by HMEP grants to provide feedback on best practices and areas for improvement related to utilization of funds.

Scope

From November through April 2023, 16 interviews with 19 individuals across 14 states, 1 territory and multiple tribes were conducted within the HMEP Grantee community to:

- Determine how well activities funded by the HMEP program align with actual HAZMAT preparedness needs at the local level.
- Identify any underserved communities whose needs could be better addressed by allocating additional HMEP resources.
- Identify program gaps that need to be addressed to ensure that the HMEP grant program is effectively supporting national HAZMAT preparedness.
- Identify best practices in utilizing HMEP funds that can be shared with other grantees to improve the effectiveness of their HMEP-related preparedness expenditures.
- Determine the cost-effectiveness of utilizing funds to support HAZMAT response and training needs.

Goals

The goal of the interviews was to evaluate and assess how grant funds are being utilized to ensure the best use of funds are being considered and identify any gaps for that may impact the HMEP community.

Gap Analysis Process

To accomplish the gap analysis, information has been gathered on HMEP program requirements and resources, interviews and meetings were held with DOT HMEP grant administrators and grant managers, and interviews were conducted with HMEP grant recipients from states, territories, and Tribal organizations. A list of questions (Appendix A) was developed for use in the interviews with the states and Tribal organizations. The focus of the questions was to gather information on current use of grant funds, identify any challenges with fully utilizing the grant funds, and to learn how grantees resolved questions related to how funds can be used and grant administration issues.

Findings

- **Challenges due to COVID:**
 - Training for the last few years has been challenging due to COVID restrictions. The grantees reported they turned to more online or virtual training opportunities as an alternative to in-person delivery. This resulted in a higher demand for in-person training for those courses with hands-on components as restrictions ended.
 - The Tribal grantees indicated in-person activities were only recently being reinitiated. Many grantees indicated a need to find additional HMEP qualifying online courses and a need to identify instructors/organizations that were available for delivering mobile training.
 - Another observation was several agencies have seen higher than normal attrition in positions requiring HMEP training. Grantees have added courses and requested re-allocation of funds when necessary to address this need.
- **Utilization of Funding:**
 - A variety of strategies is being utilized by grantees for how grant funds are utilized. Some spread the funding several ways to include sub-grantees, dividing the money for commodity flow studies, emergency plans and training, or focusing all the funding on training through a central academy/system. HMEP allows the grantee to identify their most pressing need and focus the grant on these priorities.
 - States that share funds with sub-grantees typically will conduct outreach efforts to encourage participation with mixed results. Once these sub-grants are made, the effort to track expenditures and complete the reporting can be very time consuming. This also complicates tracking the spend rate in a timely fashion, which may result in requesting a re-allocation or an extension.
 - Depending upon which strategy the grantee decides on can result in many more hours of administrative support for managing the grant. Some grantees did report having issues with staffing to meet these demands, but the requirements that were laborious were often on the state side and not the PHMSA side.
- **Grant Administration:**
 - Most interviewees identified that the HMEP grant program is well administered and that they found the HMEP Expenditures Guide helpful. Many of the grantees follow the

color-coding system in the HMEP Expenditures Guide to manage how they and their sub grantees use grant funds.

- In addition, most of the grantees have support from others in their organization to help with accounting and financial reporting. None of the respondents identified accounting and financial reporting as an issue.
- Many of the grantees did report challenges with the DOT reporting system. Some noted having difficulty with saving information and the need to re-enter standard information each time they started a report; there was no way to build on reports from quarter to quarter.

- **Funds Expenditure:**

- Nearly all grantees reported dealing with issues related to COVID. The biggest issue was a stop to in-person meetings, training, and exercises, and most had issues with expending their funds within the year. Grantees found work arounds by providing online training, re-allocating funds and getting extensions to their HMEP grant. Even with extensions, some grantees had to return unspent funds.
- Almost all noted that impacts from COVID would have been multiplied if the grant cycles were still one year and not three. Internal staff turnover was mentioned by a few respondents. There were some staff changes noted within state grant management organizations, and comments on the lack of staffing needed to take full advantage of the grant program. Most of the grantees that report success with the program have staff that have managed the HMEP grant for multiple years.
- During COVID, grantees with less experience had more challenges with understanding their spend rate, how long to request an extension, and ways to avoid having unspent funds to return.

- **Hazmat Criteria for Identifying Under Served at Risk Communities:**

- Many HMEP Grant recipients worked with their LEPC and SERC organizations to identify preparedness and training activities that would support the local communities. The State HMEP Grant program managers would then provide grant funds for these activities through sub-grantees as part of the matching requirement.
- The PHMSA HMEP grant program could provide grantees with criteria to help states identify underserved and at-risk locations from a hazardous materials transportation incident perspective. These criteria could assist states with prioritizing funds to ensure the underserved and at-risk locations with the most need receive these essential preparedness and training activities.

Summary of Interviews with Grantees

Good Practices of Grantees and PHMSA

Several good practices were shared by grantees related to fund utilization including:

- Utilizing state Hazmat Committees to help guide development of HMEP training strategy and priorities.
- Conducting surveys with their LEPC's, counties or Tribes to accurately estimate needs for training by course or planning needs, including commodity flow studies.
- Providing flexibility and soft matching options to meet the requirement to match 25% of grant funds with local organizations. PHMSA Grant Program staff are accessible and work with state grant managers to allow flexibility to meet this requirement.
- The matching requirement to allow states to flow down the HMEP grant funds to local hazardous materials committees, LEPCs, and SERCs to be utilized at the local community level for underserved or high-risk communities like the rural or Tribal groups that have hazardous materials being transported through their lands.
- Purchasing props, software and other training apparatus that can be used by multiple LEPC's or sub-grantees for training purposes.
- Holding pre-application workshops for potential sub-grantees to educate them on priorities, reporting requirements and eligible uses of funding.
- Reaching out to other agencies to help identify underserved communities, as well as environmental justice mapping if practical.
- Providing stipends to encourage participation from rural areas, as well as providing travelling training teams to reach rural or frontier areas.
- Providing centralized training centers for smaller states to consolidate services.
- Conducting exercises in rural and frontier communities to ensure that volunteer organizations get to practice response capabilities.
- Having a program that utilized a good accounting system that included tracking sub-grants, spend rates, use of funds and matching fund sources. Grantees noted that having an established system that includes regular reporting from sub-grantees and other cost centers was invaluable. In some cases, accounting systems are managed by another group within the organization which added another set of eyes on eligible use of funds and spend rate. Well organized systems helped grantees to identify challenges during COVID and other unforeseen issues, to request extensions or re-allocate funding when appropriate.
- State HMEP Grant support staff identified that the PHMSA HMEP grant program staff were very open to working with them on extensions and to follow up on questions.

- Travel and in-person training during COVID was completely shut down for many grantees, so alternative training solutions that met HMEP requirements were sought. One grantee captured in-person or online training that was instructor lead and created a YouTube channel to share it. Other grantees provided online training and identified web-based alternatives when in-person training was not allowed. Some grantees established travelling training teams to meet demand on a regional basis. It was noted that whatever method utilized it is important to track training completions, to help grantees understand their spend rate.
- When grantees had questions regarding allowable use of funds they relied upon several resources. These included the grant guidance documents on the HMEP website and their approved grant and sub-grant documents. When they still had questions, the grantees pointed out that DOT HMEP grant managers were always available, responsive, and knowledgeable.

Recommendations / Opportunities for Improvements

- **Grant Cycle Extensions and Re-allocations**

The three-year grant cycle was cited by many of the grantees as a valuable improvement. But, even with good management practices, accounting systems and the three-year grant cycle, some grantees still had to return funds. One grantee underestimated the length of time needed for their extension and another had unforeseen emergencies within their state that limited training and other planned activities. Solutions for either of these cases could include granting longer extensions as a rule and having special rules to respond to requests for extensions or re-allocation when the requesting grantee was impacted by extenuating circumstances. Another solution could include a change of practice to allow funds to be moved to the next year of a three-year grant with minimal paperwork and requests up to and including the last week of the grant year. An update to the best practice guide or strategies for developing a plan or funding strategy for the new three-year cycle was recommended.

- **Alternative Training Options for Volunteer Responders**

For rural states and Tribes, most of the first responders are volunteers. This poses an increased challenge for providing in-person training. Many won't or can't take time off to attend specialized HAZMAT training, so alternative methods need to be considered.

- **Streamlined Reporting and Application Processes**

There were grantees that indicated an improvement could be made to streamline reporting and application processes to meet the new three-year cycle. The new reporting process does not allow for information to be saved from quarterly reports and copied over and added onto the next quarterly report and ultimately built on for the annual report. It was suggested that there may also be an opportunity to reduce the level of detail required for the subsequent years of the grant cycle and provide an appendix to the initial grant application for years two and three. A recommendation was the possibility of a process improvement review on the application and reporting process among HMEP grant administrators and some of the grantees.

- **Establish a Networking System to Share Best Practices**

Some grantees reported a turnover in their ranks as well as some of their sub-grantees to the level that there was some difficulty managing their existing programs. There were suggestions that a system for networking among grant recipients to share best practices for plan development, listing for companies that offer training support, or professional services to complete commodity flow studies, as well as other common topics would be valuable. Another suggested activity was to provide regular grant management training or webinars on topics to help grantees with management issues.

Appendix A – Interview Questions

1. What type of activities do you use your HMEP Grant Funds for?
2. Has your agency been able to fully utilize your funds during your grant cycle?
3. Can you identify some methods that helped you to track the utilization of grant funds?
4. Are there barriers preventing you from fully utilizing HMEP grant funds?
5. How do you ensure that the HMEP funds are being utilized for the right purposes?
6. How do you determine which organizations receive the HMEP funds?
7. Is there a process for including underserved communities? (If so, please describe)
8. How long have you been the recipient of HMEP Grant Funds?
9. What do you like about the HMEP Grant program?
10. What can PHMSA do to improve the HMEP Grant program?
11. Other / Follow on questions or comments