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Radioactive Materials
Transportation Project

STATE EXPERIENCES UTILIZING DOE TRANSPORTATION DOLLARS



Summary

This project to document the states' experiences in receiving funding from the Department of Energy (DOE) to prepare for and fulfill their obligations related to DOE shipments of radioactive material was conducted during the first five months of 2010. The results may help DOE and the regional groups to better support the states that receive funding for these shipments. States were asked to provide details on their experiences receiving funding for the Waste Isolation Pilot Plant (WIPP), West Valley Demonstration Project, and Foreign Research Reactor (FRR) shipping campaigns, as well as other campaigns for which they received funds.

The project findings reveal that there is variation among the states' experiences receiving funds from DOE, particularly regarding the type of guidance that is provided for how funds are to be spent and the timing with which funds are received by the states. Some states expressed complete satisfaction with DOE's funding for shipping campaigns, while others documented challenges they had experienced and offered suggestions for improvement. The challenges cited most often by state survey respondents were difficulties related to the timing of receiving funds, unclear funding guidance, and a lack of flexibility in eligible expenses or unreasonable restrictions on purchases. Recommendations for improvement included providing more clarity and flexibility in guidance, beginning shipment planning and funding arrangements further in advance, and fully utilizing the regional groups as an information hub for communicating with states.

Survey Details

Objectives-

The Council of State Governments Midwestern Radioactive Materials Transportation Project undertook this project to catalogue the states' experiences in receiving funding from DOE in conjunction with radioactive material shipping campaigns. The project was intended to document the pros and cons of the process for receiving these funds, as well as lessons learned from state experiences, with the goal of providing feedback and suggestions for improvements to DOE and transportation stakeholders that will be working together on future shipping campaigns.

Methodology-

A total of 32 states were invited to participate in the project based on their receipt of DOE funding for spent nuclear fuel (SNF), transuranic (TRU) waste shipments, or other shipping campaigns for which DOE provided funding. The specific shipping campaigns covered in this project were: the Waste Isolation Pilot Plant (WIPP), which conducts ongoing shipments of TRU waste; the West Valley Demonstration Project, which conducted a shipping campaign of spent nuclear fuel in 2003, and the FRR program, which began shipping spent nuclear fuel from foreign research reactors in 1996. States that had received funding from DOE for shipping campaigns were identified by the four state regional groups:

- The Council of State Governments' Midwestern Radioactive Materials Transportation Committee
- The Council of State Governments' Northeast High-Level Radioactive Waste Transportation Task Force
- Southern States Energy Board's Radioactive Materials Transportation Committee
- Western Interstate Energy Board's High-Level Waste Committee

The first component of the State Experiences Project was an online survey consisting of 36 questions. Survey questions were developed by CSG-MW staff and several state personnel, and reviewed by state regional group staff. The questions addressed the topics of financial guidance, communications, and logistics/process. The survey included questions that asked respondents to rate various aspects of receiving DOE funds and also provided the opportunity for open-ended responses. States completed the online survey during the month of March, 2010.

States were asked questions about what type of guidance they received for spending DOE funds, who provided that guidance, and how clear the guidance was to them. The second topic addressed in the survey was communications. Survey respondents were asked questions about their communications with DOE and with the regional groups related to receiving funding for shipping campaigns. The third set of questions asked states about the process through which they received DOE funds, and how well this process worked for them. Throughout the survey, respondents were asked to identify any challenges that they faced in receiving DOE funds, describe what worked well for their states in receiving DOE funds, and identify improvements that were needed in the areas of guidance, communications, and logistics.

Twenty-four respondents representing 21 states completed the survey (66% response rate). One respondent indicated that they had not received funding from DOE for shipping campaigns, so responses were collected for a total of 20 affected states. When reporting the survey results in this paper, state names are omitted to maintain confidentiality.

The second component of the project consisted of a brief follow-up interview by phone or email. At the end of the online survey, respondents were asked whether they would be willing to participate in a follow-up interview. Fifteen people (63% of respondents) indicated that they were willing to be interviewed by a staff person. The purpose of the follow-up interviews was to clarify survey responses, if necessary, and ask several additional questions that were developed once the results of the online survey were available. Interviews were conducted during April 2010. Thirteen follow-up interviews were completed.

General Findings

Among respondents, 18 out of 20 states (85%) had received funding in conjunction with WIPP shipments. Ten states (50%) had received funding for the FRR shipments. Five of the states (25%) who responded to the survey had received funding for the West Valley spent fuel shipments. Seven states (35%) had received DOE funding for other shipping campaigns. The other campaigns for which states received funding were: high-flux reactor spent fuel; shipments of cesium capsules; shipments from Fernald; shipments from Brookhaven National Lab; and shipments of DUF₆ from Portsmouth Gaseous Diffusion Plant. States participating in the survey had received DOE funding for anywhere between one and 22 years. The median and average duration of funding were both 10.5 years.

Guidance-

Most states reported that they received guidance on how DOE funds could be spent from regional group staff and/or DOE staff. Several reported that they received guidance from the shipping site or other entities within their state. In the majority of cases, guidance was included in the funding agreement. States also reported receiving guidance over the phone, in e-mail or other written correspondence, at in-person meetings, or through a combination of these methods. In several instances, states reported

either that they did not receive any guidance or the guidance was not very clear. States were typically given the general guidance that funds were to be used to prepare for safe and secure shipments, and provided with categories of eligible expenses, such as equipment, travel, or training.

Those who received guidance through in-person meetings rated the clarity of the guidance the highest. Those who reported receiving guidance through a combination of methods provided the next highest ratings for clarity. The group that received guidance through the funding agreement provided the third highest rating for clarity. All three of these methods provided ratings between "fairly clear" and "completely clear." Ranking fourth in clarity was guidance received over the phone, with an average rating of "fairly clear." The least clear guidance was provided through e-mail or other written correspondence, which respondents ranked between "fairly clear" and "not very clear." There were two instances in which states reported that no funding guidance was given.

For the most part, states found the restrictions on spending DOE funds to be reasonable. Most of the time states were given the opportunity to provide input to DOE regarding their funding needs. The majority of states reported that, for most shipping campaigns, the funding completely met their states' needs. Some reported that the funding "met some needs," and none reported that the funding "hardly met any needs."

States were asked to provide recommendations on how to improve DOE's guidance to states.

Recommendations provided by the states included¹:

- Follow the WIPP Guidance.
- Guidance should be general in nature and allow all reasonable expenditures that constitute emergency management, safety and security.
- Provide written guidelines for expenditures qualifying for funding.
- Providing a packet of information regarding what the funds can be used for, how other states use the funds, what cannot be done.
- Make it clear, but be willing to discuss with states before limits are set.
- It wouldn't take long to put together an actual document that provided the approved expenses.
- Be more reasonable in the use of funds.
- Better accommodate state's needs.
- Work on the Scope of Work and other agreements about 3 years out.

Comments were also received on equipment restrictions/exclusions that the states believed were unreasonable. Several states mentioned specific items that they would like to see funded by DOE that currently aren't funded. Examples include equipment maintenance, vehicles, and powered air-purifying respirators (PAPRs).

Space was provided for additional comments. Comments provided by the states included:

- The major campaigns only cover a small portion of the overall transportation of radioactive waste. Funding is needed to cover the routine waste and other shipments.
- We have found DOE WIPP and EM to be generally flexible and helpful.
- It seems that DOE guidance on the use of funds has become more and more specific, especially in the last two to three years.

- DOE needs to expand the scope of activities covered by most assistance. It doesn't do any good to provide a state with funding for something they already receive funding for under other programs. Most states need equipment and operational funds. Training is helpful but can often be obtained through other avenues. Most states lack funding for staff and overtime.
- WIPP guidance has been reasonable in all aspects. Working through our regional group for us has met all our expectations.
- Nothing negative. Plus all the way.

Some states expressed satisfaction with what is funded, but were concerned about the funding amount. When funding is not sufficient, states have to choose which items to fund, sometimes at the expense of other items. For instance, if the funding for a campaign is used up funding training, equipment, and staff time, there may not be enough left to fund exercises.

In addition, while most states believed that the DOE funding is adequate for specific shipping campaigns, some were concerned that there are shipments of low-level waste and other radioactive material for which no funding is provided. While campaign-specific funding is useful to support state preparedness efforts, the restrictions that money be spent only on a specific campaign may not support general transportation readiness. For instance, when states purchase equipment in conjunction with a specific campaign, there may be restrictions that require the equipment to be used only on that shipping campaign. Many states would like to see DOE remove any restriction that funds be spent only on a specific campaign. This would support the states' ability to maintain a level of preparedness for *all* shipments, those for which funding is provided as well as others.

While many states reported that they would like more explicit guidance from DOE related to funding, this desire must be balanced with the states' desire for flexibility and understanding of their needs. Many of the states surveyed felt that more detailed written guidance from DOE, such as a list of allowable activities, would help clarify how funds could be spent. Clearer guidance and expectations from DOE could help the states in making their funding requests. However, the states were very concerned that clarity should not come at the expense of flexibility. They cautioned that any list of allowable expenditures should be extensive, and DOE should make efforts to accommodate the states' individual needs. If something were left off a list of approved expenses, some states said that expense should not automatically be ineligible for funding. Rather they would like to see DOE fund "reasonable expenses" related to the shipping campaigns. The states need latitude in determining how best to prepare routes within their borders for DOE shipments. Many commented that DOE should maintain a cooperative attitude and be open to discussing and accommodating individual state needs.

Communications-

For most of the shipping campaigns, the majority of states responded that they received accurate shipping information in advance of shipments, although for each campaign some states responded that they did not receive accurate information. In most cases states had a point of contact for DOE shipments and usually the point of contact was sensitive to the states' needs.

For all of the shipping campaigns, most states communicated with regional group staff about the funding for shipments, and this communication was found to be very helpful. The regional groups are seen as playing an important role in facilitating communication between DOE and the states.

Most of the states who received DOE funds through the regional group cooperative agreement found that this mechanism worked very well. Recommendations for improving communication between the regional group staff and the states include:

- For states new to WIPP it would be helpful to sit down with regional staff to discuss in detail the program, what funds can and cannot be used for, etc.
- Discuss in a little more detail in one-on-one, what regional groups expect in work agreements.
- Build a personal relationship, minimize turnover if possible.
- It would be nice if there was a standard format. We have been using the same format for several years but have no idea what other states do.
- Just continue to meet for discussion, getting to know everyone in person is helpful. I learn something every time I attend a meeting.

States were asked for suggestions for improving communications with DOE regarding funding for shipping campaigns. Recommendations included:

- Remain open minded about state program goals, plans, and budget requests.
- Maintain the regional groups as the funding and coordinating office for the DOE shipping programs.
- Follow the WIPP Program.
- DOE should maintain a constructive, problem-solving approach.
- Emphasis needs to be placed on providing the right point of contact at the generator site.
- An online "blog" site for questions and answers.
- Make an effort towards good communication and have the attitude of a partnership.
- Sit down and talk one-on-one.

Other comments related to communications with DOE and/or regional group staff around DOE funding include:

- Need more timely (and accurate) preliminary information on shipment campaigns to aid in the development of the scope of work.
- Communications are excellent.
- As funding and tracking expenditures becomes more complex, it may be necessary to either consolidate all DOE funding related to RAM transport into a single state fund or do workshops on different funding sources and requirements.

Overall, states expressed a desire to get as much information as possible related to shipments early on from DOE. States were understanding that schedules, routes, and funding amounts may change as shipments approach, but believed that these challenges would be lessened through ongoing, open communication with DOE.

Logistics-

States typically were informed of their eligibility to receive DOE funds through the regional group staff. In some cases, they were informed directly by DOE. For all of the shipping campaigns, most states reported that DOE provided training in conjunction with the shipments. There was wide variance in when the states received funds for the shipping campaigns, with many states reporting that they received funds more than two years in advance and many others reporting that they received funds much closer to the time of shipment. In spite of this variation in timing, most states reported that they

had adequate time to prepare for shipments. However, for each campaign some states reported that they did not have adequate time to prepare for shipments or they were unsure whether they did. Usually, but not always, states that received funding further in advance of shipments reported that they had adequate time to prepare. Also, in several cases, states that received funds close to the commencement of shipments reported that they were able to adequately prepare.

When asked how far in advance they would like to receive DOE funding if the shipping campaign was using a new route, which could be a rail route, states answered anywhere between one and five years. While most states felt that receiving funds one to two years in advance of shipments is adequate, particularly for preparing truck routes, many believed more time would be needed to prepare rail routes. Based on the states' experiences, some suggested funding for new rail routes should be made available three to five years prior to shipments.

States were asked to describe any logistical challenges that they experienced in receiving funds from DOE. Responses included:

- Because DOE shipping schedules change significantly, it has been very difficult to guess what needs will be 1 to 2 years in advance. In some cases, if training is provided well in advance, refreshers are necessary before shipping campaigns actually start.
- Timing has been very difficult since moved to a state fiscal year.
- Dependable funding has always been a challenge.
- Receive funding based on state fiscal year. Closeout each year has been difficult for states because of DOE time constraints for reimbursement.

When asked what worked well with receiving funds from DOE, states provided answers that included:

- Funding through the Regional Groups.
- Obtaining equipment for local jurisdictions and providing up-to-date training.
- Use of federal funds for equipment and training allowed us to use state funds for staffing.

States were asked how DOE could improve its process for providing funds to the states. Responses included:

- Allow two year grant cycles. Allow for carryover in the second year.
- Provide funds in 2-3 year cycles to maintain program. Considerable time and staff resources are wasted in preparing contract packages, if contracts are renewed on an annual basis.
- Listen to states first before funds are provided. Ensure funds adequately meet states' needs
- Continue to use the Regional Groups.
- More communication on funding status.
- Provide funding for two year periods only using the State Fiscal Year. No carry-over and ensuring that it is available as of 1 July of each two-year period.
- Expand the scope of available expenses.

Additional comments provided by the states included:

- Please do not try to reinvent the wheel. Use the WIPP model and support the Regional Groups. Other DOE programs should use the WIPP program as a model of how to work through the regional groups and get a job done with the least problems.

- I strongly support maintaining the State Regional Group approach to distributing funds rather than having individual states receive funding directly from DOE. The SRG approach allows states to benefit from other states' experiences and lessons learned in acquiring equipment, training, and preparation for shipments.
- Largest problem was working with the uncertainty and inaccuracy of DOE shipment information. DOE needs to have constant and accurate communications with states of shipment timeframes.

Campaign-specific Findings

West Valley Results:

On July 13, 2003, 125 spent nuclear fuel assemblies were shipped by rail from the West Valley Demonstration Project in western New York to Idaho National Engineering and Environmental Laboratory (INEEL) for interim storage. The shipment traveled 2,300 miles through 11 states and arrived at INEEL on July 17. Planning for the shipment began in 1999, with the goal of completing the shipment in 2001. By August 2001, DOE was prepared to ship. However, in October 2001, DOE announced that the West Valley shipment would be postponed "to allow DOE-ID to focus on improving shipment of stored transuranic wastes from the INEEL to the Waste Isolation Pilot Plant in New Mexico in accordance with near-term legal commitments," (DOE WVDP, p. 2). In January 2003, DOE rescheduled the shipment and began reviewing the planning documents that had been completed in 2001. Between October 2001 and January 2003, DOE stayed in contact with the corridor states by attending the state regional group meetings. In September 2003, DOE, FRA, and the involved states and railroads began a review of the shipping campaign. A lessons-learned report for the West Valley shipment was issued in April 2004.

Guidance-

Five of the eleven states that were impacted by the West Valley spent fuel shipment responded to this survey. Of the five states that had received funding for the West Valley shipment, three (60%) reported receiving guidance from DOE related to spending the funds. Two (40%) received guidance from regional group staff and two (40%) received guidance from another party. One state (20%) received no guidance on spending the funds, while two reported receiving guidance that was "completely clear" and two reported receiving guidance that was "fairly clear." The method by which the financial guidance was delivered also varied among states. Two states (40%) responded that guidance was specified in the funding agreement and two (40%) responded that the guidance was delivered by some other method. Three states (60%) believed that the restrictions on spending DOE funds were reasonable. All five states reported spending funds on equipment and emergency response training.

Other activities that were funded using DOE money for the West Valley shipment were:

- Hospital training: 3 states (60%)
- Public information materials: 3 states (60%)
- Staff time: 3 states (60%)
- Other training: 2 states (40%)
- Inspections: 2 states (40%)
- Other activities: 2 states (40%)

All five of the states that received DOE funding for the West Valley shipment reported that they had been given the opportunity to provide input to DOE regarding their states' funding needs. Four states (80%) responded that the DOE funds completely met the needs of their states. One respondent (20%)

reported that the funding “met some needs.” One state (20%) responded that the funding amount they were expecting changed at some point, two states (40%) reported that the amount did not change, and two states (40%) were unsure if the amount changed.

Communications-

Two of the states (40%) that received funding for the West Valley shipment reported that they received accurate information on the shipment, while two others (40%) reported that they did not; one state (20%) was unsure whether accurate information had been received by the state. All five reported having a point of contact for the shipment, three (60%) felt that contact was “very sensitive” to their states’ needs, and two (40%) felt that the contact was “somewhat sensitive” to the needs of their state. Four states (80%) received comments on their scope of work, while one state (20%) did not. Four of the five states (80%) that received funding in conjunction with the West Valley shipment received the funds through the regional group cooperative agreement and all of those states reported that the cooperative agreement mechanism “worked well” or “worked very well.” One state received funds directly from DOE. Two of the states responded to the open-ended question on communication between the states and DOE by stating that communications for this shipping campaign were quite good.

Logistics/Process-

Three (60%) of the five states that received funding for the West Valley shipment learned that they were eligible to receive funds from their regional group, while two (40%) learned of the funding opportunity directly from DOE. Regarding the funding amount, one state (20%) reported that DOE told the state what was available and one state (20%) reported negotiating the amount with DOE. Three states (60%) were unsure of how the funding amount was determined. There was wide variation among the states in the timing of receiving DOE funds. Three states (60%) reported receiving funds less than 6 months prior to the commencement of shipments, one state (20%) reported receiving funds more than a year but less than two years in advance, and one state (20%) received funds more than two years prior to shipment. The states that received funds less than a year in advance reported that this did not allow them to adequately prepare for the shipment. The states that received funds more than a year in advance reported that they were able to adequately prepare for the shipment. All of the states reported that DOE provided training in advance of the West Valley shipment.

WIPP Results:

Since 1999, the Waste Isolation Pilot Plant in Carlsbad, New Mexico, has been receiving truck shipments of defense-related TRU waste from generator sites around the country. As of April 2010, WIPP had received more than 8,400 truck shipments that have traveled a total of more than 10 million miles. Transportation planning for WIPP shipments commenced in the 1980s, with the WGA WIPP Technical Advisory Group being established in 1989. Twenty-one states have been impacted by WIPP shipments over the life of the program.

Guidance-

Twenty-one out of the 23 survey respondents, representing 18 states, had been impacted by WIPP shipments. These states had been receiving DOE funding for anywhere from one to 22 years. Of those states that have been affected by WIPP shipments, 15 (83%) received funding guidance from regional group staff, 11 (61%) received guidance from DOE, and four (22%) received guidance from another party. Six respondents (33%) received guidance that was “completely clear,” 10 (56%) received guidance that was “fairly clear,” and two (11%) received guidance that was “not very clear.” Six

respondents (33%) replied that the guidance was specified in the funding agreement, five (28%) received guidance at an in-person meeting, three (17%) received guidance through email or other written correspondence, two (11%) received guidance over the phone, and two (11%) received guidance through some other method, which included a combination of the previous methods.

When asked whether the restrictions on using DOE funds seemed reasonable, 15 states (83%) replied "yes," while two (11%) replied "no," and one respondent (6%) was unsure. Eighteen states (100%) spent DOE funds on equipment and 18 (100%) spent funds on training for emergency responders.

Other activities that were funded using DOE money for WIPP shipments were:

- Hospital training: 14 states (78%)
- Public information materials: 12 states (67%)
- Staff time: 11 states (61%)
- Other training: 10 (55%)
- Escorts for shipments: 8 states (44%)
- Inspections: 7 states (39%)
- Other activities (i.e. Travel to meetings): 4 states (22%)

Sixteen states (89%) reported that they had been given the opportunity to provide input to DOE regarding their states' needs for the WIPP shipping campaign, and two states (11%) were unsure whether they were given this opportunity. Thirteen states (72%) felt the DOE funding for WIPP shipments completely met their states' need and five states (28%) responded that the funding met some needs. When asked whether the amount of funding they were expecting changed at any point, nine states (50%) replied "yes," seven states (39%) replied "no," and two states (11%) were unsure.

Communications-

Fifteen states (83%) received accurate shipment information in advance of the WIPP shipments and three states (17%) did not. All 18 affected states reported having a point of contact for WIPP shipments, and 13 (72%) rated the point of contact as being "very sensitive" to their states' needs while four (22%) reported that the contact was "somewhat sensitive." Twelve states (67%) reported receiving comments on their scope of work, five states (27%) reported that they did not receive comments, and one state (6%) was unsure.

Sixteen states (89%) communicated with regional group staff about DOE funding, one state (6%) did not, and one state (6%) was unsure. Sixteen (89%) of the states received WIPP funding through the regional group cooperative agreements, and all of them reported that this mechanism "worked well" or "worked very well."

Logistics/Process-

Thirteen states (72%) learned of their eligibility for funding through the regional groups, three (17%) learned of the funding opportunity through DOE, and two (11%) were unsure how their state learned it was eligible to receive funds. Regarding the funding amount, seven (39%) states reported that DOE told the state what was available, five states (28%) reported that the state provided DOE with an estimate of the needed funding, and in four cases (22%) DOE and the state negotiated an amount. Two states (11%) were unsure how the funding amount was determined. Ten states (56%) reported that they received funding for WIPP shipments more than two years prior to the shipments. Two states (11%) received

funds between one and two years in advance, three states (17%) received funds between seven and 12 months in advance, and one state (6%) received funds less than six months in advance of shipments. Fifteen of the states (83%) responded that the funds were received in time to allow them to adequately prepare for shipments and the remaining three states (17%) were unsure. Fifteen states (83%) reported that DOE provided training in conjunction with these shipments, two (11%) reported that DOE did not provide training, and one (6%) was unsure whether DOE training was provided.

FRR Results:

Ten of the states (50%) responding to the survey indicated that they had received funding in conjunction with FRR shipments. Under the FRR program, the United States accepts spent nuclear fuel from 41 countries to whom the U.S. provided enriched uranium. FRR shipments began in 1996 and have occurred at a rate of approximately two to four shipments per year. FRR spent nuclear fuel is shipped to the Savannah River Site in South Carolina, where some of it is stored, and some is shipped on to Idaho National Lab (INL). One rail shipment to INL took place in 1998. (Messick)

Guidance-

For this shipping campaign, nine of the states (90%) received funding guidance from the state regional groups, five (50%) received guidance from DOE, and two (20%) received guidance from some other party. Four states (40%) reported that the guidance they received was completely clear, three (30%) reported that the guidance was fairly clear, two (20%) reported that the guidance was not very clear, and one (10%) reported their state did not receive any funding guidance. Of the states that received guidance, three (33%) reported it was included in the funding agreement, two (22%) received guidance through e-mail or other written correspondence, one (11%) received guidance over the phone, one state (11%) reported that guidance was delivered at an in-person meeting, and one (11%) received guidance through some other method. All nine states that received guidance reported that the restrictions on spending DOE funds seemed reasonable to them.

Eight states (80%) spent funds received in conjunction with FRR shipments on training emergency responders and seven states (70%) spent funds on equipment. Other activities that were funded using DOE money for FRR shipments were:

- Staff time: 6 states (60%)
- Inspections: 6 states (60%)
- Hospital training: 5 states (50%)
- Public information materials: 5 states (50%)
- Escorts for shipments: 5 states (50%)
- Other training: 3 (30%)
- Other activities (i.e. Travel to meetings): 1 state (10%)

Eight states responded that they were given the opportunity to provide input to DOE regarding their states' needs for this shipping campaign, one state was not given such an opportunity, and one state was unsure whether they provided input. Six states (60%) said that the funding completely met their states' needs and four states (40%) said that the funding met some needs. Five states (40%) reported that the funding amount that they were expecting changed at some point, four states (40%) reported that the amount did not change, and one state (10%) was unsure.

Communications-

Seven of the states (70%) that received funding for FRR shipments received accurate shipment information in advance of the shipments, one (10%) did not, and two (20%) were unsure. Eight of the states (80%) reported having a point of contact for the foreign fuels shipments, and of these, five (63%) reported that the point of contact was very sensitive to their states' needs while three (38%) reported that the point of contact was somewhat sensitive to their states' needs.

All of the states that received funding for FRR shipments communicated with regional group staff about these shipments, and all reported that receiving funds through the state regional group worked well or worked very well.

Logistics/Process-

Six (60%) of the states receiving funding for foreign fuels shipments learned of their eligibility from regional group staff and three (30%) learned of the funding opportunity through DOE. (The tenth state did not respond to this question.) Regarding the funding amount, six states (60%) reported that DOE told the state what was available, two states (20%) provided an estimate of their needs, and one state (10%) was unsure of how the funding amount was determined. (The tenth state did not respond.)

Three states (30%) received funds for the foreign fuels shipments two or more years prior to the shipping campaign, one (10%) received funds between one and two years in advance, three (30%) received the funds between seven and 12 months in advance, and two states (20%) received funds less than six months in advance of shipments. Eight of the states reported that receiving funds at this time gave them adequate time to prepare for shipments while one responded that it did not give them adequate time and one did not respond. The state that did not have adequate time to prepare for shipments had received funds seven to 12 months prior to shipments. Five states (50%) reported that DOE provided training in conjunction with FRR shipments, while two states (20%) reported that DOE did not provide training.

Conclusions

Most states are generally satisfied with the funding that DOE provides and how it is provided. However, there is variation in all aspects of the states' experiences in receiving funds from DOE for radioactive material shipping campaigns, and the states identified opportunities for improvement in how funds are provided. Frequently, states that received funding for the same shipping campaigns received different guidance through different channels than other states receiving funds for the same campaign. While more standardized guidance may be helpful to the states, flexibility is also needed to accommodate the states' individual needs.

Another theme that emerged through this project is that the cooperative agreements with the regional groups are beneficial to states and should be fully utilized. Almost all of the states reported deriving benefit from working with the regional group staff on DOE shipping campaigns.

Finally, the WIPP program was cited by many states as a model of a successful transportation program. The states generally expressed satisfaction with the funding and communication that they receive through the WIPP program. The clarity of guidance provided by the WIPP program was rated more highly than what was provided for the other shipping campaigns. Many respondents felt that the WIPP

funding arrangement should be used as a template for other DOE programs, or that eligible expenses for this program should serve as the minimum for what expenses are funded by DOE.

Recommendations for Further Discussion

This project highlights several opportunities for further discussion between DOE and the states related to DOE's funding for radioactive materials shipping campaigns. Such discussions could occur at a national or regional meeting or via conference call or webinar. Topics for discussion should focus on the aspects of receiving DOE funds that have been challenging for the states. Specifically, DOE and the states could address:

- Timing:
 - how far in advance funds are provided to the states
 - whether to use a two-year funding cycle and allow carryover of funds
 - how to address the issue of different state and federal fiscal years
- Guidance:
 - whether DOE should provide a package of guidance materials, including a list of allowable activities and examples of scopes of work
 - whether DOE funding should be campaign-specific
- Communications:
 - how states and DOE can engage as partners on transportation
 - how to promote one-on-one interactions and personal relationships
 - how to ensure that states receive accurate and timely shipping information from DOE
 - how to fully utilize the regional groups

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ⁱ For a full list of survey questions and comments that were received, please contact Melissa Bailey (mbailey@csg.org) 802-229-2219.