

CITIZEN VIEWS OF TRANSPORTING RADIOACTIVE WASTE IN OREGON, IDAHO, COLORADO, AND NEW MEXICO

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ABSTRACT

The proposed opening of the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico has generated a flurry of studies that examine public perceptions of the hazards involved in transporting radioactive waste to that site. Presently, Oregon, Idaho, Colorado, and New Mexico are most affected by the potential WIPP opening and future shipments of wastes. This study synthesizes the findings of independent surveys among residents in those states regarding their concerns. Five topics are commonly measured: trust, safety of highway shipments, moving waste versus maintaining the present temporary storage, risk perceptions, and economic impact. People in the four states report high levels of trust for scientists and low levels for federal officials. Of the four populations, Idahoans are most likely to support moving the waste. Respondents agreed that traffic accidents are likely but this is also true of shipping other cargo such as toxic chemicals. Residents in New Mexico and Colorado perceive the greatest economic gains while Oregonians think that transporting radioactive waste will have adverse effects in their state. These findings will assist public officials in making decisions regarding the eventual shipments. Suggestions for public officials are included.

INTRODUCTION

In anticipation of the Waste Isolation Pilot Plant (WIPP) opening for shipments, federal and state officials began to assess public concerns about moving radioactive waste from temporary sites, e.g., Hanford, Washington, Rocky Flats,

Colorado, and Idaho National Engineering Laboratory (INEL), Idaho, to the WIPP site near Carlsbad, New Mexico. Since 1988, several nonprofit agencies have surveyed the sentiments of citizens living alone or near the transportation corridors, particularly in Oregon, Idaho, Colorado, and New Mexico.

At least five studies have been completed and their results made available: a 1988 Oregon telephone survey of 1,006 residents near the transportation corridor [1]; a 1991 New Mexico telephone survey of 553 state residents [2]; a 1992 telephone survey of 1,219 New Mexico and Colorado residents [3]; a 1993 telephone survey of 1,618 Idaho and New Mexico residents [4]; and a 1993 mail survey of 1,872 residents along the transportation corridor in southeastern Idaho [5]. The present study synthesizes some principal findings and identifies similarities and differences between responses of people in the target communities.

With the exception of the three Jenkins-Smith surveys [2-4] conducted by the University of New Mexico Institute of Social Policy, none of the researchers collaborated to standardize their survey instruments. Only one of the published studies explains logic of the design of its survey instrument: McBeth and Oakes [5] address concerns and issues that emerged from nine focus groups composed of a cross-section of people living in southeastern Idaho. Regardless of the logic of their design, the five studies reveal common patterns.

While each study addresses some unique concerns, five topics are common to all of the studies: 1) the degree of public trust in federal, state, and local officials, 2) public perceptions of the safety of transporting radioactive waste along public highways, 3) risks of transporting waste to a permanent site relative to storing the waste at present temporary storage sites, 4) risk perceptions associated with the shipments, and 5) the economic impact on affected communities.

This study assesses the comparability of the findings for studies of Oregon, Idaho, Colorado, and New Mexico. To simplify comparisons, we analyze results of three of the five studies: Oregon, Idaho, and New Mexico-Colorado. Since two of Jenkins-Smiths studies (the 1991 New Mexico and the 1993 New Mexico-Idaho) report only regression coefficients statistics, including their results is problematic. However, the thinking of New Mexicans and Idahoans are represented within the three studies that we are analyzing. What then, are the specific points of agreement and differentiation? Precisely what do we know about the sentiments of people living in and near areas through which radiological waste will be transported?

BACKGROUND

Since the origins of the study of public policy and administration, there has been considerable debate over the relationship between bureaucracy experts and citizens. Writing in 1933, Luther Gulick, one of the founders of the study of American Public Administration, implied that eventually as society became

increasingly complex, bureaucrats would take over many of the roles of citizens. Gulick's [6] notion was that democracy's existence could not be dependent on endless decisions of citizens; a democratic society's well-being could not be linked to the extent to which people are informed and knowledgeable about each and every complicated issue that emerges.

The rationale behind this arguably undemocratic notion is that citizens lack the language, knowledge, and ability to understand and solve complex technical problems associated with modern society. Indeed, in many areas of public policy, the issues seem too complicated, too scientific, too technical for common citizens to grasp in a way that would support their informed choices.

Bureaucracies have, however, created a self-fulfilling prophesy by assuming hierarchical structures and other characteristics that keep the "life world" of the bureaucratic expert and the lifeworld of the citizen separate. Hummel [7] argues that by using bureaucratic language and scientific analysis and by treating citizens as cases rather than thinking and feeling individuals, bureaucracies have become a policy-making elite characterized by one-way hierarchical relations. Bureaucracies, as experts, dictate to citizens in "one-directional" language the appropriate elements of public policy [7, pp. 51-52].

Bureaucratic expertise has been particularly prevalent in the transportation and storage of hazardous waste, especially nuclear waste. Bureaucratic and scientific experts working for state, federal, and local agencies continually reassure citizens that the transportation and storage of waste is safe. The early era of public administration suggested that administrators should merely execute policy created by elected officials in what was known as the politics/administration dichotomy. Today, not only is the dichotomy itself dead, but elected officials in highly technical areas such as hazardous waste more often than not defer to experts. Citizens who are uneducated (non-experts) about terms such as transuranic waste are deleted from the domain of decision-making. It can be argued, then, that Gulick's prediction has come true: democracy is not effectuated by scientific experts; elected officials and citizens assume passive roles as policies that have great bearing on their lives are created and implemented by bureaucratic experts.

The notion that citizens cannot easily make intelligent, informed choices about highly technical issues is unfortunate for it suggests an end to grass-roots democracy and a rise of an elite-scientific-meritocracy. In the last ten to fifteen years, public administration and public policy scholars have called for a reexamination of the relationship between bureaucrats and citizens [7-9].

This article endorses the philosophy that the views of educated citizens should play an important role in policy formation. Several recent studies have assessed citizen perceptions of the highly technical and scientific problem of the transportation and storage of hazardous, radioactive waste. These studies shed light on how citizens view the problems associated with highly technical, scientific issues and provide insights into popular trust of expert opinion. The studies identify

transportation hazards that worry citizens, name the risks that people see, assess the extent to which people think their local economies may be impacted by shipping along and near their communities, and address their preferences on shipping versus storing waste in its present location. From these studies generalizations can be drawn about citizen views of waste transportation and storage, and implications for policy makers and bureaucrats can in turn be identified. This article reviews the results of recent studies, and suggests how elected officials and public administrators can make use of this information.

COMMON ISSUES

Trust

Until or unless the public perceives that its well-being and interests are not being considered, policy-making typically is left to specialists and experts. Ideally, decisions of policy-makers concur with and represent the wishes of the general public. The issue of TRUST emerges in its own right, in part, as reaction to public perceptions that experts and bureaucrats have allowed technologies to damage the environment and/or its human components.

Air pollution, water pollution, dangerous chemicals, and radiation have produced what may well be irreversible damage to the environment. Public awareness of the unexpected, unpleasant, and even dangerous consequences of problematic technologies emerged during the 1970s and resulted in significant legislation. The problem of how to dispose of nuclear waste has not been resolved and is one of the dominant issues among residents of the states where radioactive waste is being temporarily housed, including Washington, Idaho, and Colorado.

Clouding the issue is the emergence of political action groups that take "liberal" or "conservative" positions to environmental problems. That is, they either 1) counter the opposition to seemingly environmentally sound practices, such as restrictions on logging, population growth, or cigarette smoking, or 2) counter the support of purportedly environmentally sound practices, by denying or minimizing the deleterious effects of, say, agricultural techniques on soil or air pollution on the ozone layer.

Balancing the concerns of the opposing groups is the task of federal, state, and local elected officials. Formulating recommendations for policies that resolve or at the least address environmental dilemmas lies in the province of scientists and expert policy-makers. Inasmuch as the public cannot become experts in all areas, citizens must *trust* elected officials and/or scientific experts to select courses of action that lie in the best interest of humans and of the environment. The decisions made by others may pose the real dangers for many citizens [10].

Each of the studies mentioned includes measures of public *trust* of officials and scientific experts, as shown in Table 1.

Table 1. Trust in Elected Officials or Expert Policy-Makers
(Ranked Outcomes are Listed in Parentheses: First Indicates Highest Trust)

	Oregon Scale 1-10	Idaho Scale 1-5	New Mexico Scale 0-10	Colorado Scale 0-10
Environmental groups	6.3 (1st)	2.5 (5th)	5.6 (2nd)	5.6 (3rd)
State/local elected officials	5.6 (2nd)	3.2 (2nd)	5.0 (5th)	5.1 (5th)
Nuclear regulatory agencies (e.g., NRC)	5.3 (3rd)	3.1 (3rd)	—	—
DOE	5.1 (4th)	—	4.9 (6th)	4.5 (6th)
Federal government officials (e.g., EPA)	4.7 (5th)	3.0 (4th)	5.5 (3rd)	5.2 (4th)
State oversight/ environmental officials	—	3.2 (2nd)	5.4 (4th)	5.8 (2nd)
National laboratory scientists	N/M N/M	3.4 (1st)	6.5 (1st)	6.3 (1st)

There are many more similarities than differences in the responses on trust. People in Idaho, New Mexico, and Colorado are most trusting of scientists (the Oregon survey excludes scientists in its trust measures), citizens generally assign high marks to state career officials who monitor environmental circumstances in their states, and to environmental groups. However, Idahoans differ in that they rank environmental groups as lowest in trustworthiness.

State and local elected officials seem to hold more public trust in Oregon and Idaho than in New Mexico and Colorado. Medium marks are accorded to federal agencies such as the Nuclear Regulatory Commission, Department of Energy, and Environmental Protection Agency in each state surveyed.

These findings suggest that although respondents trust science and its findings, they are suspicious of how scientific knowledge is handled by often anonymous federal officials. Moreover, state and local officials are likely to have more at stake than unknown federal officials who well may live and work elsewhere. The former are more easily identified and recognized; their names and faces appear regularly in the media; the proximity of their places of work and residence make

them more accessible than faraway federal officials. Indeed, the anonymous nature of federal officials may be interpreted as disinterest and detachment from the concerns of local residents.

We hasten to note that these interpretations are based on sociological theorizing, not on empirical findings. In any event, civil democratic society demands that citizens be able to trust their elected and appointed officials.

Perceived Safety of Transporting Waste

Respondents in each study were asked if they thought that transporting shipments of radioactive waste is risky or safe. For researchers the underlying issue concerns the gap between what technicians say is safe and what the public believes. Technicians cite much evidence demonstrating the integrity of radioactive shipping containers in the face of punctures, fires, crashes, and other events that might breach ordinary containers (e.g., [11]). Because they are so confident that they have designed the safest possible containers, it is difficult for technical experts to come to terms with the fears and concerns of the general public regarding the safety of transporting radioactive waste. Public fears may seem irrational to the experts, but their fears appear quite rational and justifiable to those who hold such beliefs [12].

We argue that the safety of the packaging technology and the shipping technology is not the issue. What people believe has consequences, and the more mysterious and secretive the technology, the more they are likely to behave in ways with the potential to produce moral panics or hysteria, such as occurred in Washington during the hydrogen bomb testing in the North Pacific during the 1950s [13].

Variations in question wording occur across all of the studies, yet the substance of the underlying inquiry is consistent: each sample was asked to report perceptions of the safety of transporting radioactive waste. The specific questions and results are listed in Tables 2A-2C.

There are considerable differences in peoples' perceptions of the safety of transporting the shipments by state. Idahoans are the most comfortable with the shipments, with 70.3 percent agreeing that shipments can be accomplished safely. It is noteworthy that the applicable question on the Idaho survey was prefaced with information regarding the amount of waste and the number of anticipated shipments, given as follows:

Presently, about 2.4 million cubic feet of transuranic waste and other types of radioactive materials are stored at the INEL. During the testing phase of the WIPP, plans include one to three shipments of transuranic waste per week. If the testing phase lasts the anticipated five to eight years, then the total number of shipments will number between 260 and 1,250.

Table 2A. How Hazardous is Transporting the Waste? Perceptions that Transporting Hazardous Materials In or Near Community is Reasonably Safe (in Percents)

	Oregon
Strongly Agree/Agree	50.7
Disagree/Strongly Disagree	49.3
Total	100.0
N	1,006

Table 2B. Department of Energy Representatives Say That They Will Ensure that Shipments are Transported Safely. Do You Agree? (in Percents)

	Idaho
Yes, I Agree	70.3
No, I Disagree	29.7
Total	100.0
N	1,872

Table 2C. How Safe is the Transportation of Radioactive Waste to WIPP? (in Percents)

	New Mexico	Colorado
Safe/Completely Safe	20.3	13.0
Neutral	29.2	28.1
Completely Unsafe/Unsafe	50.5	58.9
Total	100.0	100.0
N	782	576

Coloradans are least convinced of the safety of the shipment: only 13 percent agree that they are "safe or completely safe"; New Mexicans also have low ratings with 20.3 percent reporting the same sentiments as Coloradans. This skepticism helped fuel a 1991 political debate in the New Mexico state legislature, which overruled the State Environmental Improvement Board decision on the location of the WIPP route, and its exact location became questionable [4].

Among Oregonians, half (50.7%) "agreed or strongly agreed" that current methods of transporting hazardous materials through the community are reasonably safe.

Shipping Versus Temporary Storage

Eastern Oregon includes four counties straddling a proposed transportation corridor for waste removed from Hanford, Washington, and shipped to WIPP in

Carlsbad, New Mexico. The Oregon case differs in this regard from the other states: Idaho and Colorado both contain their own temporary storage facilities and New Mexico is the site for WIPP. Each of the studies included questions that implicitly asked respondents to think about the risks of leaving the waste in temporary storage rather than moving it to a permanent facility.

As Table 3 indicates, the majority (55.7%) of Oregonians think that transporting the waste represents risks that are "much greater or slightly greater" than maintaining temporary storage. About one fourth (25.7%) perceive that moving the waste is the least risky choice while 17.5 percent view the risks as the "same."

Table 3A. Perceptions of Benefits of Shipping versus Temporary Storage
(in Percents)

If you had a choice between transporting the waste or storing it at Hanford, how do you see the risk of transporting radioactive material through eastern Oregon to a disposal site out of state?	Oregon
The risks are less	25.7
The risks are the same	17.5
Much greater/slightly greater	55.7
Total	100.0
<i>N</i>	1,006

Table 3B. Perceptions of Benefits of Shipping versus Temporary Storage
(in Percents)

With Which Statement Would You Tend to Agree?	Idaho
The benefits of moving the waste out of Idaho outweigh the risks, therefore I support its removal .	40.2
It is safer to move the transuranic waste to WIPP than to store it at the INEL, so it should be moved .	22.3
Transuranic waste is reasonably safe stored at the INEL, so I am not terribly concerned about where it is stored .	18.6
It is safe to keep transuranic waste at the INEL than to move it, so I think that it should stay at the INEL .	8.0
I agree with none of the above.	10.9
Total	100.0
<i>N</i>	1,573

Table 3C. Perceptions of Benefits of Shipping versus Temporary Storage (in Percents)

Risks of Temporary Storage versus Risks of Transporting It	New Mexico	
	Temporary Storage	Moving It
No Risk	1.4	3.3
Slight Risk	11.2	8.7
Some Risk	34.5	26.4
A Lot of Risk	28.2	28.1
Extreme Risk	24.7	33.5
Total	100.0	100.0
N	787	789

Table 3D. Perceptions of Benefits of Shipping versus Temporary Storage (in Percents)

Risks of Temporary Storage versus Risks of Transporting It	Colorado	
	Temporary Storage	Moving It
No Risk	0.8	0.7
Slight Risk	9.6	5.5
Some Risk	37.7	22.4
A Lot of Risk	26.2	32.5
Extreme Risk	25.7	38.9
Total	100.0	100.0
N	596	599

Residents of New Mexico and Colorado differ substantially from those in Idaho. Only 8 percent of Idahoans think that the risk of moving the waste is so great that it should be maintained in temporary storage. Idahoans want the waste moved and they perceive the risks of moving it as producing greater safety in the long run; 62.5 percent support its removal rather than its storage.

New Mexicans and Coloradans perceive the risks of transporting the waste as being much greater than those of storing it in temporary facilities. In spite of citizens' concerns about the waste stored at Rocky Flats, Colorado, the risks of moving it are perceived as greater than those of maintaining it: 71.4 percent said that moving it poses "a lot of risk or extreme risk" compared to 51.9 percent responses concerning the risk of storage. The majority of New Mexicans (61.6%) viewed transporting the waste as entailing "a lot or extreme risk" compared to the risk of storage (52.9%).

Risks

The single biggest concern regarding the shipments appears to be that of a traffic accident in which the containers might be breached, resulting in a spill of radioactive material. Scientists and WIPP officials have argued that a traffic accident during shipment is highly unlikely [2]. However, given the number of shipments likely to occur if WIPP opens, the public and state police who monitor traffic along interstate highways dispute this claim, according to a conversation with an anonymous official of the Idaho State Police.

Two studies asked about the perceived risks of transporting radioactive waste compared to the risk of other types of cargo such as nuclear weapons, insecticides, liquid propane, and fertilizers. Oregonians were evenly divided on perceptions of the risks of transporting radioactive waste compared to other highway risks: 48.6 percent “agreed or strongly agreed” that waste-transport risks were small compared to other highway risks; 48.7 percent said that they “disagreed.” Oregon respondents were asked to rate each of eight health and safety risks in terms of *how serious a risk it is to you personally*. Transportation of toxic chemicals and explosives was rated as most serious followed by radioactive waste transportation on highways, then motor vehicle accidents and accidents at home. Chemical pesticide risks were high but prescription drugs, medical x-rays, and air travel were low.

The Idaho question was posed more specifically: people were asked to rank their concerns on a 5-point scale—with 1 = Quite concerned and 5 = Quite unconcerned—about driving on the highway at the same time as other types of freight. An examination of the mean scores (see Appendix A) indicates that Idahoans are more concerned about driving with concurrent shipments of high-level radioactive waste, nuclear weapons, chemical waste, and medical radioactive waste than with transuranic (low-level radioactive waste). However, each type of freight produces problems, for none received ratings of “quite unconcerned.”

Idahoans reported that the competence of drivers and weather conditions are the greatest concerns regarding transportation risks. To address these risks, 44 percent thought that extensive training of truck drivers was extremely important, and 15 percent wanted shipments to take advantage of the best weather conditions.

The Jenkins-Smith et al. survey asked a general question regarding the likelihood of an accident and a specific question regarding the possibility that radiation would escape [4]. On a scale of 0 to 10 with 0 = Never Happen, and 10 = Certain to Happen, New Mexico and Colorado residents selected nearly identical middle-of-the-road responses: New Mexico means = 6.2 and Colorado means = 6.1. Their residents are slightly more confident about the possibility of radiation escaping as a result of an accident. The means for New Mexico are 5.2 versus 5.6 for Colorado.

Respondents in the four states appear to be pragmatic in their thinking regarding the risks associated with transporting radioactive waste. Radioactive waste is not the only hazardous cargo being carried on the highways.

Economic Impact

The economy of communities near transportation corridors can be affected in several ways. First, “outsiders” can perceive that the property and products from these areas are less valuable as a result of having been “exposed” to shipments. Second, the number of jobs can fluctuate as a result of the shipment. That is, additional work roles may include preparing and packaging the radioactive material, servicing and staffing the trucks, and monitoring the shipments. On the other hand, if property and commodities such as agricultural goods are perceived as less useful because of their proximity to transportation corridors, then local economies can be adversely affected.

Measuring public perceptions of the economic impact took a number of forms. Table 4 displays the questions by state.

Much of Oregon’s economy relies on agriculture [1]. A majority of Oregonians think that the shipments of radioactive waste diminishes the worth of the agricultural products (52.7%). A larger proportion believes that areas near transportation corridors are less attractive for tourists and business developers (61.0%).

Idahoans have indefinite views on the economic impact of the shipments. A majority (56.0%) reported “no opinion” about the effect on jobs; only one in ten people think that jobs will increase (10.5%) and few think that the number of jobs will decline (6.4%). The Idaho sample consisted of people in the southeastern section of the state—people for whom the INEL has a great deal of salience: many of these people are presently employed by an INEL subcontractor. People there have lived for some time with the knowledge of the type of waste stored at that facility. Potato and sugar beet are local crops, and cattle and sheep graze in the area. However, only 4.1 percent voiced concerns about property devaluation.

Almost one-half (48.1%) of New Mexicans and one-third (33.0%) of Coloradans anticipate an economic effect where they live and work. In contrast to the Oregonians, they anticipate that the effects on their economies will be positive.

SUMMARY

Generally people report high levels of trust for scientists, state level career bureaucrats, and for environmental groups. Idahoans differ substantially from the other states in having the lowest levels of trust for environmental groups, including the Snake River Alliance, Greenpeace, Sierra Club, and Earth First. Their low trust levels are an anomaly; people in Oregon, Colorado, and New Mexico tend to place high levels of trust in such groups.

Table 4. Economic Impact on Communities Near Transportation Corridors
(in Percents)

Question	State	Agree
Areas through which radioactive wastes are trucked are likely to be unattractive to new business development and tourists.	Oregon	61.0
Food produced in an area through which radioactive wastes are trucked is not as acceptable as that produced elsewhere.	Oregon	52.7
In the long run it would be good for southeastern Idaho because it would indirectly create more jobs.	Idaho	10.5
In the long run it would be bad for southeastern Idaho because it would decrease the number of jobs.	Idaho	6.4
My first concern is the possible effects of contamination on property and its value.	Idaho	4.1
If WIPP were opened, do you think WIPP would have any effect on the economy where you live and work?	New Mexico	48.1
If WIPP were opened, do you think WIPP would have any effect on the economy where you live and work?	Colorado	33.0
Do you think WIPP would have a very positive, somewhat positive, mixed, somewhat negative, or very negative effect on the economy where you live and work?	New Mexico	48.6 (very to somewhat positive)
Do you think WIPP would have a very positive, somewhat positive, mixed, somewhat negative, or very negative effect on the economy where you live and work?	Colorado	30.5 (very to somewhat positive)

Idahoans report quite different perceptions regarding the safety of transporting the shipments to a permanent storage site. While fewer people in Colorado and New Mexico are convinced of the safety of the shipments, a large proportion (70.3%) of Idahoans and about a half of Oregonians think the shipments can proceed relatively safely.

Similar cleavages occur in comparing the risks of moving the waste compared to that of leaving it alone. Idahoans are much more likely to support moving it:

62.5 percent think it should be driven out of state. People in New Mexico and Colorado perceive the risks of moving the waste as greater than that of letting it be; most Oregonians think it is riskier to move it than to maintain its present storage.

People perceive that traffic accidents during shipments are unavoidable. On the other hand, other freight such as toxic chemicals, explosives, nuclear weapons, and medical radioactive waste are perceived to be more dangerous than the transuranic waste. This does not mean that people agree that all of these things are being shipped with their approval. Rather, it reflects the fact that people feel better informed about other dangerous cargo.

Residents in New Mexico and Colorado perceive the greatest gains to their economies, while Idahoans are generally dubious about the economic gains or losses. The strongest results by far are from Oregon where respondents think that tourism, business developers, and consumers of agricultural products will be biased against using goods and services in the areas near the transportation corridor.

IMPLICATIONS

We asserted that it is not untypical for bureaucratic experts to ignore the voices of citizens, who perhaps lacking direct political clout, delegate decisions to experts. These are not trivial decisions—they could affect health, environmental quality, and their economic well-being. This delegation from citizen to expert has not been solely the result of increasing technology creating increasingly complex policy issues. Part of the reason that citizens are uninformed is because experts have not actively sought to build a dialogue between themselves and the public. The uninformed nature of the public, in turn, justifies neglecting their opinions, in something of a vicious circle.

The studies reviewed here suggest that citizens can and should inform the policy dialogue even in highly technical areas. The studies engender the following general suggestions for elected officials, bureaucratic experts, and political action groups:

1. Citizens must be provided with sound information from administrators, scientists, and elected officials. This must be information and not propaganda. Effective methods for disseminating information include use of the media and interactive town-meetings.
2. Bureaucrats and elected officials must find ways of regularly gathering information from citizens. This might include focus-groups, town-meetings, and surveys.
3. Considerable efforts must be made to demystify radioactivity. The biggest roadblock to public input on radioactive waste and transportation is the public's perception that only scientific experts can understand radioactivity

and hence its risks. An understanding of the risks of radioactive waste transportation and storage and how scientific experts determine risk might go a long way towards removing the barriers that now lie between bureaucrats and citizens.

4. Since state and local officials are more trusted by local residents they may well be asked to play significant roles in radiological waste transportation. This would require extensive training of these officials.
5. Federal officials must interact more with local communities. They must "reach out" to communities in an ongoing dialogue. The same suggestion is made to political action groups that are perceived by residents to be "out of touch."

APPENDIX:
Public Concerns About Highway Safety and Transporting Freight:
Idaho Survey

Scale 1 to 5: 1 = Quite Concerned; 5 = Quite Unconcerned

	Standard			
	Mode	Median	Mean	Deviation
Nuclear Weapons	1.0	2.0	2.4	1.4
High-Level Radioactive Waste	1.0	2.0	2.4	1.3
Medical Radioactive Waste	1.0	2.0	2.5	1.3
Transuranic Waste	1.0	2.0	2.6	1.4
Chemical Wastes	2.0	2.0	2.4	1.3
Insecticides	2.0	2.0	2.8	1.3
Liquid Propane	2.0	3.0	2.9	1.3
Gasoline	2.0	3.0	3.0	1.3
Farm Products	4.0	3.0	2.9	1.3
Fertilizers	4.0	4.0	3.3	1.3

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