

Kieling, John, NMENV

From: Ken LaGattuta [joken@valornet.com]

Sent: Saturday, April 17, 2010 7:54 AM

To: Kieling, John, NMENV

Subject: Community Survey Report for Northern New Mexico

Attachments: KL testimony_4-16-10.doc; Community Survey Report 2009.doc

Mr. Kieling:

I'm sending you as attachments to this email an electronic copy of my "Community Survey Report for Northern New Mexico", as well as a copy of my "Comments", made at the Friday, April 16, 2010 Hazardous Waste Permit Hearing, in Pojoaque.

Thank you for all of your hard work on these Permit matters.

Ken LaGattuta Española, NM 505-747-1574



Comments by Ken LaGattuta

nttuta Friday, April 16, 2010, 2:00 PM

These comments are by Ken LaGattuta, private citizen and resident of Española, New Mexico. They are being presented at the Hazardous Waste Permit Hearing, held today in the Pojoaque Cities of Gold Conference Center. The Hearing is now in its tenth full day.

I am a PhD physicist, retired for the last four years, following twenty years of employment at Los Alamos National Laboratory, in the Applied Physics Division (X-Division). Prior to my LANL years, I worked for seven years as a Research Associate Professor of physics at the University of Connecticut. I have lived in Española for seventeen years.

During the past two years I volunteered my time to the DOE's Northern New Mexico Citizens Advisory Board (NNMCAB), where I became familiar with issues concerning hazardous waste generation, storage, and treatment at LANL. While with the NNMCAB I also learned about the sometimes difficult relations between the present regulator, the Hazardous Waste Bureau (HWB), an arm of the New Mexico Environment Department (NMED), and LANL's present owner, the National Nuclear Security Administration (NNSA), as well as LANL's current management contractor, Los Alamos National Security Limited Liability Company (LANS-LLC). I also learned about the role played in these relations by local citizens groups such as Concerned Citizens for Nuclear Safety (CCNS), Nuclear Watch of Northern New Mexico (NWNNM), and Citizens Action of Albuquerque (CAA), as well as local pueblos, especially those allied into the Eight Northern Pueblos; e.g., Pojoaque, Santa Clara, Ohkay Ohwingeh, San Idelfonso, Tesuque, Nambe, Taos, and Picuris.

It was with much interest that I heard testimony presented at this hearing. I have also listened with interest to comments presented by many private citizens.

I have been particularly struck by the emphasis placed by private citizens on the call for an information repository, to be located on the campus of Northern New Mexico College (NNMC). As conceived, this repository would be for the purpose of accumulating and making available to local residents information relating to the history of the generation, storage, and treatment of hazardous waste at LANL, as well as relating to the history of relations between the local communities and the DOE, the NNSA, and LANS-LLC, and to relations with the previous management contractor, the University of California (UC).

It appears that NMED is well aware of a desire on the part of local citizens for such an information repository. In fact, Mr. James Bearzi, head of the HWB/NMED, addressed this issue in Sect. IV. D. of his written testimony. However, he said in that testimony that it is the opinion of NMED that an electronic information repository should suffice.

Even'so, he also says in his written testimony (Sect. IV. C.) that NMED is attempting to adhere to Environmental Protection Agency (EPA) concerns for the promotion of

environmental justice among local communities. Such concerns require that local communities be provided with all possible opportunities to participate in decisions related to local environmental matters; e.g., matters resulting from the actions of government in New Mexico, especially the federal government.

In this regard, environmental justice concerns would be better met, in my opinion, by the establishment of a permanent information repository at NNMC, than with a simple electronic repository. In my view, if such a repository is to serve the purpose for which it is intended, it must have an on-site staff, trained in its maintenance, and able to assist local citizens in their quest for information.

Mr. Bearzi also refers to the RACER database in his written testimony (Sect. IV. G.) He points out that RACER is a compendium, in electronic form, of environmental data recorded in and around the Pajarito Plateau. He notes too that this database is already fully accessible to the general public (at least that part of the general public that has access to a PC and a high-speed data link) and is being well-maintained by the Los Alamos Community Foundation. He does not mention that it is currently a part of the RACER plan that RACER shall eventually be maintained by a staff located at NNMC.

I would like also to recall a critical public comment made at this Hearing, this past Tuesday, regarding the influence of LANL on the local economy. In this remark it was suggested that an unfortunate dependency had been created in the local community on the economic benefits brought here by LANL, over the last sixty years.

It is in this context that I would like to speak briefly about the last few months of my two years of service on the DOE's NNMCAB. It was during this time that I first recognized the presence of a tension between Board members who believed that economic benefits brought by LANL to the local communities were always of paramount concern, when dealing with regulatory matters, and other Board members who felt that health matters were much more important. In an attempt to quantify the strength of such opposing opinions, and the degree to which such opposed opinions were wide-spread in the local community, I conducted a public opinion survey.

This survey was conducted in the fall of 2009 in the towns of Santa Fe and Española, and accumulated responses from 225 persons. The questions in the survey were written, the survey administered, and the results analyzed entirely by myself. In an effort to obtain, some technical guidance in this matter, I did consult briefly with a staff member from Research and Polling, Inc. of Albuquerque.

The results of the survey can be perused in my attached report. In quick summary, these results show that there are indeed two strong attitudes about LANL to be found within the local community. One attitude is of appreciation for the economic benefits brought here by LANL. The other attitude is one of worry about possible environmental hazards arising from the type of work done at LANL. This second attitude is combined with an uneasiness about the nature of that work itself; i.e., the R&D of nuclear weapons.

Simplifying somewhat, approximately 25% of respondents felt that the economic benefits brought by LANL were great, while environmental hazards were of little concern, and uneasiness about nuclear weapons R&D was just not a factor. Approximately 25% of respondents felt just the opposite; i.e., while economic benefits did not impress them, the threat arising from environmental hazard was great, and the culture of nuclear weapons was rejected strongly. Interestingly, ~50% of respondents displayed both attitudes simultaneously. For these conflicted individuals, there was an awareness of a clear economic benefit brought by LANL to the local community. At the same time, however, worry about possible environmental hazards due to the business of LANL, and uneasiness about the nuclear weapons industry was also great.

In closing, I make the claim that it is the effect of LANL's business on the local community which should be the subject of further study. Evidently, this effect is perceived to be wholly positive by some, and wholly negative by others but, generally, both positive and negative effects are experienced simultaneously by at least half the members of the local community.

Thank you for your attention.

Community Survey Report for **Northern New Mexico**



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Ken LaGattuta joken@valornet.com 505-747-1575 November 1, 2009

Abstract

An unbiased survey was conducted of the attitudes of 225 citizens of Espanola and Santa Fe toward DOE operations in New Mexico. Results show that worries about legacy waste, as well as wastes generated by present and possible future DOE operations, are combined with an appreciation for the economic benefits brought to New Mexico by these same DOE operations.

Introduction

The Department of Energy (DOE), since the beginning of its program in the mid-1990's to clean up its nuclear weapons (NW) waste sites, has believed that it was important to its success to enlist support from members of the local communities. As one means of obtaining such support the DOE, through its office of Environmental Management (EM), has created a set of Site Specific Advisory Boards (SSAB), located at its major NW production and/or laboratory sites around the country, and staffed by local citizen volunteers. Today the DOE can point to several accomplishments of these Boards, and argue plausibly that the Boards have been an asset to DOE-EM's program to clean up socalled legacy waste^[1].

Nevertheless, it must be admitted that a variety of problems has been experienced by the SSABs, and that these problems began to emerge early on^[1,2]. For example, it has been noted that local Board members will struggle amongst themselves to reach agreement about critical questions regarding the clean up at their particular site, either to no avail, or if successfully then accompanied by a residue of bad feelings. Polarization of the Board can then ensue.

Occasionally, it has been found that Boards that are experiencing polarization are divided between members who feel a strong economic interest in the future of the DOE facility in question, and other members who feel no such economic interest but are critical of the DOE's NW program. Such a situation can emerge if a NW laboratory or production facility is sited within an economically depressed region in which there is an active antinuclear movement^[2].

1 During the last two years the northern New Mexico Citizens Advisory Board 2 (NNMCAB) has experienced some polarization. Heated discussions amongst Board 3 members have revealed underlying prejudices, both pro and con, with regard to the DOE 4 and its operations. Often, discussions have devolved into assertions about what members of the local community want and think. However, no real evidence has been offered to 5 6

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support these claims.

Consequently, a formal survey of attitudes held by members of the northern New Mexico community toward DOE-LANL was thought to be advisable. This survey was designed to reflect the debates that have occurred among NNMCAB members, during the past two years.

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The local community being sampled included proportionate numbers of community members from Rio Arriba and Santa Fe counties. Such a survey may help the DOE, LANL, and the NNMCAB staff to better understand the local community in which they live and work^[3]. Moreover, by providing an outlet for the expression of public opinion, the survey may even help to build public confidence in the ongoing cleanup of legacy wastes at LANL. This will be particularly important as actual remediation of the affected sites begins, and more public involvement in the planning for long-term stewardship is sought.

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23 24 In truth, DOE-LANL already conducts an annual survey of local attitudes. However, these professionally conducted surveys^[4] have been confined to so-called community leaders; e.g., mayors, city council members, and local businessmen. Such surveys do not really attempt to assess the attitudes of ordinary citizens.

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Procedure

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The procedure invoked was evolved from an approach which is standard in the polling industry^[5]. The sample size obtained was of 225 respondents, which implies a maximum probable error of 6.7%, with 95% confidence^[6]. As will become clear from the Results section of this report, the differences in average response rates observed were often much in excess of 10% and, therefore, much in excess of the maximum probable error.

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Although the polling industry ordinarily makes use of telephone contacts to obtain its survey results, in the present survey I obtained results entirely through face-to-face contacts. In order to facilitate this process, I chose to set up polling stations in places where a large amount of human traffic would be expected; i.e., in the lobbies of local Health and Fitness centers, during times of maximum usage.

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Survey Statements

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As described in the Introduction, the statements selected for this survey were suggested by conversations between members of the NNMCAB, over the past two years. The form of the survey, and its statements, were as follows:

1 2	(For each of the following, please circle one response: 5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree; 1=Strongly Disagr	ee)				
3 4 5	I believe that local communities have benefited greatly from DOE operations in New Mexico.	5	4	3	2	1
6 7 8	 Money and jobs that the DOE has brought to New Mexico are the most important factor. 	5	4	3	2	1
9 10 11	3. Radioactive and chemical wastes generated at LANL over the past 60 years are of concern to me personally.	5	4	3	2	1
12 13	4. Radioactive and chemical wastes transported to, and stored at,	5	4	3	2	1
14 15 16	the WIPP site are of concern to me personally.5. I worry about present and future DOE operations at WIPP, at SNL,	5	4	3	2	1
17 18	and at LANL.					
19 20 21	The DOE is a trustworthy organization, and I feel safe knowing that their operations are located nearby.	5	4	3	2	1
22 23 24	Nuclear technologies developed at LANL and SNL have benefited New Mexico communities.	5	4	3	2	1
25 26 27	8. Nuclear weapons technologies developed at LANL and SNL have made the people of New Mexico more safe and secure.	5	4	3	2	1
28 29 30	Since some managers of the DOE's operations at LANL, SNL, and WIPP live within local communities, then local citizens need not worry about what the DOE is doing.	5	4	3	2	1
31 32 33 34	10. I don't believe that DOE operations are potentially hazardous to New Mexico's clean air and water.	5	4	3	2	1
35 36	Results					
37 38 39 40 41 42 43	Surveys were completed by 225 individual respondents, and response profiles for each of the ten statements were determined by averaging over respondents. These profiles exhibited clear differences in the level of agreement, or disagreement, to the individual statements. Isolated written comments offered by respondents appear in Appendix A. The locations and times at which the individual surveys were administered are described in Appendix B.					
44	Strongest agreement was displayed to the two statements:					

3. Radioactive and chemical wastes generated at LANL over the past 60 years are of concern to me personally. 4. Radioactive and chemical wastes transported to, and stored at, the WIPP site are of concern to me personally. Moderate agreement was displayed to the two statements: 1. I believe that local communities have benefited greatly from DOE operations in New Mexico. 5. I worry about present and future DOE operations at WIPP, at SNL, and at LANL. Weak, although still significant, agreement was displayed to the statements: 2. Money and jobs that the DOE has brought to New Mexico are the most important factor.

7. Nuclear technologies developed at LANL and SNL have benefited New Mexico communities.

Neutrality of opinion was displayed to the two statements:

6. The DOE is a trustworthy organization, and I feel safe knowing that their operations are located nearby.

8. Nuclear weapons technologies developed at LANL and SNL have made the people of New Mexico more safe and secure.

Finally, disagreement was displayed with the two statements:

9. Since some managers of the DOE's operations at LANL, SNL, and WIPP live within local communities, then local citizens need not worry about what the DOE is doing.

10. I don't believe that DOE operations are potentially hazardous to New Mexico's clean air and water.

Graphs of the profile of these averaged responses appear in the accompanying five

Figures. Each Figure contains the profile of the average response to just two statements.

where Fig. 1 shows responses to the two statements which evoked the strongest

agreement (statements #3 and #4); Fig. 2 shows responses to the two statements evoking

moderate agreement (statements #1 and #5); Fig. 3 shows responses to the two statements

evoking weak agreement (statements #2 and #7); Fig. 4 shows neutrality of opinion (statements #6 and #8); and Fig. 5 shows disagreement (statements #9 and #10).

Discussion

As has been remarked earlier, and as should be clear from Figs. 1-5, the profiles of responses to the ten statements were quite varied, being strongly dependent on the subject being addressed; i.e., on the statement #. These differences are summarized in Fig. 6, where the average response to each statement (average over each profile) is plotted versus statement #.

Further, after averaging all responses over all ten statements, the overall average response was determined to be 3.25. Hence, since 3.0 indicates "no opinion", or a "neutrality of opinion", I assert that the phrasing of the ten statements did not prejudice respondents toward an overall agreement or disagreement, and was an unbiased survey.

We next consider implications of the results obtained from the 225 respondents who participated in this unbiased survey.

More than any other issue touched on by the statements in this survey, the matter of potential radioactive and chemical contamination of the local environment seems to have evoked the strongest feelings amongst respondents; viz., "radioactive and chemical wastes generated at LANL over the past 60 years are of concern to me personally", and "radioactive and chemical wastes transported to, and stored at, the WIPP site are of concern to me personally" (statements #3 and #4), produced strong agreement. Evidently, however, the strength of these feelings was reduced if the threat of potential contamination was located at a more remote site, or was placed off into the future; e.g., statement #5.

Respondents also agreed, although with less conviction, that "local communities have benefited greatly from DOE operations in New Mexico" (statement #1), and with still less conviction to the thought that "money and jobs that the DOE has brought to New Mexico are the most important factor" (statement #2). As well, it was felt by respondents to be only somewhat true that "nuclear technologies developed at LANL and SNL have benefited New Mexico communities" (statement #7).

Interestingly, respondents were either unsure, or of decidedly mixed opinion, that "the DOE is a trustworthy organization, and I feel safe knowing that their operations are located nearby" (statement #6), and "nuclear weapons technologies developed at LANL and SNL have made the people of New Mexico more safe and secure" (statement #8).

Definite disagreement was shown by respondents to the thought that "since some managers of the DOE's operations at LANL, SNL, and WIPP live within local communities, then local citizens need not worry about what the DOE is doing" (statement #9). Also, "I don't believe that DOE operations are potentially hazardous to New Mexico's clean air and water" (statement #10) evoked strong disagreement; i.e., in accord with the strong agreement of respondents to the closely related statements #3 and #4, which were expressed as a positive.

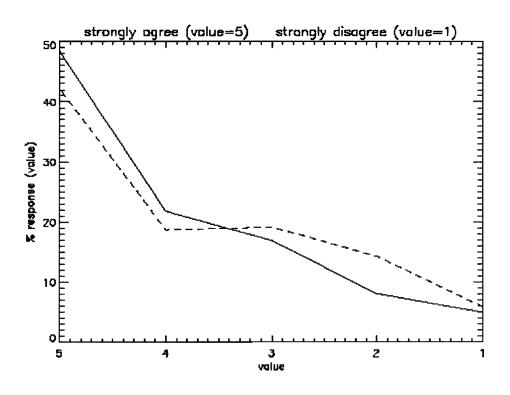
1 **Summary** 2 3 Based on these results, it is plausible to say that money and jobs brought to northern New 4 Mexico by the DOE are generally considered to be very important to many of northern 5 New Mexico's citizens. At the same time, however, concerns about pollution caused by the DOE's operations are very worrisome. Often, strong feelings of gratification due to 6 7 economic benefit, and pronounced worries about pollution, appear within the same 8 individual. 9 10 There is also evidence of ambivalence toward the DOE's ongoing nuclear weapons 11 program. Although, generally, it seems that strong opinions pro and con about nuclear 12 weapons do not appear within the same individual, definite uncertainty about this issue 13 can still be seen in the views of individual respondents. 14 15 Finally, it seems fair to say that suspicion about the DOE's operations in northern New 16 Mexico is widespread. The fact that many DOE employees live and work in northern 17 New Mexico is, generally, not seen as a reason to be sanguine about the DOE's 18 operations here. 19 20 References 21 22 [1] History of the DOE-EM SSAB; March, 2009; http://www.em.doe.gov 23 24 [2] Advice and Consent: the DOE's SSABs; Jennifer Weeks, Harvard U.'s Belfer Center 25 for Science, Technology, and Public Policy; Discussion Paper; Sept., 2000. 26 27 [3] Tuler, S. and Webler, T.; 2003, SERI Report 03-004; Public Participation in Setting 28 Clean Soil Standards at Rocky Flats; http://www.seri-us.org 29 30 [4] http://www.lanl.gov/orgs/cpo/ 31 32 [5] Research and Polling, Inc.; Albuquerque, NM; telephone: 505-821-5454. 33 34 [6] http://www.DSSResearch.com; http://en.wikipedia.org/wiki/Sample_size 35 36 Appendix A 37 38 Comments offered by individual respondents were as follows: 39 40 Let the masters of science at LANL focus on climate change, health care, etc. 41 42 The powers that be do not reside in, and perhaps do not even visit, New Mexico so why

should I believe that they have the health and welfare of New Mexico's citizens in mind?
 They do not!

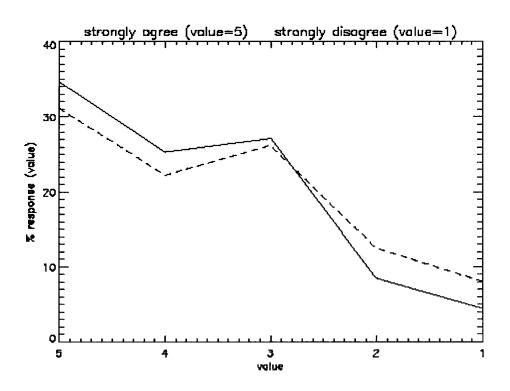
46 I think LANL is good because it gives work to the community and because it is safe.

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2	I believe that DOE does everything in their power and within the law to protect the
3	economy, safety, and way of life in New Mexico, and wherever else they operate.
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5	Sloppy procedures with radioactive materials at LANL concerns me greatly. I equate the
6	DOE's attitude toward New Mexico with that of the Catholic church's attitude toward its
7	pedophile priests, many of whom it dumped in New Mexico.
8	
9	Statement #9 is poorly written. Also, if statement #10 refers to WIPP, then there are other
10	problems that concern me more.
11	•
12	I am not very familiar with the DOE's operations, and their effect on New Mexico.
13	
14	Keep doing good work!
15	F
16	No more nuclear development in New Mexico please!
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18	Yucca Mt. is example of DOE's misuse of tax \$. DOE is not credible!
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20	DOE badly manages tailings and dump sites and inadequately protects ground water.
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22	LANL has a terrible history of contamination of the ground water.
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24	I do not consider myself to be well informed about these issues,
25	,
26	DOE needs to be more efficient at the planning and execution of its work.
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28	Let's move into the 21 st century!
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30	I hope that those who lost jobs at LANL will get them back.
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32	Thank you for taking time to conduct this study!
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34	I'm glad that over 1 million American lives were saved by the Manhattan project.
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36	If LANL loses funding then I am concerned, otherwise no!
37	,
38	The cleanup at LANL is necessary, but the research there is questionable.
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40	Statement #10 is tricky.
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42	Appendix B
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44	Surveys were obtained from respondents at the following locations and times:
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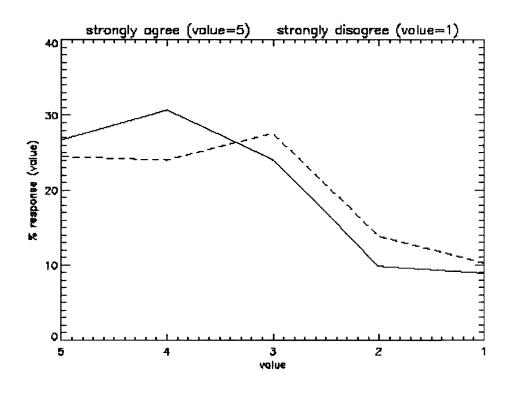
Thursday, Sept. 24, 2009; 9:30AM-11:30AM; Atlas Gym (privately owned facility); Espanola, NM; 18 surveys completed. Thursday, Sept. 24, 2009; 5:00PM-7:00PM; Lucero Fitness Center (publicly owned facility); Espanola, NM; 20 surveys completed. Mon., Sept. 28, 2009; 5:00PM-7:00PM; Lucero Fitness Center; Espanola, NM; 17 surveys completed. Sat., Oct. 10, 2009; 9:30AM-12:00PM; Chavez Fitness Center (publicly owned facility); Santa Fe, NM; 51 surveys completed. Wed., Oct. 14, 2009; 5:00PM-8:00PM; Chavez Fitness Center; Santa Fe, NM; 54 surveys completed. Mon., Oct. 19, 2009; 5:00PM-7:30PM; Chavez Fitness Center; Santa Fe, NM; 45 surveys completed. Wed., Oct. 21, 2009; 4:15PM-6:30PM; Pojoaque Pueblo Fitness Center (pueblo owned facility); Pojoaque, NM; 20 surveys completed. The total number of surveys completed was 225. The towns of Taos and Los Alamos were not surveyed. Based upon the results from Espanola, Pojoaque, and Santa Fe, it was thought that Taos and Los Alamos could have produced another 50 surveys, in a period of time estimated to be 5 hours, exclusive of travel time. This would have improved the value of the expected maximum probable error from 6.7% to 6.0%.



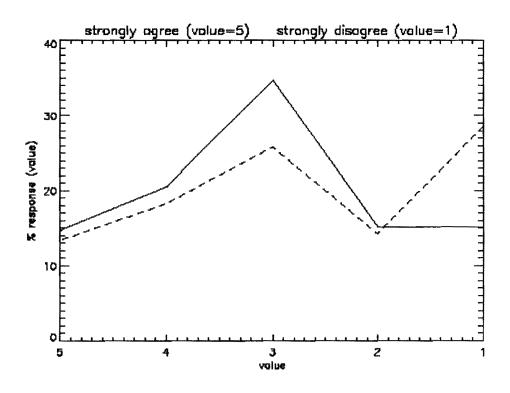
1 2 Figure 1: statement #3 (solid line); statement # 4 (dash line)



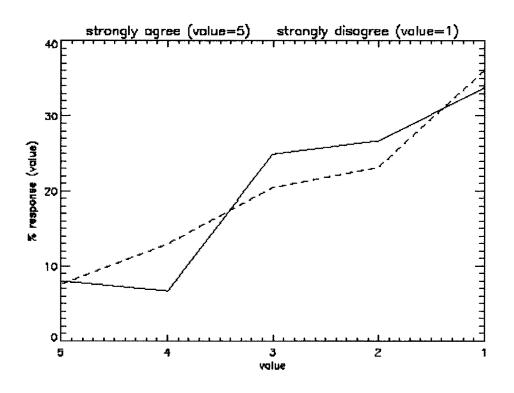
1 2 Figure 2: statement #1 (solid line); statement #5 (dash line)



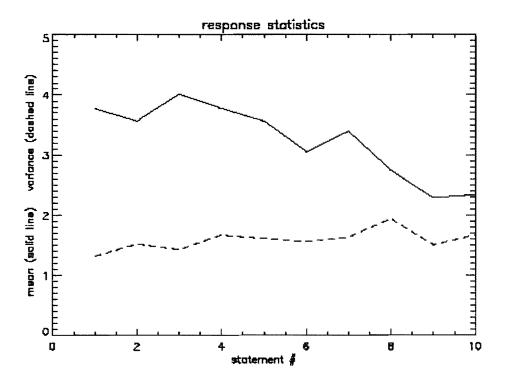
1 2 Figure 3: statement #2 (solid line); statement #7 (dash line)



1 2 Figure 4: statement # 6 (solid line); statement #8 (dash line)



1 2 Figure 5: statement #9 (solid line); statement #10 (dash line)



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3 Figure 6: mean of responses (solid line); variance of responses (dash line)