

Appendix G: Analyses by Job Function—Non-Federal Respondents

This Appendix presents results by the job functions for the non-federal respondents. This logic mirrors the presentation for federal respondent findings reported in *Appendix F*.

We ordered each section of this Appendix by the number of respondents in each category. Some of the job function categories have lower numbers of respondents than others, though our original sample for non-federal respondents was aimed at gaining representation from each of the job function groups included. When the number of respondents is a matter of concern a cautionary statement is included in that section. Since we have no census on the number of individuals who actually fall into each functional category we have no insights on the proportion of individuals from that community who participated. Findings represent the opinions and views of those who participated in the survey, and are not assumed to represent all non-federal employees within a particular functional group. In fact, it is our suspicion that we have only 'scratched the surface' on this category of respondents.

Findings derived from this Appendix can help guide communication to specific functional areas within the agencies served by Predictive Services, as well as offering greater insight into how products and services are currently being used and how they might be improved for particular groups. Some key findings derived from this Appendix were presented in the body of the report; here all findings are reported.

Appendix G1: Incident Management Team Members—Non-Federal Respondents

Incident management team members were grouped into one category ($n=68$). These respondents came from state agencies (64.7%), county agencies (20.6%), consulting firms (4.4%), universities or academic institutions (1.5%), and other agency types (8.8%).

Who Were the Non-Federal Incident Management Team Members?

The majority was male (91.2%).

Educational background / degree or equivalent—Educational attainment was high with almost three-fourths (72.1%) having completed at least a bachelor's degree or equivalent (*Figure G1-1*).

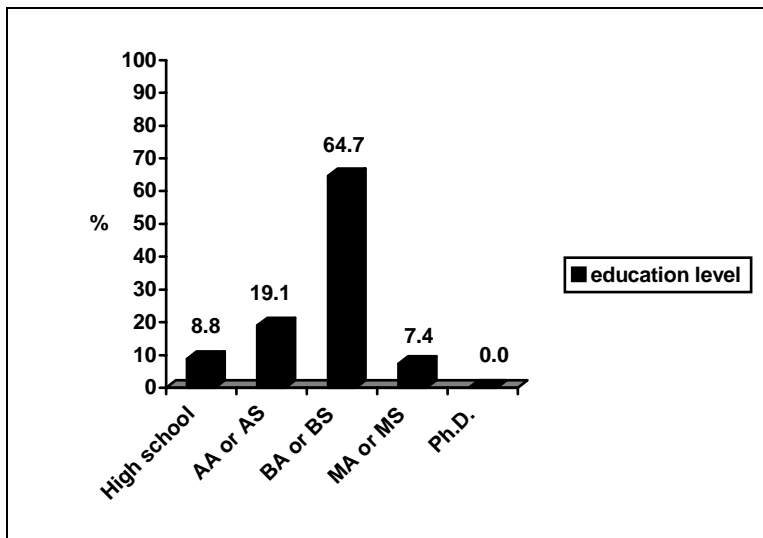


Figure G1-1. Educational attainment—non-federal incident management team members.

Respondents reported degrees in the following subjects:

- AG/forest-watershed mgt
- Agriculture
- Agriculture/fire service mgt.
- Botany, geography and planning
- Communication
- Environmental studies
- Fine arts
- Fire administration
- Fire science (2 respondents)
- Fisheries mgt
- Forest management (8 respondents)
- Forestry (6 respondents)
- Forest management and forest biometrics

- Forestry/natural resources
- Forestry-wildlife
- Forestry and resource management
- History
- Journalism, history
- Natural science, fire service administration
- Public health
- Theater arts
- Wildlife management

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the Geographic Areas (GAs) areas shown below (Figure G1-2).

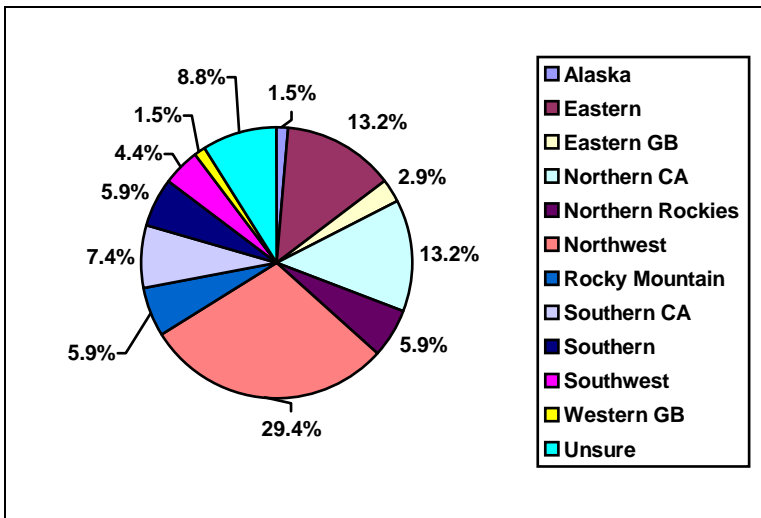


Figure G1-2. GAs—non-federal incident management team members.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents provided information regarding specific situations when they access or obtain information from Predictive Services. More than half reported accessing Predictive Services during fire season (73.5%), and half during a fire incident (50.0%). One respondent accessed the services prior to fire season.

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited, or which GACC services they had used, revealing that about one third had visited/used the National Interagency Coordination Center (NICC—36.8%). The Geographic Area Coordination Center sites from most to least mentioned were the Northwest (22.1%), Northern California (14.7%), Northern Rockies (13.2%), Southwest (11.8%), Rocky Mountain (10.3%), Southern (10.3%), Southern California (10.3%), Eastern (10.3%), Eastern Great Basin (5.9%), Western Great Basin (2.9%), and Alaska (2.9%; responses do not sum to 100% because respondents could select multiple sites). A few (8.8%) were not sure which if any GACC

websites they had visited or GACCs they had used, while about one-tenth (13.2%) indicated they had not visited/used any of the listed GACCs.

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services' products on the web, the briefings, and the emails. They were more familiar with the web products (*Figure G1-3*, $M=2.9$, $sd=1.2$, $n=62$), and the briefings (i.e., national, geographic, situational, or meteorological, $M=3.2$, $sd=1.2$, $n=62$), than with the emails (these contain current projections and/or information about Predictive Services, $M=2.6$, $sd=1.2$, $n=60$).

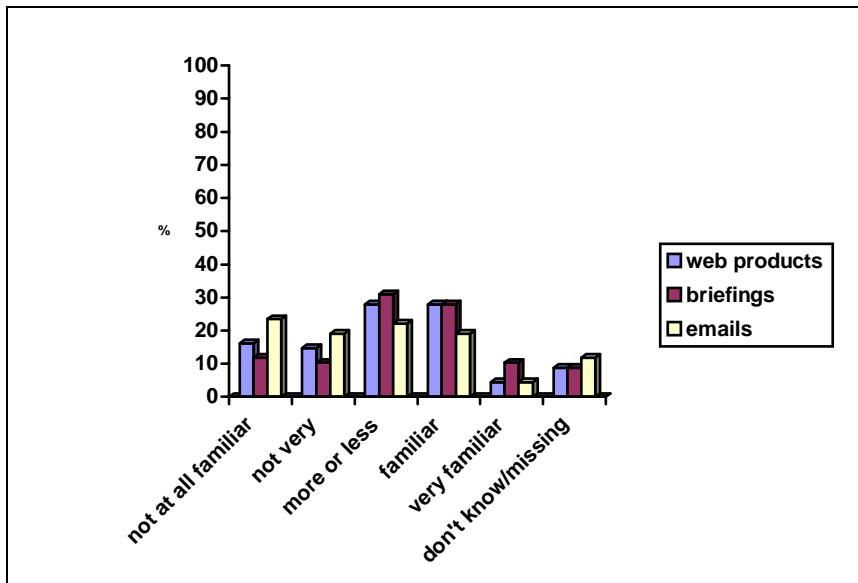


Figure G1-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal incident management team members.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=4.2$, $sd= .7$, $n=50$, *Figure G1-4*, 22.1% marked 'don't know' and 4.4% did not respond).

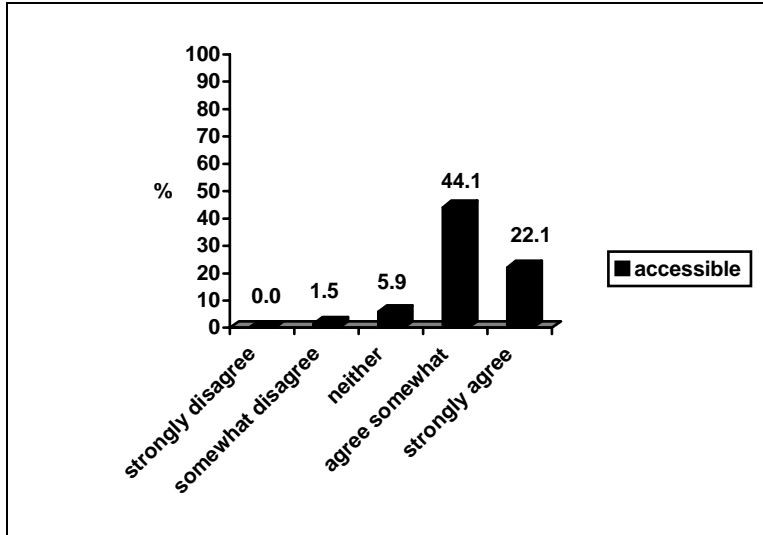


Figure G1-4. Ratings of accessibility of Predictive Services information—non-federal incident management team members.

A majority agreed that Predictive Services information was timely ($M=4.0$, $sd= .7$, $n=47$, *Figure G1-5*, 23.5% marked 'don't know' and 7.4% did not respond).

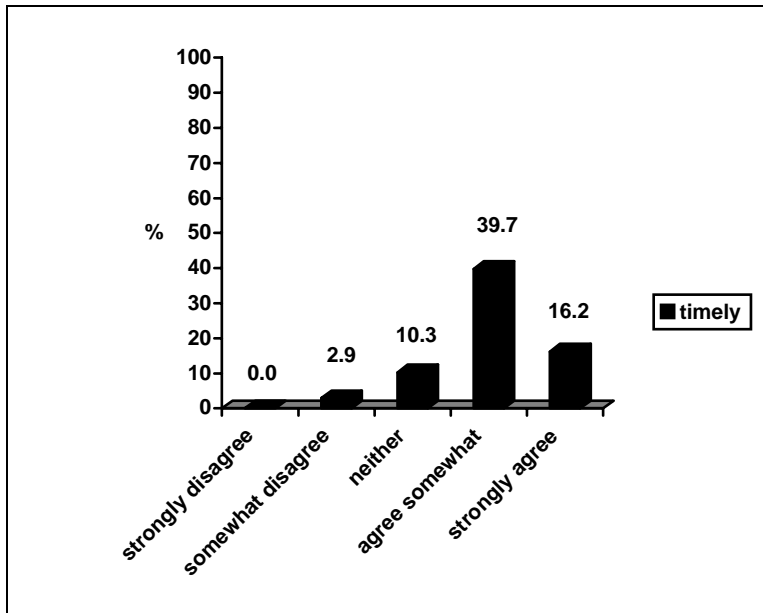


Figure G1-5. Ratings of timeliness of Predictive Services information—non-federal incident management team members.

A majority agreed that Predictive Services information was relevant ($M=4.1$, $sd=1.0$, $n=48$, Figure G1-6, 23.5% marked 'don't know' and 5.9% did not respond).

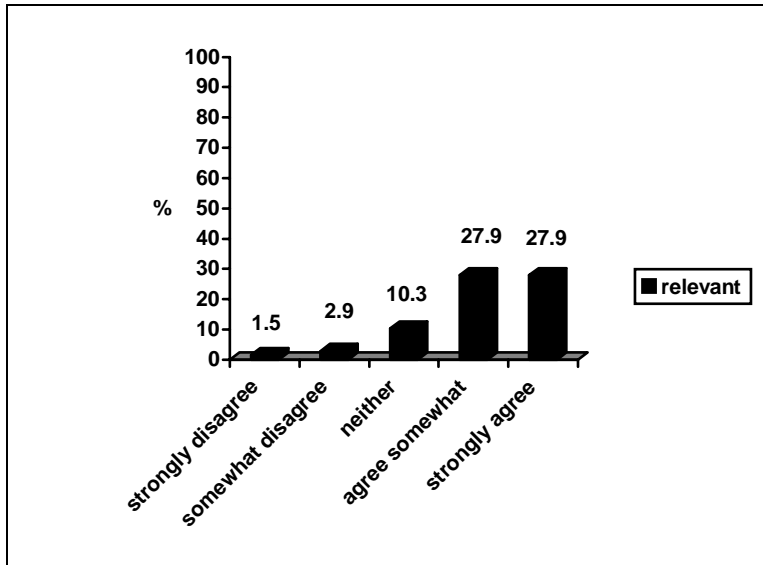


Figure G1-6. Ratings of relevance of Predictive Services information—non-federal incident management team members.

Half agreed that Predictive Services information was accurate ($M=3.8$, $sd= .9$, $n=48$, Figure G1-7, 23.5% marked 'don't know' and 5.9% did not respond).

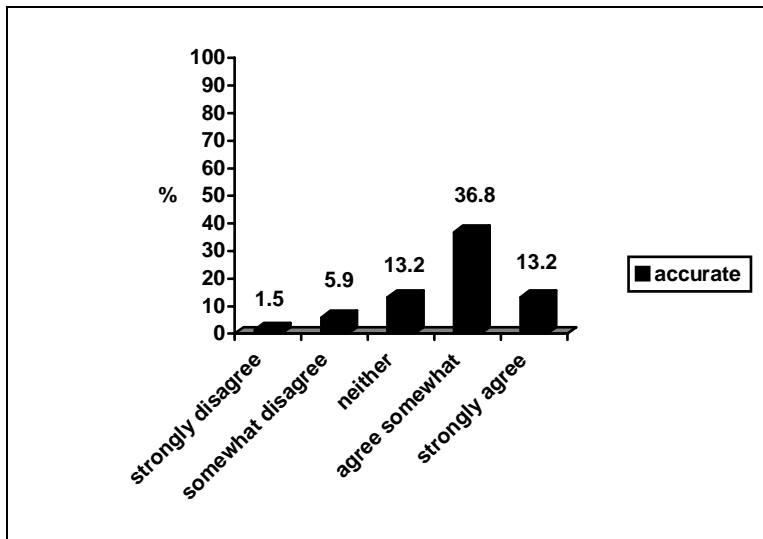


Figure G1-7. Ratings of accuracy of Predictive Services information—non-federal incident management team members.

A near majority also agreed that Predictive Services information was complete ($M=3.9$, $sd= .9$, $n=48$, *Figure G1-8*, 23.5% marked 'don't know' and 5.9% did not respond).

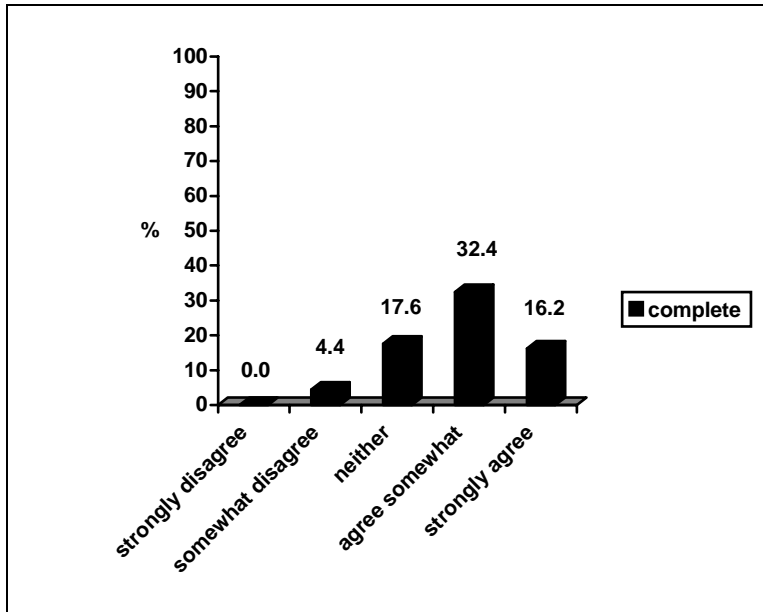


Figure G1-8. Ratings of completeness of Predictive Services information—non-federal incident management team members.

A majority agreed that Predictive Services information was easy to understand ($M=3.9$, $sd= .9$, $n=48$, *Figure G1-9*, 23.5% marked 'don't know' and 5.9% did not respond).

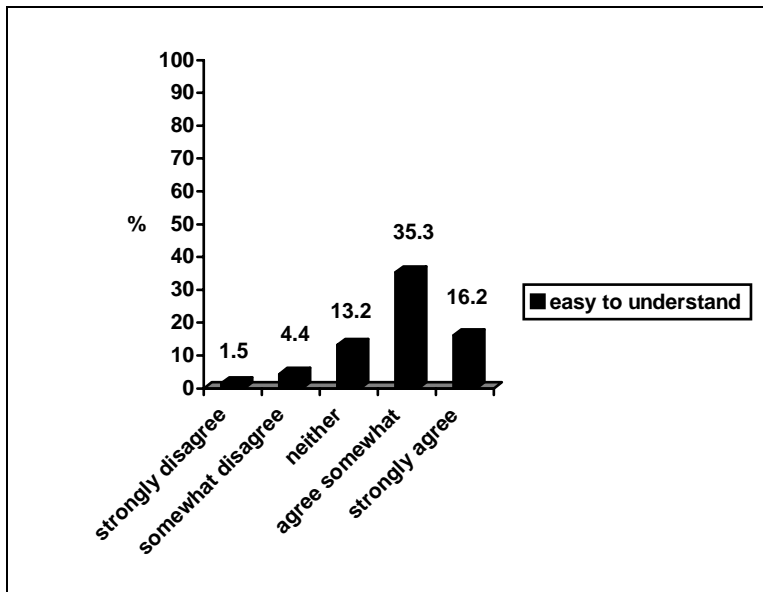


Figure G1-9. Ratings of ease of understanding of Predictive Services information—non-federal incident management team members.

Satisfaction with Predictive Services Contacts—Few respondents (7.4%) had contacted Predictive Services to report a problem with a product or service. All five of these

respondents selected a 4 on the scale indicating they felt Predictive Services was responsive (scale was 1 to 5, 1=not at all responsive, 5=very responsive).

Overall satisfaction—Responses indicate that Predictive Services had met most expectations ($M=3.0$, $sd= .8$, $n=50$, *Figure G1-10*), and respondents were satisfied ($M=3.8$, $sd= .8$, $n=59$, *Figure G1-11*).

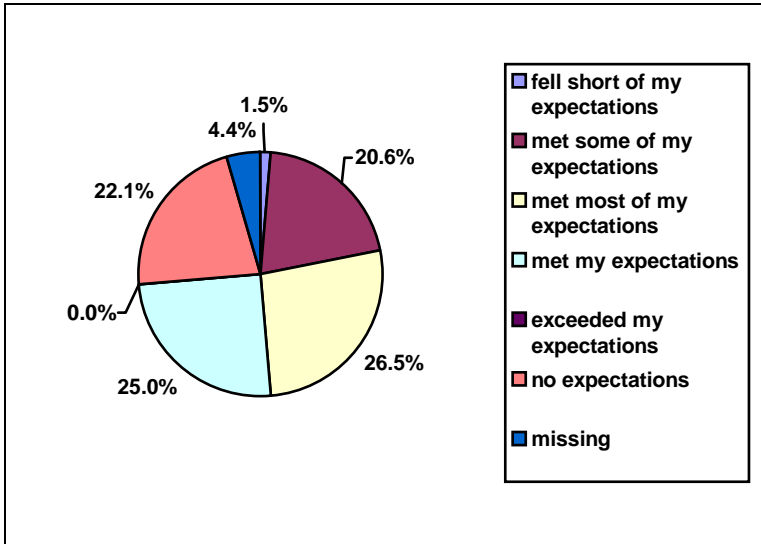


Figure G1-10. Ratings of degree to which Predictive Services met expectations—non-federal incident management team members.

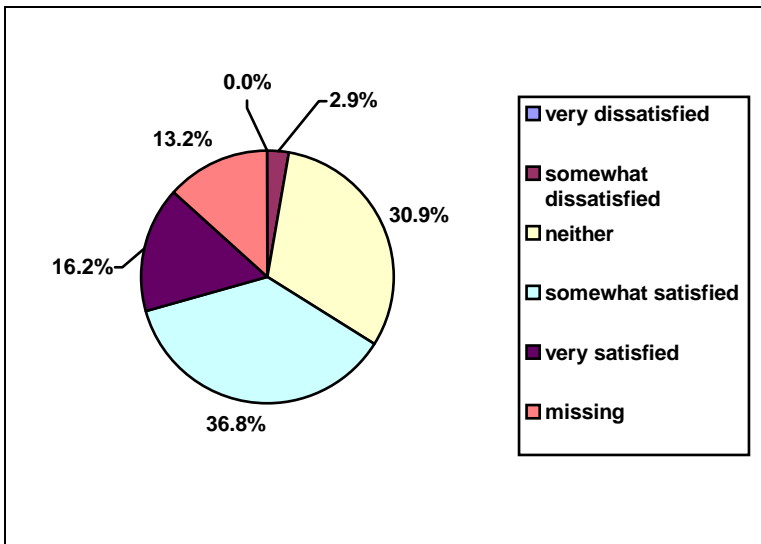


Figure G1-11. Ratings of satisfaction with Predictive Services products and services—non-federal incident management team members.

Trust and confidence in the information—A majority expressed some, to a great deal of trust and confidence in Predictive Services information (*Figure G1-12*, $M=3.4$, $sd=1.1$, $n=63$; 7.4% did not provide a response).

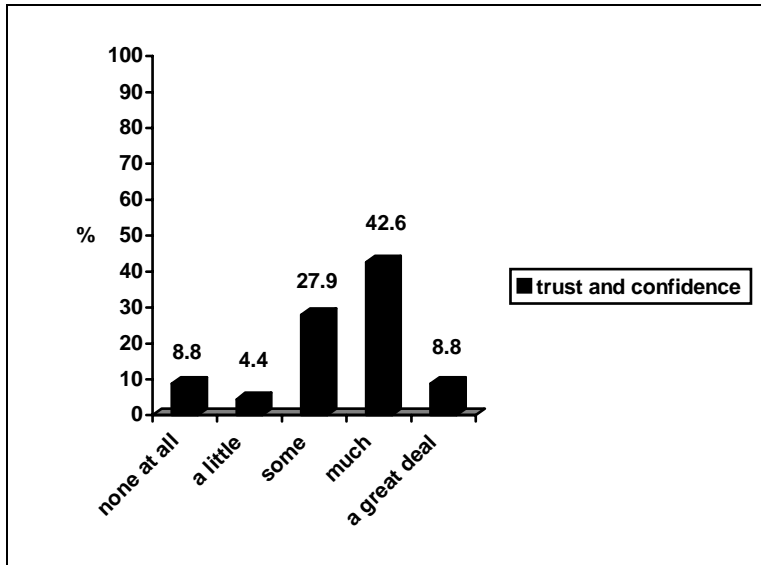


Figure G1-12. Ratings of trust and confidence in Predictive Services information—non-federal incident management team members.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some, to a great deal) on Predictive Services in making decisions (*Figure G1-13*; 5.9% did not provide an answer).

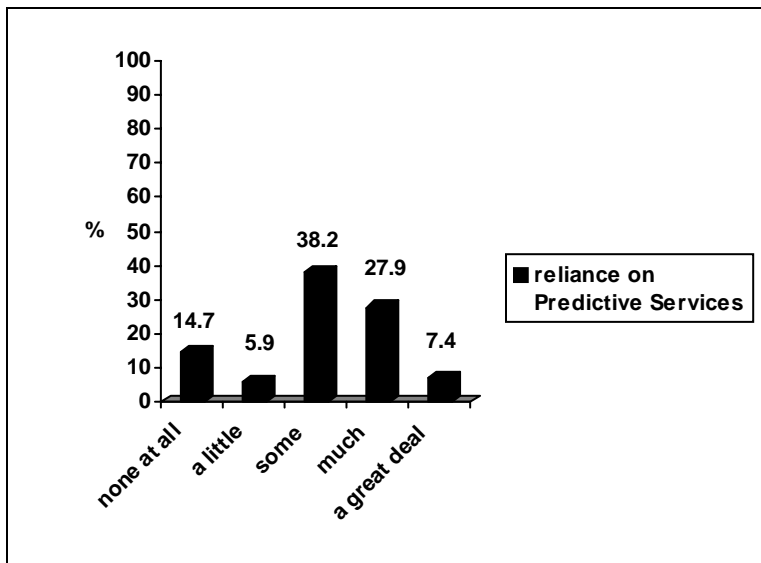


Figure G1-13. Degree of reliance on Predictive Services—non-federal incident management team members.

About one-tenth (14.7%, *Figure G1-14*) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services (chose a 4 or 5, where 5=very true).

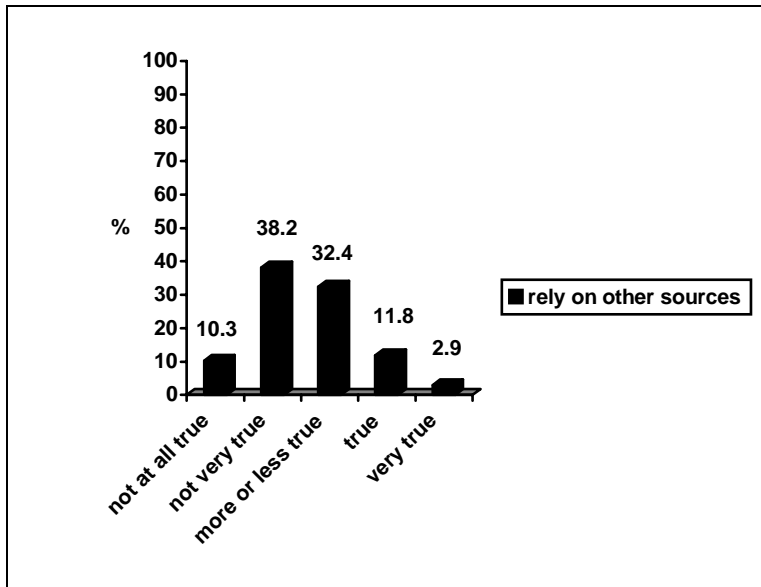


Figure G1-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal incident management team members.

Those who selected 'true' or 'very true' were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

- Pacific Disaster Center
- University of Hawaii--Meteorology Svc
- IA. fire weather forecast
- NWS Fire Weather Offices (2 respondents)
- I use many sources, but none as heavily as Predictive Services
- California Office of Emergency Services
- National Weather Service (4 respondents)

The likelihood of taking action based on Predictive Services information was examined. About one-third were likely to take action based on Predictive Services information (36.8% chose 'likely' or 'very likely', *Figure G1-15*, 7.4% did not answer this item).

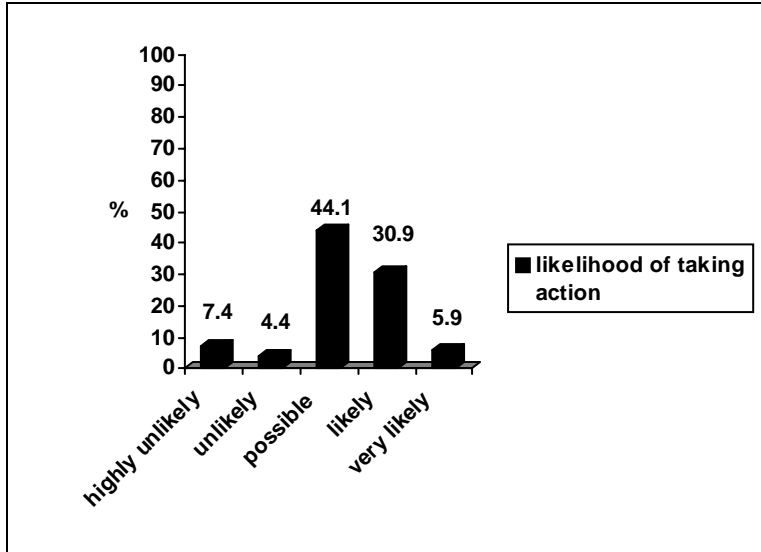


Figure G1-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal incident management team members.

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). About one-tenth indicated there was no overlap (not at all true, 2.9%), almost half chose ‘not very true’ (47.1%), about one-third felt it was more or less true (33.8%), and a few felt that it was true (5.9%); 10.3% did not provide a response.

When individuals marked ‘true’ or ‘very true’ they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

I don't know what services you provide
 Roman and NOAA
 National Weather Service's Fire Weather Forecasters
 There is some overlap, but there is more unique information available through
 Predictive Services

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential barriers (*table G1-1*). The most frequent reasons provided were not having thought about using the products and services, and needing information that is site specific.

Table G1-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal incident management team members.

Reason	Percent
I never thought about it.	48.5
My current management practices don't require the types of information provided by Predictive Services	10.3
I need information that is site specific	20.6
I am not mandated to use these products	14.7
I don't have the time to use these products	11.8
I don't know where to get advice about using these products	8.8
I don't know where to get the technology to use these products	8.8
I don't have the technology I need to use these products	4.4
I don't trust the products and services	0
I don't want to use these products	0
I don't think these products support my agency's current practices	1.5
Agency directives/guidelines instruct me to use other information	4.4
I don't have the money to use these products	2.9
I don't trust the advice I get about using these products	0
I don't trust information that is generated by multiple agencies	1.5

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence “The information and services provided by Predictive Services would be more useful to me if...”. The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

easy web site name to remember
we would have information which includes the State of Hawaii
it were a bit more site specific
I used them on a daily/weekly basis instead of just during extreme fire season or during active fires
I knew more about what it is and does for me.
I remembered to access it in a more timely manner
I would use it all the time.
if I knew what they were and how to access them.
PS is used to supplement our site specific data and for incident projection
I ALWAYS HAD ACCESS TO A COMPUTER WHILE ON ASSIGNMENT.
the information could be downloaded into GIS for display and documentation.
the information was updated more frequently when extreme conditions existed.
I was e-mailed periodically with summary information, with the option for further review.
I had better training in terminology and weather processes.
It's a guide, weather is hard to predict
they were more timely. Some of the products I have used were several weeks old.
I like it as is..so can't complete
the data sets utilized to construct some of the products were more current and accurate. PS tends to be very broad scale.
I was more aware of what they do or provide.
If it was updated year around rather than just during fire season

I spent more time on wildland fire service incidents.
 I knew what they were.
 it were more site specific.
 email alerts were available (maybe they are and I just don't know about them)
 Smaller geographic areas.
 the product stayed essentially the same but keeping up with changing technology.
 I knew what they were.
 I used it at all
 I had experience using them.
 the weather and fuels information was kept current for GACC.
 I like what I get.
 the use was fully supported by my agency.
 I had the technology to access it on the road.
 I knew about them.
 it were more widely used by cooperators
 I had more of a direct need to utilize them.
 agency would join the predictive services group.
 I accessed it more often.
 I knew they existed and could learn more about them.
 it is meeting my needs today!
 it were easier to access
 I took more time to know what was available.
 it could be applicable to a specific section(sq mile) of land
 I was certain what they are. There has been no real explanation. If they are what I
 think they are, they are interesting and may affect management decisions I make
 in relation to fire preparation.
 I didn't have any other information
 They were more site specific
 I was more fully involved in Fire Management
 if I merely took the time to seek out the provided information.
 more accurate
 They were also available on hand-held devices (e.g., Blackberry).

Were There Additional Comments?

As is customary in surveys, we offered the opportunity for our incident management team members in the non-federal sector to tell us if they had any additional comments about Predictive Services that were not covered above or any comments about the survey. In no particular order, here are their responses:

I have only heard of Predictive Services in passing. I have not had any exposure to
 where to access it so that I may evaluate how it may help me in my job.
 When the Predictive Services products include the State of Hawaii? The NWS has
 seen fit to include their services as vital to Hawaii's economy and public safety.
 The fire management community in Hawaii needs similar consideration in its
 supporting technologies
 Interesting that I had not recognized that what I had been using was this service. It
 speeds up data gathering needs and puts it all at my fingertip.
 I would think that if people weren't using the services then they probably won't be
 answering your survey either.
 You guys do a great job. Thanks.

Appreciate being a part of the survey. Predictive Services is and can be a more valuable tool. Many of the decisions that need to be made on Wildland Fire Use events need to rely heavily on predictive tools. Predicting anything into the future is a tough job. All we can do is rely on the best information available which is what we do when we use your services. Keep improving the service.

Thankless job! Thanks for all you do. [name and location removed]

Predictive Services serve a niche that isn't provided elsewhere. I have helped create some of the PS products so I am also a supporter of PS.

From an IMT stand point, I function as IC or Deputy IC. I count on other staff to understand the need and utilize the services directly.

I think you need a brief explanation of what National Predictive Services are. I am guessing, but I am not certain. I do not like being coerced into completing this survey without an explanation of what National Predictive Services you are referencing.

A great service

Appendix G2: Crew Supervisors/Other Suppression Personnel— Non-Federal Respondents

Crew supervisors and other suppression personnel were grouped into one category ($n=52$, this Appendix will refer to both groups as suppression personnel). These respondents came from state agencies (73.1%), county agencies (11.5%), other agency types (11.5%), and tribal governments (3.8%).

Who Were the Non-Federal Suppression Personnel?

The majority was male (88.5%).

Educational background / degree or equivalent—Educational attainment showed that almost two-thirds (63.4%) completed at least a bachelor's degree or equivalent (*Figure G2-1*).

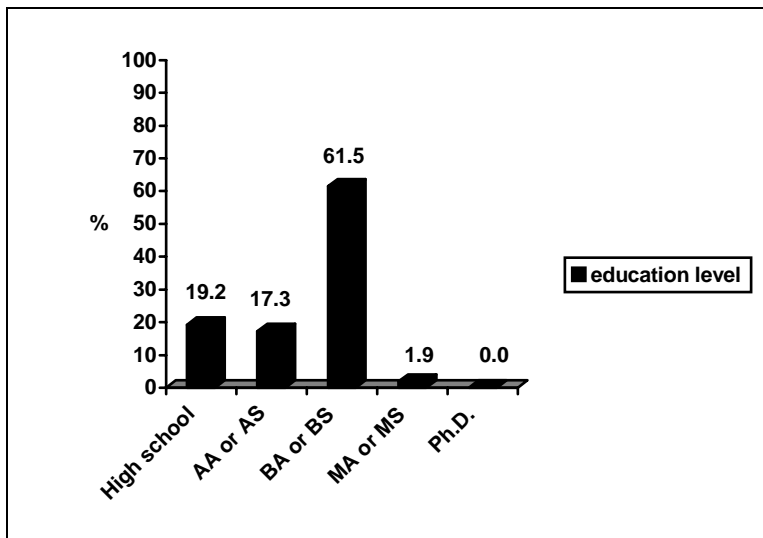


Figure G2-1. Educational attainment—non-federal suppression personnel.

Respondents reported degrees in the following subjects:

- Biology (2 respondents)
- Business management (2 respondents)
- Fire administration
- Fire protection administration and technology
- Fire science (3 respondents)
- Fish & wildlife biology
- Forest management
- Forest management - silviculture
- Forestry (7 respondents)
- History/ fire science
- Landscape architecture
- Recreation and park management

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the various Geographic Areas (GAs) shown below (Figure G2-2).

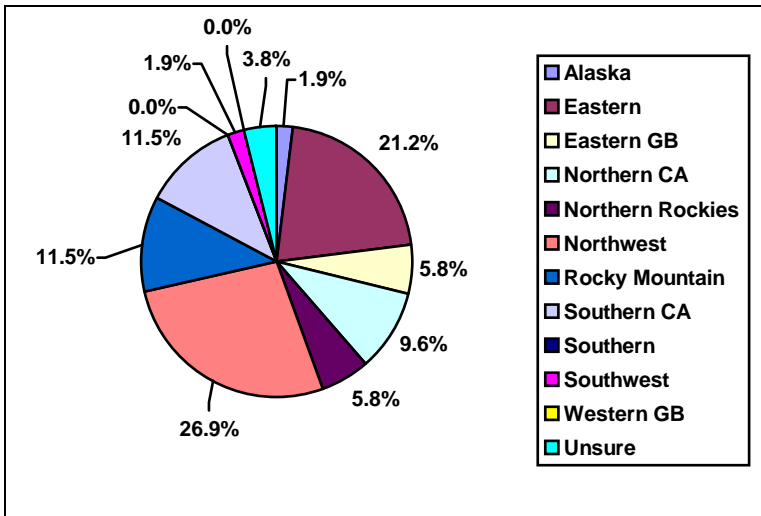


Figure G2-2. GAs—non-federal suppression personnel.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents provided information regarding specific situations when they access or obtain information from Predictive Services. More than half reported accessing Predictive Services during fire season (69.2%), about one-third during a fire incident (36.5%), and one-fourth when a prescribed burn is taking place (25.0%). However, one-fourth of these respondents reported not accessing Predictive Services under any of the aforementioned situations.

Other situations when they access or obtain information from Predictive Services included:

red flag warning situations - forecast

Although I am not familiar with Predictive Services at all, now that I know about it, I expect to use it during fire season, in preparation for controlled burns, and during fire events.

Prior to travel to an incident

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited and which GACC’s services they had used, revealing that a majority had visited/used the National Interagency Coordination Center (NICC—51.9%). The Geographic Area Coordination Center sites from most to least mentioned were the Eastern (23.1%), Northwest (17.3%), Northern Rockies (15.4%), Rocky Mountain (15.4%), Northern California (13.5%), Southern California (11.5%), Southwest (7.7%), Alaska (7.7%), Southern (5.8%), Eastern Great Basin (5.8%), and Western Great Basin (5.8%; responses do not sum to 100% because respondents could select multiple sites). A few (3.8%) were not sure which if any sites

they had visited or GACCs they had used, while about one-fifth (17.3%) indicated they had not visited/used any of the GACCs.

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services' products on the web, the briefings, and the emails. They were more familiar with the web products (*Figure G2-3*, $M=2.7$, $sd=1.2$, $n=50$), and the briefings (i.e., national, geographic, situational, or meteorological, $M=3.0$, $sd=1.5$, $n=49$), than with the emails (these contain current projections and/or information about Predictive Services, $M=2.1$, $sd=1.3$, $n=49$).

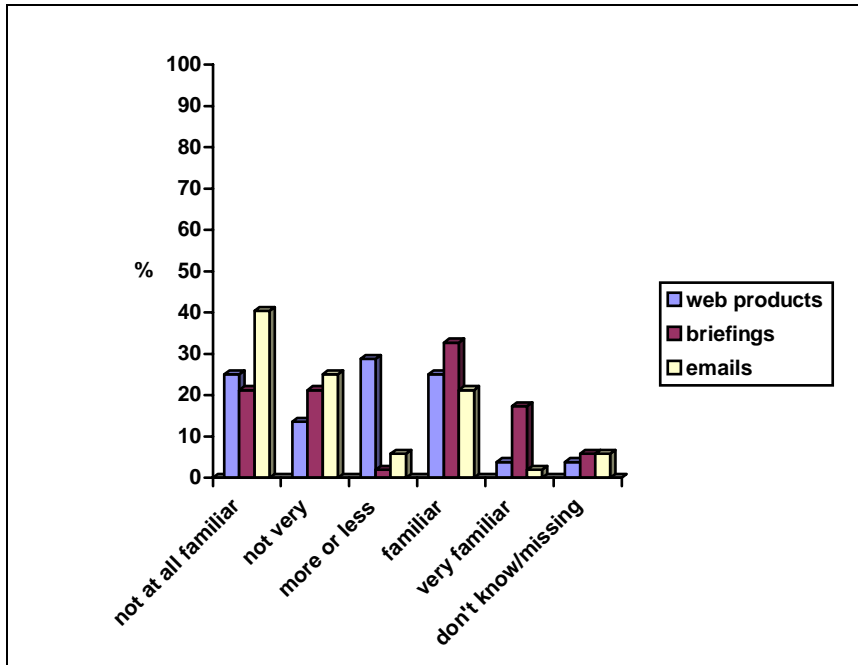


Figure G2-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal suppression personnel.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=4.1$, $sd= .8$, $n=36$, *Figure G2-4*, 19.2% marked 'don't know' and 11.5% did not respond).

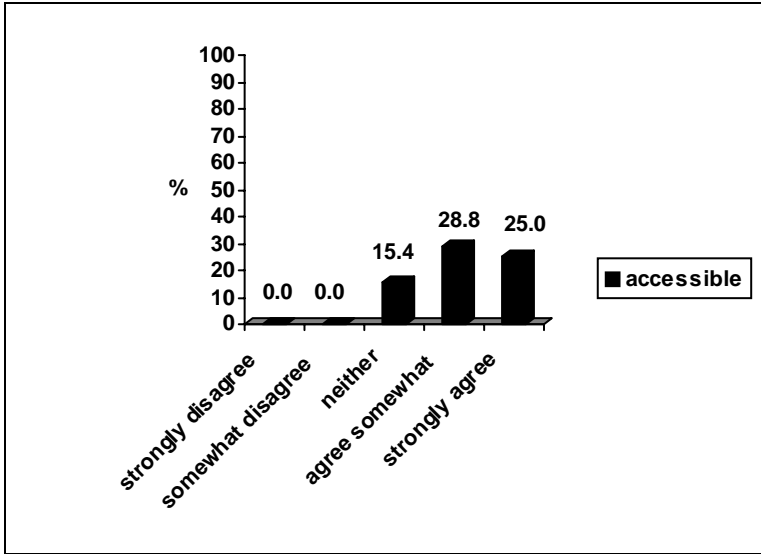


Figure G2-4. Ratings of accessibility of Predictive Services information—non-federal suppression personnel.

A majority agreed that Predictive Services information was timely ($M=4.0$, $sd= .7$, $n=36$, *Figure G2-5*, 19.2% marked 'don't know' and 11.5% did not respond).

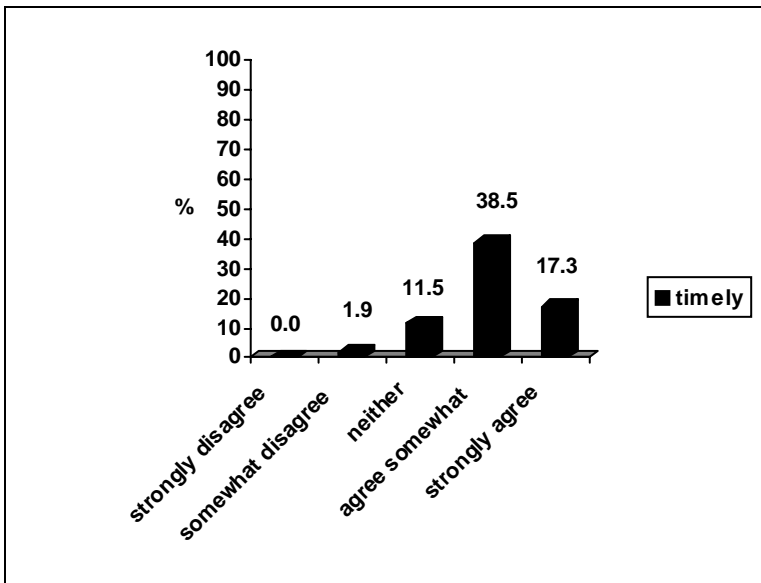


Figure G2-5. Ratings of timeliness of Predictive Services information—non-federal suppression personnel.

A majority agreed that Predictive Services information was relevant ($M=4.1$, $sd= .7$, $n=36$, Figure G2-6, 19.2% marked 'don't know' and 11.5% did not respond).

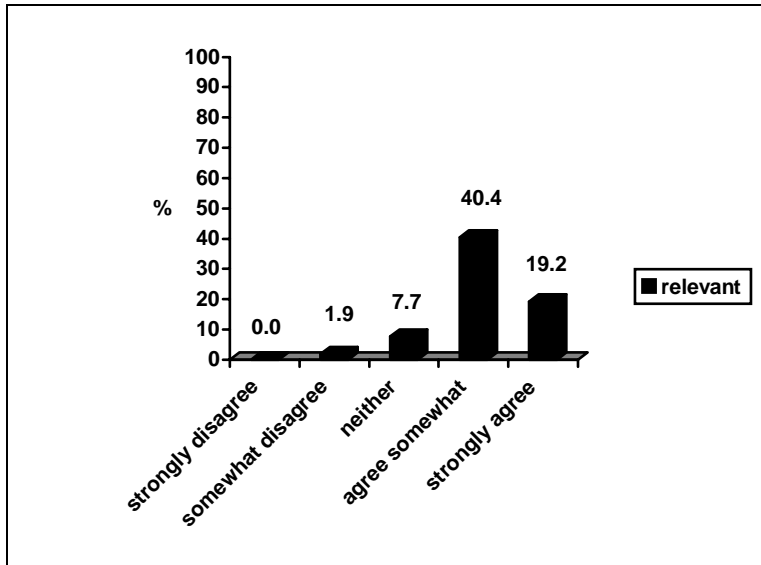


Figure G2-6. Ratings of relevance of Predictive Services information—non-federal suppression personnel.

A majority agreed that Predictive Services information was accurate ($M=3.9$, $sd= .7$, $n=36$, Figure G2-7, 19.2% marked 'don't know' and 11.5% did not respond).

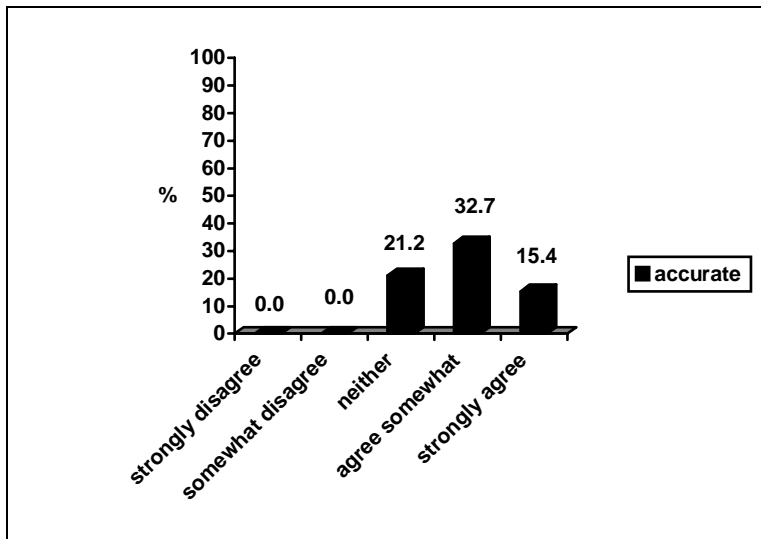


Figure G2-7. Ratings of accuracy of Predictive Services information—non-federal suppression personnel.

A near majority also agreed that Predictive Services information was complete ($M=3.9$, $sd= .7$, $n=36$, *Figure G2-8*, 17.3% marked 'don't know' and 13.5% did not respond).

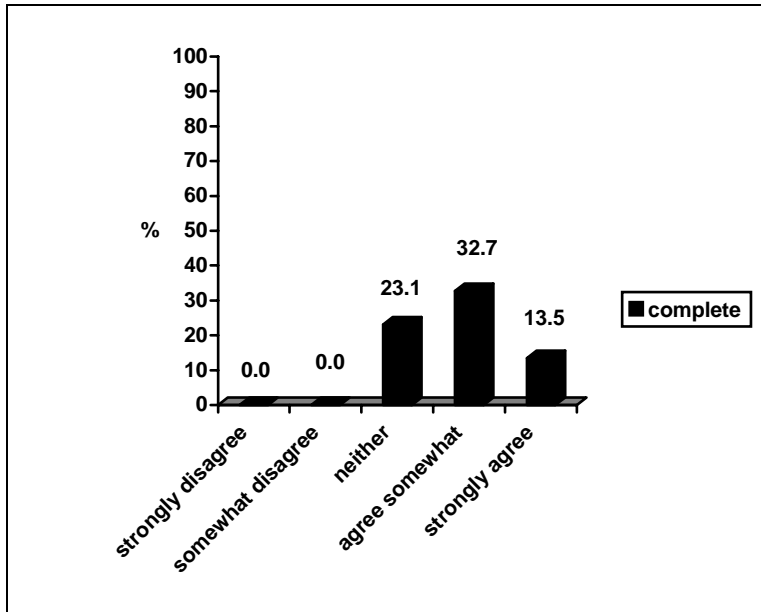


Figure G2-8. Ratings of completeness of Predictive Services information—non-federal suppression personnel.

A majority agreed that Predictive Services information was easy to understand ($M=4.0$, $sd= .8$, $n=36$, *Figure G2-9*, 19.2% marked 'don't know' and 11.5% did not respond).

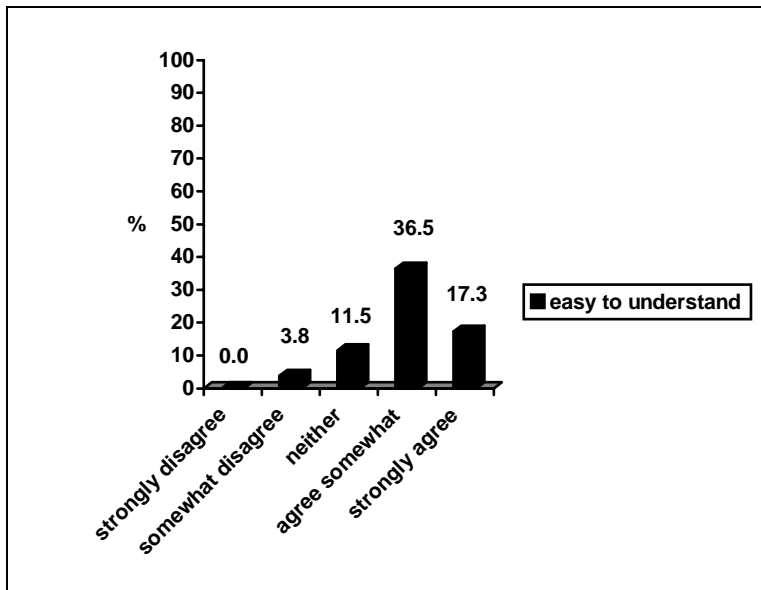


Figure G2-9. Ratings of ease of understanding of Predictive Services information—non-federal suppression personnel.

Satisfaction with Predictive Services contacts—Few respondents (3.8%) had contacted Predictive Services to report a problem with a product or service. One rated Predictive Services as responsive; the other rated them as very responsive.

Overall satisfaction—Responses indicate that Predictive Services had met most expectations ($M=3.0$, $sd= .8$, $n=33$, *Figure G2-10*), and a majority ranged between somewhat satisfied and neither satisfied nor dissatisfied ($M=3.8$, $sd= .9$, $n=40$, *Figure G2-11*).

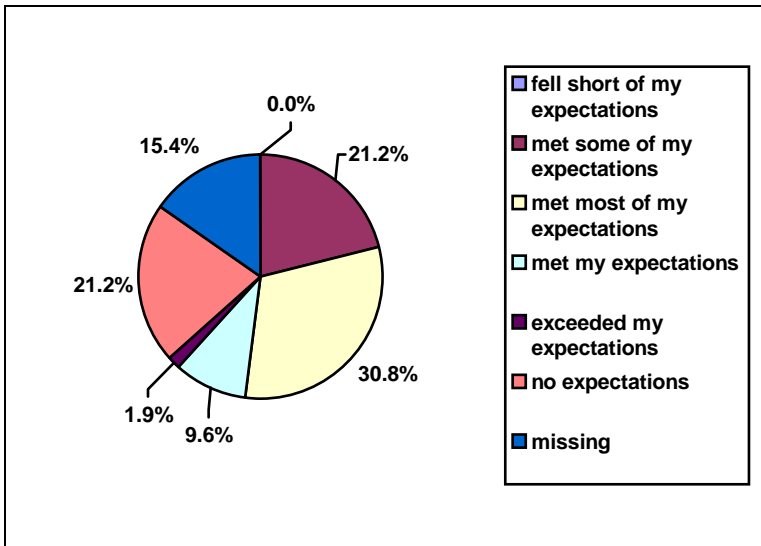


Figure G2-10. Ratings of degree to which Predictive Services met expectations—non-federal suppression personnel.

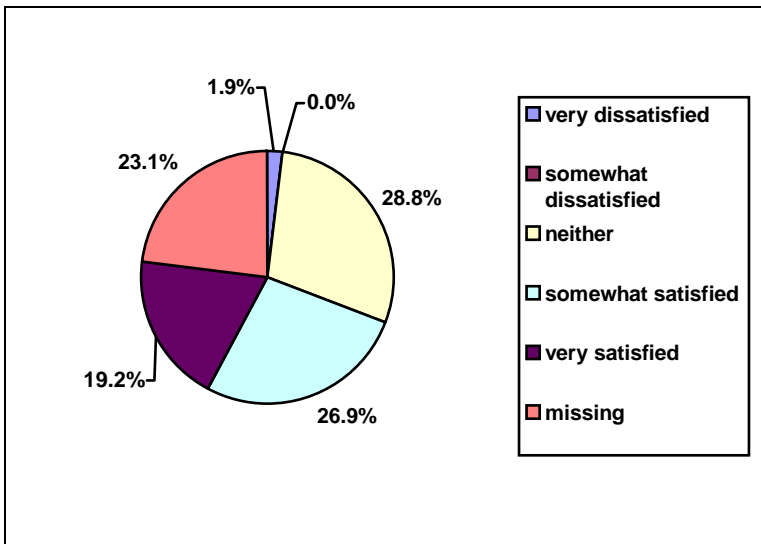


Figure G2-11. Ratings of satisfaction with Predictive Services products and services—non-federal suppression personnel.

Trust and confidence in the information—A majority expressed some, to a great deal of trust and confidence in Predictive Services information (*Figure G2-12*, $M=3.4$, $sd= .9$, $n=42$; 19.2% did not provide a response).

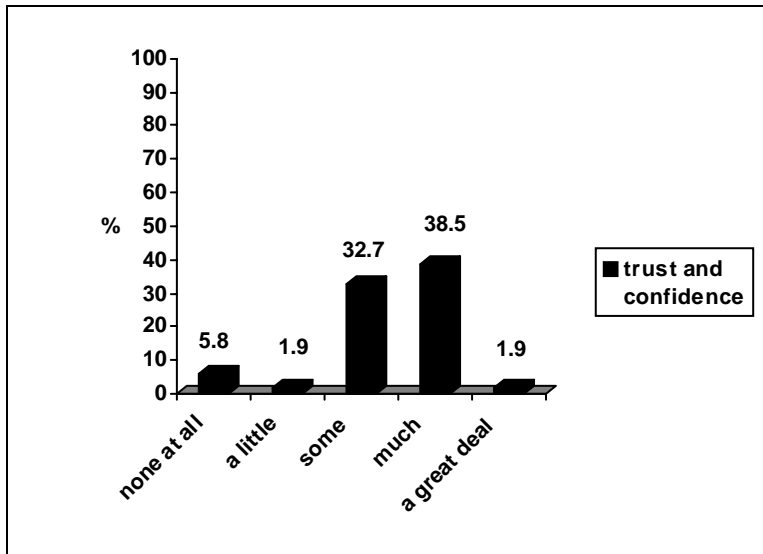


Figure G2-12. Ratings of trust and confidence in Predictive Services information—non-federal suppression personnel.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some, to a great deal) on Predictive Services in making decisions (*Figure G2-13*; 17.3% did not provide an answer).

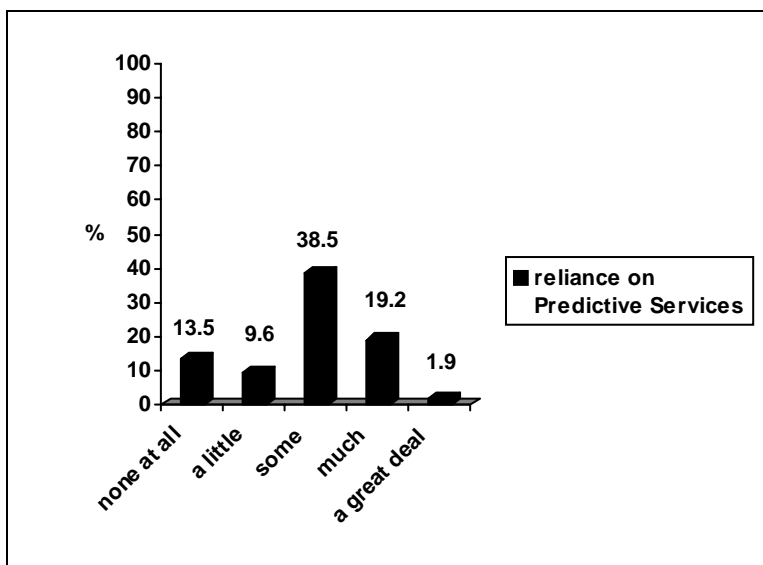


Figure G2-13. Degree of reliance on Predictive Services—non-federal suppression personnel.

About one-tenth (11.5%, *Figure G2-14*) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services.

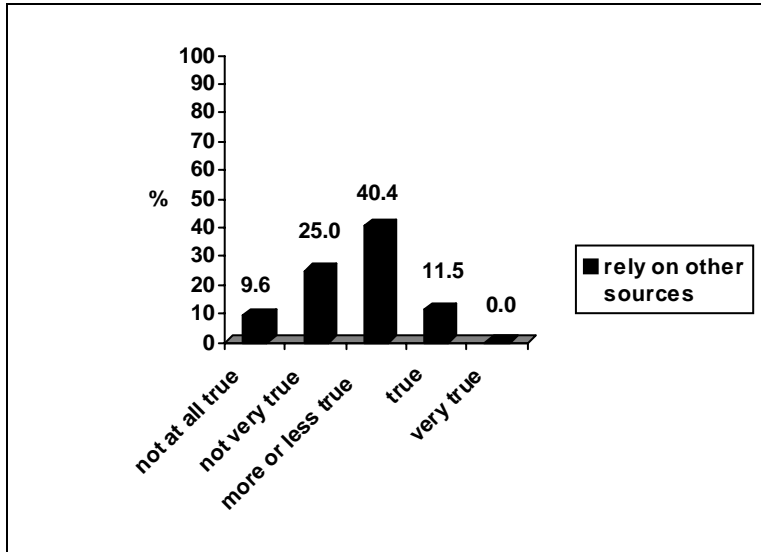


Figure G2-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal suppression personnel.

Those who selected 'true' or 'very true' were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

National Weather Service Fire Weather forecasts

During our spring fire season our internal information is more pertinent, during the western season the Predictive Services info is more useful when assessing off unit fire activity.

NOAA Chicago Weather Office

209 reports , RO 5 intel reports

The likelihood of taking action based on Predictive Services information was examined. About one-third were likely to take action based on Predictive Services information (28.8% chose 'likely' or 'very likely', *Figure G2-15*, 19.2% did not answer this item).

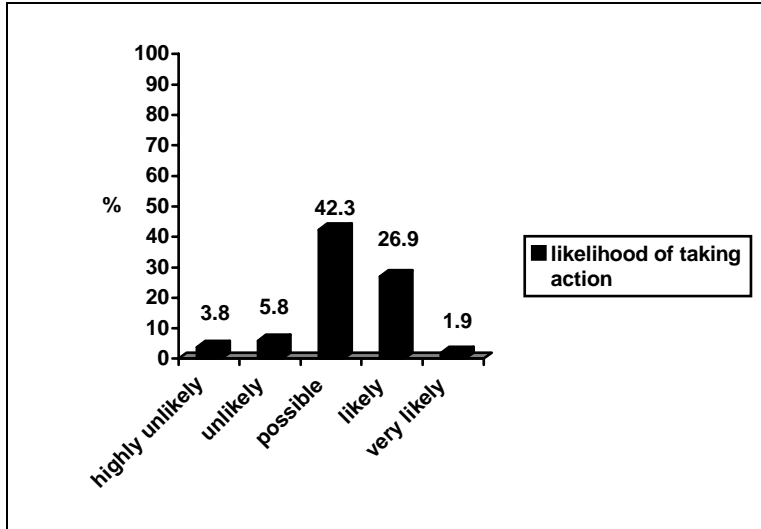


Figure G2-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal suppression personnel.

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). About one-tenth indicated there was no overlap (not at all true, 7.7%), one-fourth chose ‘not very true’ (25.0%), almost half felt it was more or less true (46.2%), and a few felt that it was true (1.9%), or very true (1.9%; 17.3% did not provide a response).

When individuals marked ‘true’ or ‘very true’ they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

By overlapping the information I'm able to get a truer picture of needed info.
State of MN provided information and National Weather Service information

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential barriers (*table G2-1*). The most frequent reasons provided were not having thought about using the products and services, needing information that is site specific, and not being mandated to use the products.

Table G2-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal suppression personnel.

Reason	Percent
I never thought about it.	42.3
My current management practices don't require the types of information provided by Predictive Services	9.6
I need information that is site specific	32.7
I am not mandated to use these products	30.8
I don't have the time to use these products	5.8
I don't know where to get advice about using these products	15.4
I don't know where to get the technology to use these products	5.8
I don't have the technology I need to use these products	7.7
I don't trust the products and services	0
I don't want to use these products	1.9
I don't think these products support my agency's current practices	3.8
Agency directives/guidelines instruct me to use other information	1.9
I don't have the money to use these products	3.8
I don't trust the advice I get about using these products	0
I don't trust information that is generated by multiple agencies	1.9

When asked to explain "I don't want to use these products" the respondent added this comment "I know nothing about your program, surprised I received an email to participate in the survey".

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence "The information and services provided by Predictive Services would be more useful to me if...". The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

- I knew more about them.
- it was updated more often
- I got more acquainted with what is available and where to find it.
- I knew where to get it & what is offered
- It was more site specific.
- A greater degree of localized information was presented in addition to the regional information.
- long range predictions were more frequently updated
- all fire station has internet connections.
- I used it more and learned more about it.
- I had time to fully understand the product and services available.
- I had a better understanding of products produced by Predictive Services
- I could receive the daily weather report before 1015 hrs.
- I had a chance to use them
- I had a full understanding of what they offer.
- I knew more about the service in general, and how to access it.
- other GACCs sent alerts out when conditions warrant or resource shortages/needs present themselves so we are able to spool up for resource needs
- it was more site or region specific.

they keep it the same, it works good for me the way it is
 I knew what it is.
 They were free
 I had better access while on the road.
 I could find more time to invest in using the information provided.
 I knew what they were.
 I had more time to use them. Faster internet connection would also help.
 better access to the web
 As an incident commander I look at all info and options before I make a decision, so I
 don't rely on just one source
 I had better cell phone coverage
 it came to me (e.g. vial email, xml) rather than me going to get it.
 I was more familiar with the program.
 I could get it more site specific
 I've never heard of it, no idea what it is.
 It had more specific detail for Minnesota
 I really needed to use it.
 I could get more site specifics.

Were There Additional Comments?

As is customary in such surveys, open-ended remarks were invited. Comments received from the non-federal crew supervisors and other suppression personnel were as follows:

The UTF list in the intelligence section is a favorite place to go to keep tabs of
 resource needs across the country. Some GACCs do a much better job than
 others in maintaining and updating this bit of intelligence.
 The survey is very simple to use. Great Job!
 I have only used this for one season and I need to use it more to get a better feel
 for the service
 Keep up the good work. We are really looking forward to new technology. Too bad it
 is difficult to take time to use this service.
 I am not familiar with Predictive Services and my answers reflect this.
 I have used predictive services but very little and it has been some time since.
 Thanks for the opportunity to comment. I use predictive services as another 'tool' in
 my toolbox to help me make informed decisions.
 I only use a small portion of the information that is available. I have to meet work
 goals in my primary job before I can have freedom to travel to out of state fire
 assignments.
 Very interesting survey, I hope the info gets used to help to protect our fire fighting
 resources
 I am very pleased with the services provided.

Appendix G3: Administrators and Supervisors—Non-Federal Respondents

Administrators and supervisors were grouped into one category ($n=34$). These respondents came from state agencies (76.5%) and other agency types (23.5%).

Who Were the Non-Federal Administrators and Supervisors?

The majority was male (82.4%).

Educational background / degree or equivalent—Educational attainment was high among the majority in this subgroup, with about three-fourths (76.4%) completing at least a bachelor's degree or equivalent (*Figure G3-1*).

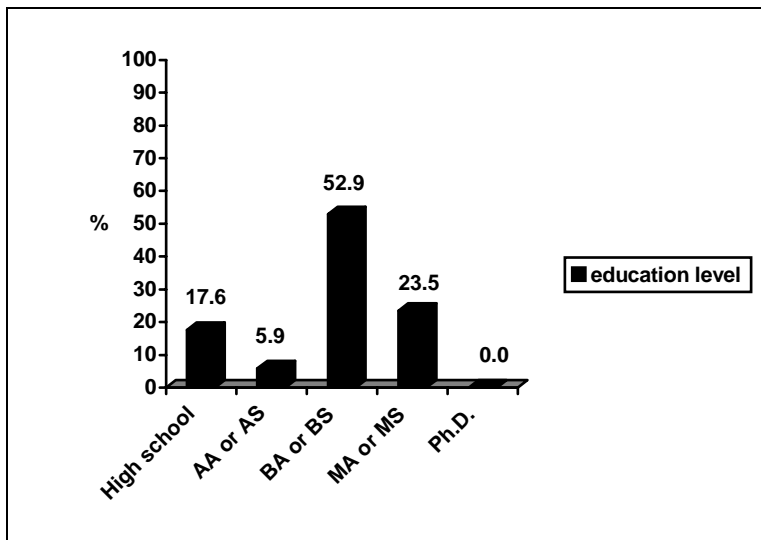


Figure G3-1. Educational attainment—non-federal administrators and supervisors.

Respondents reported degrees in the following subjects:

- Admin. of justice/ management
- Biology (2 respondents)
- Emergency disaster preparedness & broadcast journalism
- Fire protection administration
- Fire service management
- Forest management (5 respondents)
- Forestry (5 respondents)
- Forest sciences
- Physical education, certificate in forestry
- Public administration

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the various Geographic Areas (GAs) shown below (*Figure G3-2*).

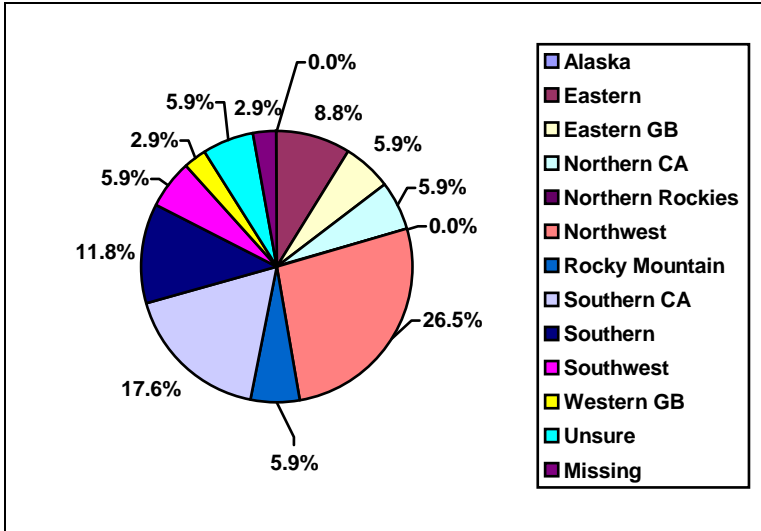


Figure G3-2. GAs—non-federal administrators and supervisors.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents provided information regarding specific situations when they access or obtain information from Predictive Services. A majority reported accessing Predictive Services during fire season (70.6%), and half during a fire incident (50.0%). Another fourth (23.5%) accessed information when a prescribed burn was taking place. However, one-fourth (23.5%) did not access the services for any of the prior reasons listed. Other situations when they access or obtain information from Predictive Services included:

- Pre Season (3 respondents)
- Post incident evaluation and public fire education
- multiple fire sieges

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited and GACC services they had used, revealing that more than a third had visited/used the National Interagency Coordination Center (NICC—41.2%). The Geographic Area Coordination Center sites from most to least mentioned were the Northwest (20.6%), Southern California (20.6%), Northern California (11.8%), Southwest (11.8%), Eastern (11.8%), Northern Rockies (5.9%), Rocky Mountain (5.9%), Southern (5.9%), Eastern Great Basin (2.9%), and Western Great Basin (2.9%; responses do not sum to 100% because respondents could select multiple sites; no respondents had visited the Alaska site). A few (8.8%) were not sure which if any sites they had visited or GACCs used, while about one-tenth (11.8%) indicated they had not visited any of the listed sites.

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services' products on the web, the briefings, and the emails. They were more familiar with the web products (*Figure G3-3*, $M=3.2$, $sd=1.2$, $n=31$), and the briefings (i.e., national, geographic, situational, or meteorological, $M=3.3$, $sd=1.4$, $n=31$), than with the emails (these contain current projections and/or information about Predictive Services, $M=2.7$, $sd=1.4$, $n=31$).

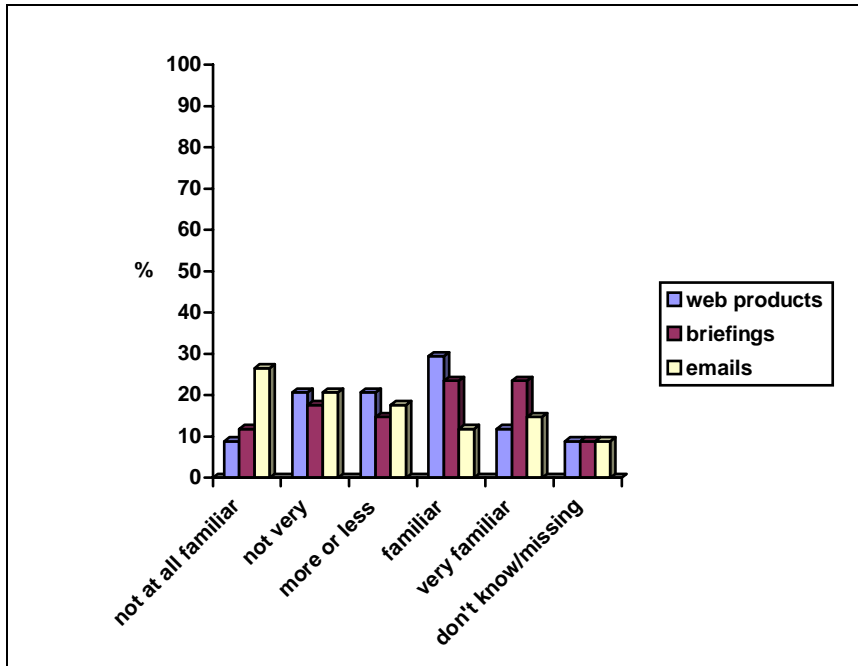


Figure G3-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal administrators and supervisors.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=4.1$, $sd= .8$, $n=26$, *Figure G3-4*, 17.6% marked 'don't know' and 5.9% did not respond).

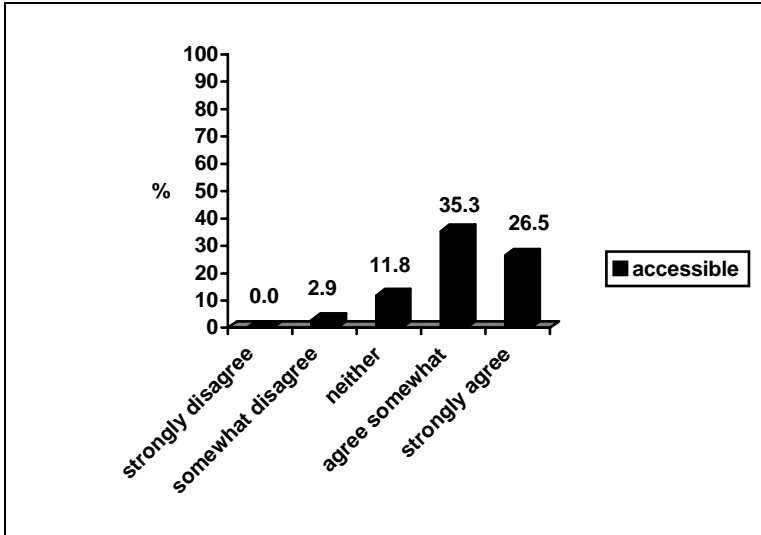


Figure G3-4. Ratings of accessibility of Predictive Services information—non-federal administrators and supervisors.

A majority agreed that Predictive Services information was timely ($M=4.2$, $sd= .9$, $n=26$, *Figure G3-5*, 17.6% marked 'don't know' and 5.9% did not respond).

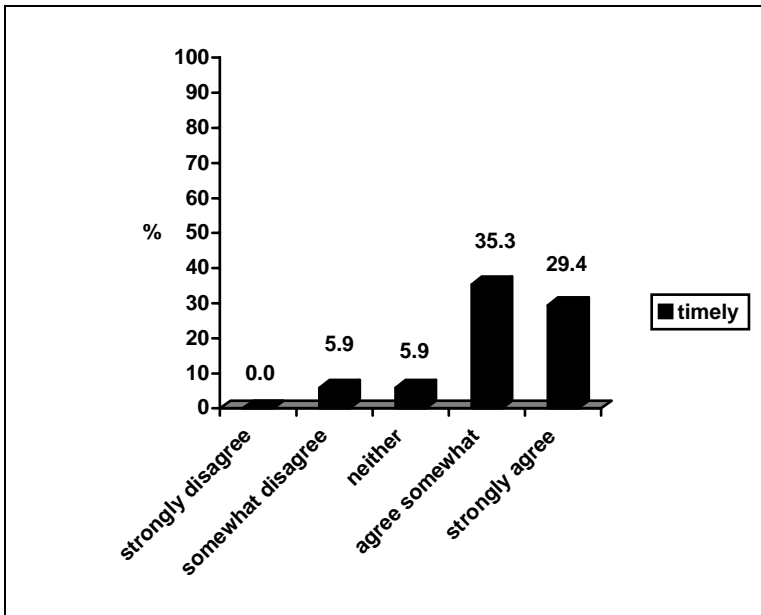


Figure G3-5. Ratings of timeliness of Predictive Services information—non-federal administrators and supervisors.

A majority agreed that Predictive Services information was relevant ($M=4.2$, $sd=1.0$, $n=26$, Figure G3-6, 17.6% marked 'don't know' and 5.9% did not respond).

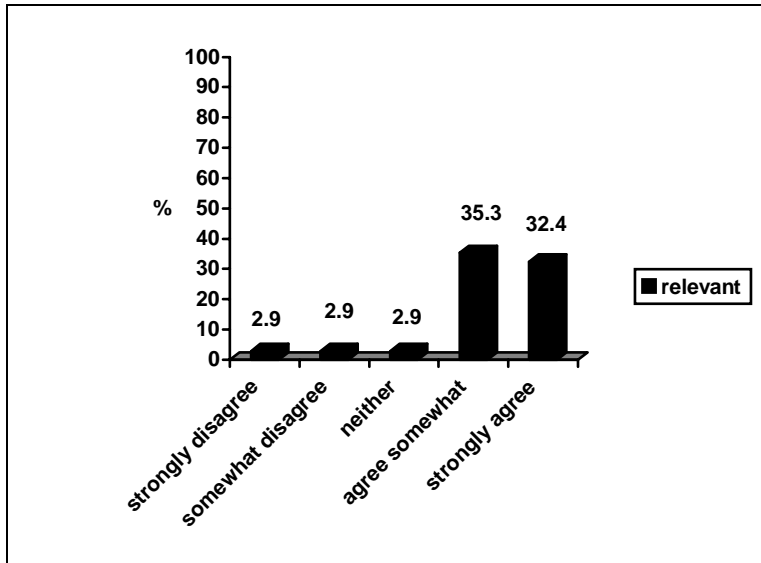


Figure G3-6. Ratings of relevance of Predictive Services information—non-federal administrators and supervisors.

The majority agreed that Predictive Services information was accurate ($M=3.9$, $sd=1.0$, $n=25$, Figure G3-7, 20.6% marked 'don't know' and 5.9% did not respond).

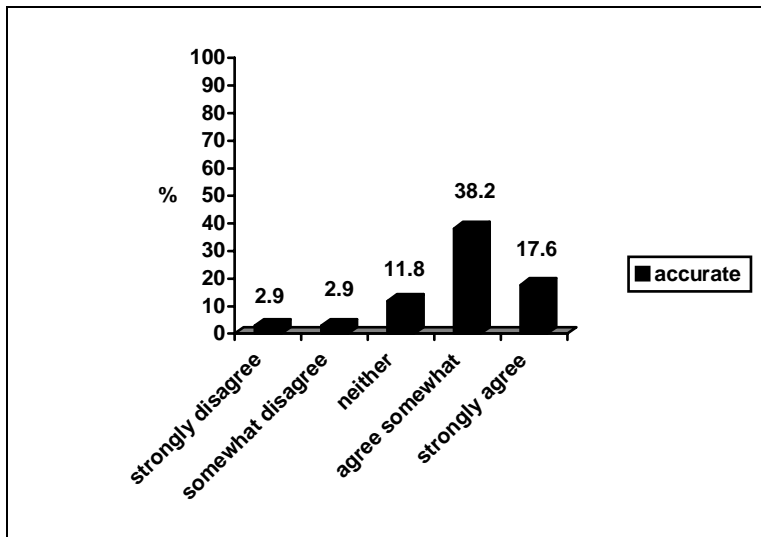


Figure G3-7. Ratings of accuracy of Predictive Services information—non-federal administrators and supervisors.

A majority also agreed that Predictive Services information was complete ($M=4.0$, $sd=1.1$, $n=26$, *Figure G3-8*, 17.6% marked 'don't know' and 5.9% did not respond).

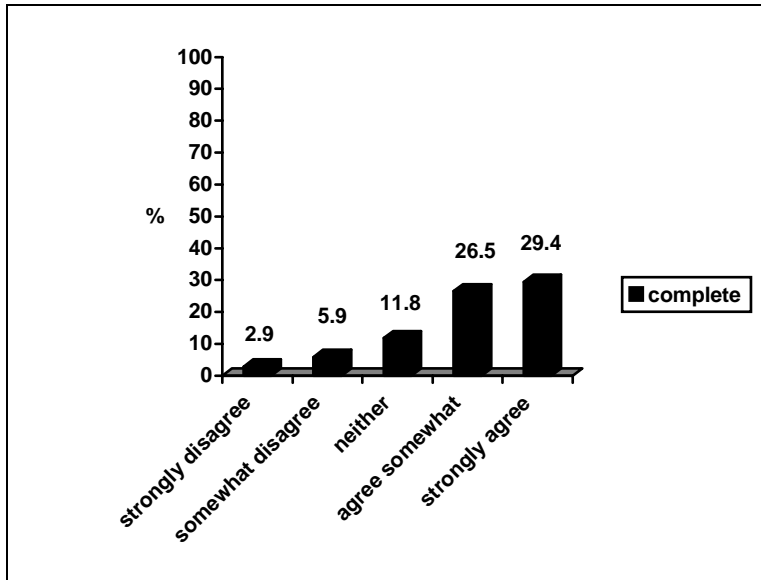


Figure G3-8. Ratings of completeness of Predictive Services information—non-federal administrators and supervisors.

A majority agreed that Predictive Services information was easy to understand ($M=4.0$, $sd= .9$, $n=26$, *Figure G3-9*, 17.6% marked 'don't know' and 5.9% did not respond).

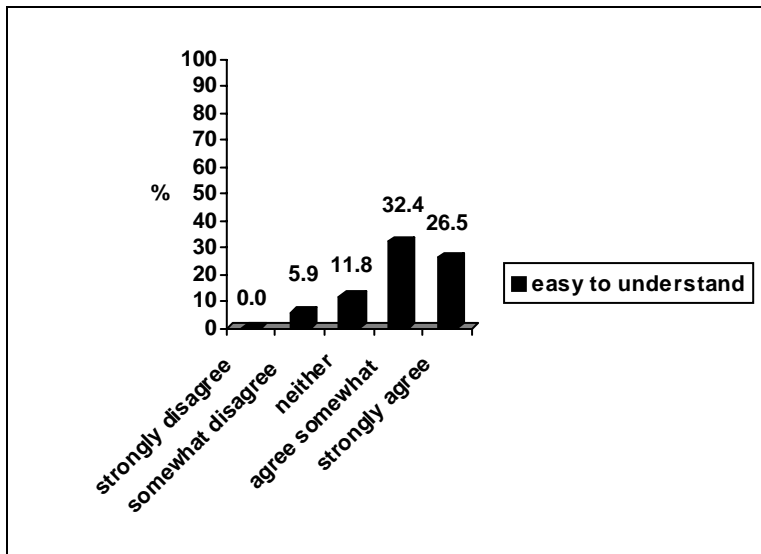


Figure G3-9. Ratings of ease of understanding of Predictive Services information—non-federal administrators and supervisors.

Satisfaction with Predictive Services Contacts—Few respondents (11.8%) had contacted Predictive Services to report a problem with a product or service. These four individuals rated Predictive Services as responsive (50.0%), or very responsive (50.0%).

Overall satisfaction—Responses indicate that Predictive Services had met most expectations ($M=3.3$, $sd=1.0$, $n=23$, *Figure G3-10*) and respondents were somewhat satisfied, to very satisfied ($M=3.9$, $sd= .8$, $n=26$, *Figure G3-11*).

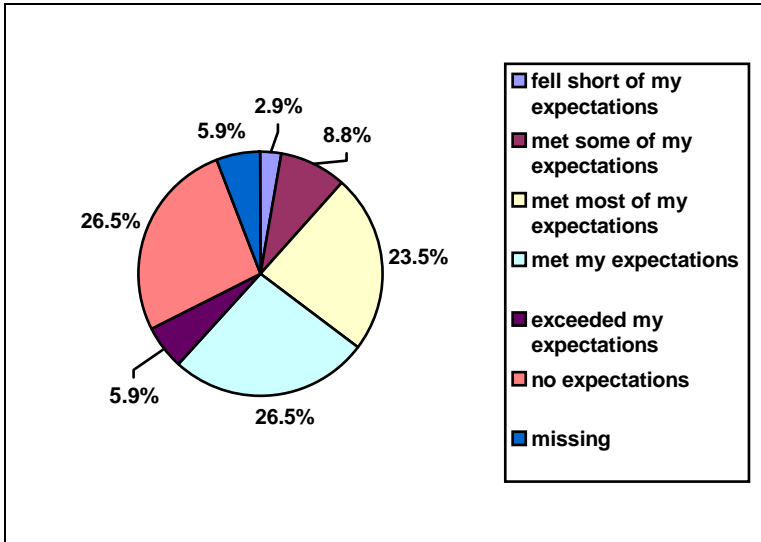


Figure G3-10. Ratings of degree to which Predictive Services met expectations—non-federal administrators and supervisors.

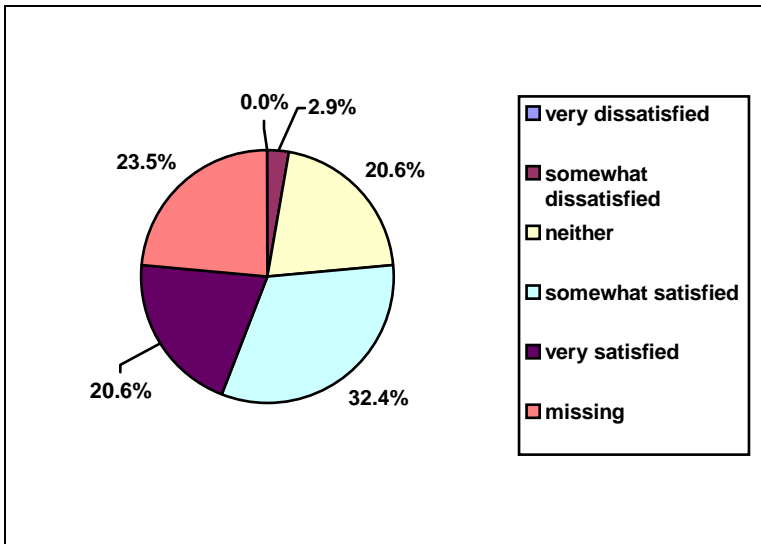


Figure G3-11. Ratings of satisfaction with Predictive Services products and services—non-federal administrators and supervisors.

Trust and confidence in the information—A majority expressed some, to a great deal of trust and confidence in Predictive Services information (*Figure G3-12*, $M=3.4$, $sd= .9$, $n=32$; 5.9% did not provide a response).

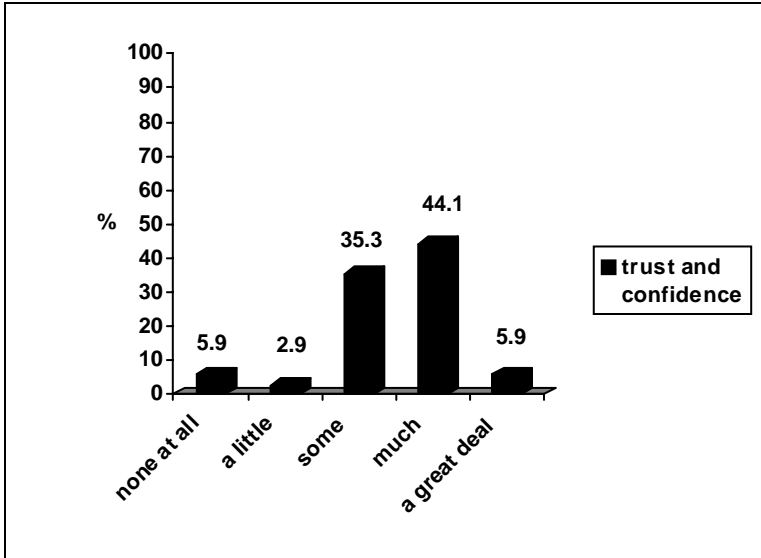


Figure G3-12. Ratings of trust and confidence in Predictive Services information—non-federal administrators and supervisors.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some, to a great deal) on Predictive Services in making decisions (*Figure G3-13*; 5.9% did not provide an answer).

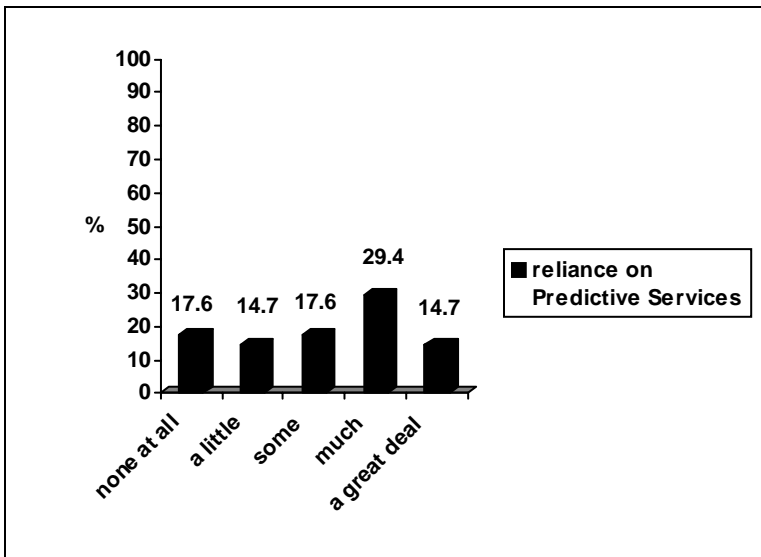


Figure G3-13. Degree of reliance on Predictive Services—non-federal administrators and supervisors.

About one-fifth (20.6%, *Figure G3-14*) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services (chose a 4 or 5, where 5=very true; 17.6% did not provide a response).

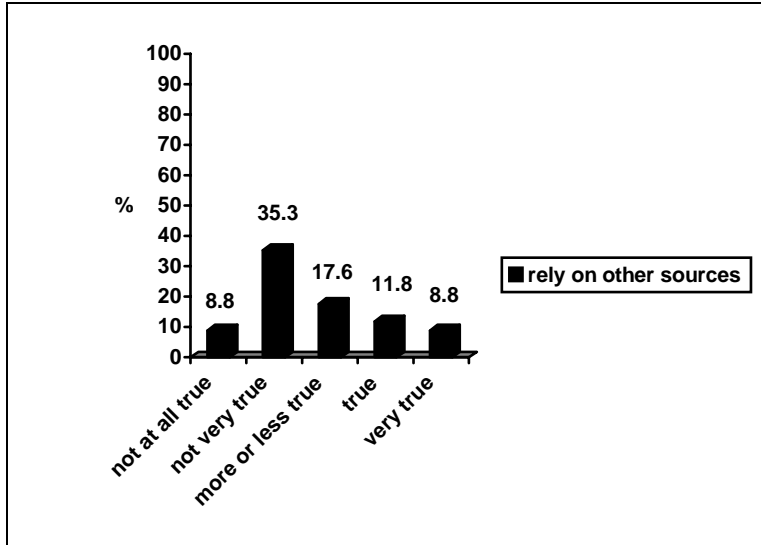


Figure G3-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal administrators and supervisors.

Those who selected 'true' or 'very true' were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

MN DNR Wildfire Information Center webpage.

I look at NWS fire-weather forecasts. National predictive maps are usually useless to me as I'm somewhat color blind and they don't appear at a resolution that allows me to see local detail.

City Fire briefing and after incidents SDFRN (San Diego Fire Recovery Network)

Internal information, staff specialists

National Weather Service; ROMAN; Western Region Climate Center

In house intel, some of which is obtained from PS.

Our own weather folks

Use ODF Resources.

The likelihood of taking action based on Predictive Services information was examined. Half were likely to take action based on Predictive Services information (50.0% chose 'likely' or 'very likely', *Figure G3-15*, 5.9% did not answer this item).

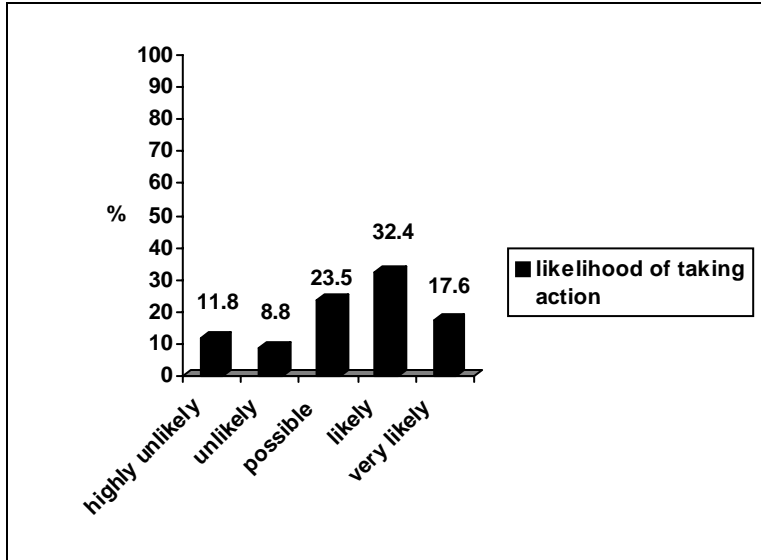


Figure G3-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal administrators and supervisors.

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). One person indicated there was no overlap (not at all true, 2.9%), about one-third chose ‘not very true’ (35.3%), about one third felt it was more or less true (32.4%), and a few felt that it was true (11.8%), or very true (2.9%; 14.7% did not provide a response).

When individuals marked ‘true’ or ‘very true’ they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

From the MN DNR Wildfire Information Center.
 NWS, etc, but GACC info has it all in one place and is more comprehensive
 Internal and External -However, I think that is a good thing
 National Weather Service, News paper, TV Weather Channel
 My agency doesn't use products.

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential barriers (*table G3-1*). The most frequent reasons provided were not having thought about using the products and services, needing information that is site specific, and not being mandated to use the products. The one individual who indicated they did not want to use the products felt they were not applicable to their setting (a museum).

Table G3-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal administrators and supervisors.

Reason	Percent
I never thought about it.	38.2
My current management practices don't require the types of information provided by Predictive Services	5.9
I need information that is site specific	32.4
I am not mandated to use these products	26.5
I don't have the time to use these products	5.9
I don't know where to get advice about using these products	5.9
I don't know where to get the technology to use these products	2.9
I don't have the technology I need to use these products	5.9
I don't trust the products and services	0
I don't want to use these products	2.9
I don't think these products support my agency's current practices	0
Agency directives/guidelines instruct me to use other information	2.9
I don't have the money to use these products	2.9
I don't trust the advice I get about using these products	0
I don't trust information that is generated by multiple agencies	0

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence “The information and services provided by Predictive Services would be more useful to me if...”. The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

- They included more for the local units.
- Weather could be predicted with 100% accuracy!
- I cannot think of anything you could do to make it better, as we just love it, and rely on the information.
- Centrally located so the user would only have one location to get all the information they needed
- information was succinct and easily accessible
- There is easier and more direct access to products.
- If they provided more detail about the south, which seems neglected.
- I had time to check it out more often
- less complex
- my organization utilized it or put value in it or mandated using it.
- I regularly reviewed the products.
- refined the scale. had understanding, acceptance and support from the interagency community.
- Maintained and updated year round.
- the products had better spatial definition.
- remotely available such as on PDA and Blackberry browser accessible
- there were daily updates, especially on good fire days. On the other hand, I know I can call [name removed] and get better info, if I need it.
- If website was cleaner.
- I knew what it was.

an e-mailed link arrived when high fire conditions were imminent or significantly changed in my region.
 it more accurately made predictions climate zones or smaller areas. Too large of an area is currently used and many times is not applicable to the area.
 I had more time to read and review them.
 additional weather sites in the state were utilized in developing the information.
 I knew more about this service. (I am answering this survey but I am unfamiliar with the service as I am not a fire professional).
 The State system utilized it to a greater degree.
 I had more knowledge of the program
 it wasn't geared towards fire management so much, but rather more general in nature.

Were There Additional Comments?

As is customary in surveys, we offered the opportunity for our respondents in the non-federal sector to tell us if they had any additional comments about Predictive Services that were not covered above or any comments about the survey. In no particular order, here are their responses:

I have never heard of National Predictive Services
 Having these experts concentrating on parameters that pertain to wildland fire is essential to my Agency's operations.
 Keep up the diligence, and hard work.
 I occasionally use this information informally to generate information for our website, but I am not a fire manager or suppression expert.
 Thanks for the opportunity to comment
 It would have been nice to know what is the intent of the survey?
 The survey lumps all products together. Some products are appropriate to my decision needs; other products are not focused on my needs. The questions tend to ask that I 'average' the information about all products. Is the survey designed to support the existence of Predictive Services or to identify areas where service can be improved?
 Who are you?
 Very helpful, friendly staff
 This survey was not actually relevant to what our museum does.
 I have always enjoyed the staff and products produced
 Have used NWCC email address as that is the GACC that should be contacted in the Future. This agency has it's only analytical staff.
 The information provided by the predictive services unit has been a valuable asset to our program and in the decision making process during fire season. Very much appreciate the effort and responsiveness of the predictive services personnel.
 Will contact some USFS counter-parts and obtain more information.

Appendix G4: Fire Behavior/Long-Term Analyst in Incident Support— Non-Federal Respondents

Fire behavior analysts and long term analysts in incident support (FBANs/LTANs) were grouped into one category ($n=32$). These respondents came from state agencies (59.4%), consulting firms (18.8%), county agencies (6.3%), and other agency types (15.6%).

Who Were the FBAN/LTAN Non-Federal Respondents?

The majority was male (93.8%).

Educational background / degree or equivalent—Educational attainment was high, with three-fourths (75.1%) completing at least a bachelor's degree or equivalent (*Figure G4-1*).

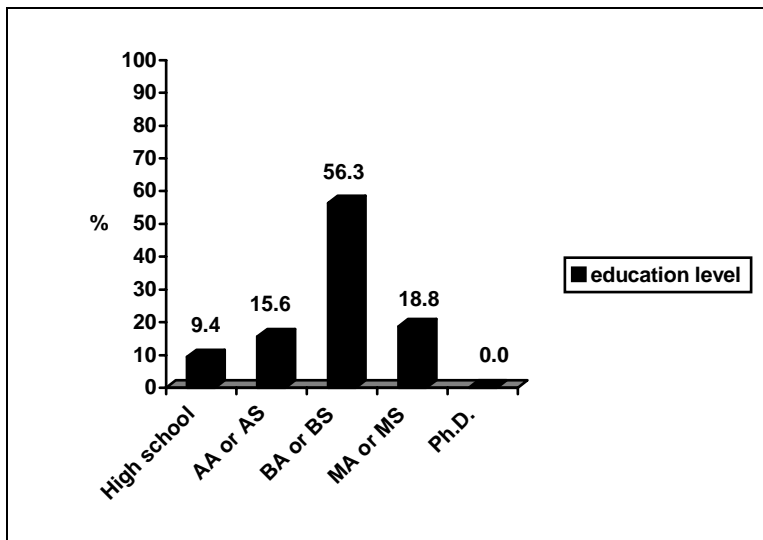


Figure G4-1. Educational attainment—non-federal FBANs/LTANs.

Respondents reported degrees in the following subjects:

- Fine arts
- Fire management
- Forest management (4 respondents)
- Forest management technology
- Forest science
- Forestry (3 respondents)
- Forestry/fire sciences
- Forestry and business
- Geology

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the various Geographic Areas (GAs) shown below (*Figure G4-2*).

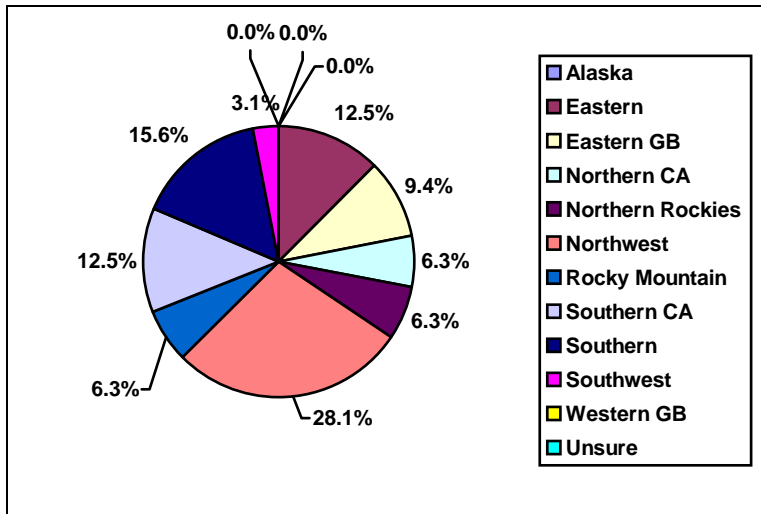


Figure G4-2. GAs—non-federal FBANs/LTANs.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents indicated specific situations when they access or obtain information from Predictive Services. The majority reported accessing Predictive Services during fire season (93.8%), during a fire incident (84.4%), and when a prescribed burn is taking place (37.5%). Other situations when they access or obtain information from Predictive Services included:

- Operations Duty
- seasonal assessments; training materials
- Regional meeting in Shephardstown
- to keep track of trends or changes in other GACC's that I may go to for an incident

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited, or GACC services they had used, revealing that a majority had visited the site/used the services of the National Interagency Coordination Center (NICC—53.1%). The Geographic Area Coordination Center sites from most to least mentioned were the Northwest (53.1%), Southwest (46.9%), Southern (46.9%), Northern Rockies (40.6%), Northern California (31.3%), Rocky Mountain (28.1%), Eastern Great Basin (28.1%), Southern California (25.0%), Eastern (25.0%), Western Great Basin (21.9%), and Alaska (15.6%; responses do not sum to 100% because respondents could select multiple sites). A few (3.1%) were not sure which if any sites they had visited/GACC services they had used.

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services' products on the web, the briefings, and the emails. They were more familiar with the web products (*Figure G4-3*, $M=3.8$, $sd=1.0$, $n=32$), and the briefings (i.e., national, geographic, situational, or meteorological, $M=3.8$, $sd=1.1$, $n=32$), than with the emails (these contain current projections and/or information about Predictive Services, $M=2.7$, $sd=1.3$, $n=32$).

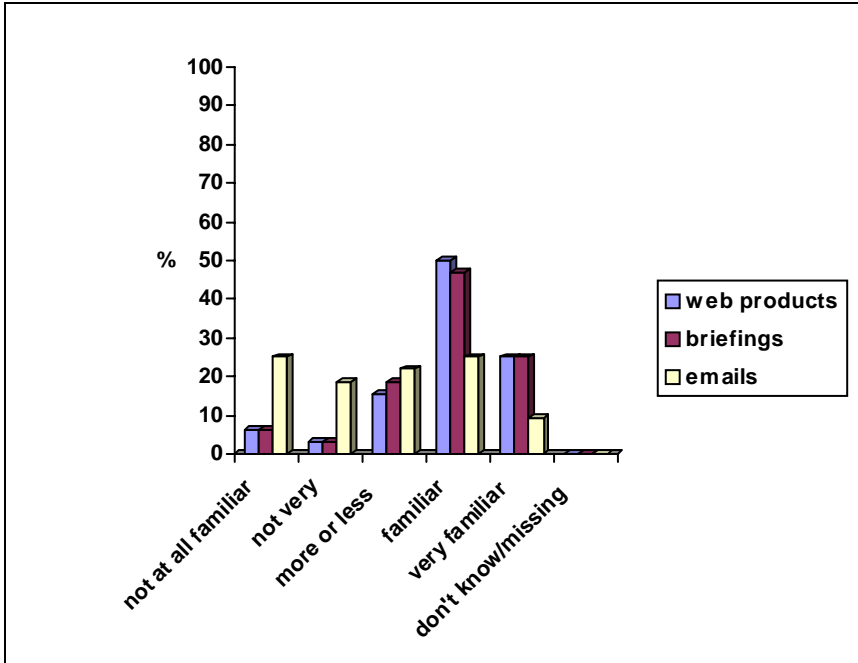


Figure G4-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal FBANs/LTANs.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=4.1$, $sd= .8$, $n=28$, *Figure G4-4*, 9.4% marked ‘don’t know’ and 3.1% did not respond).

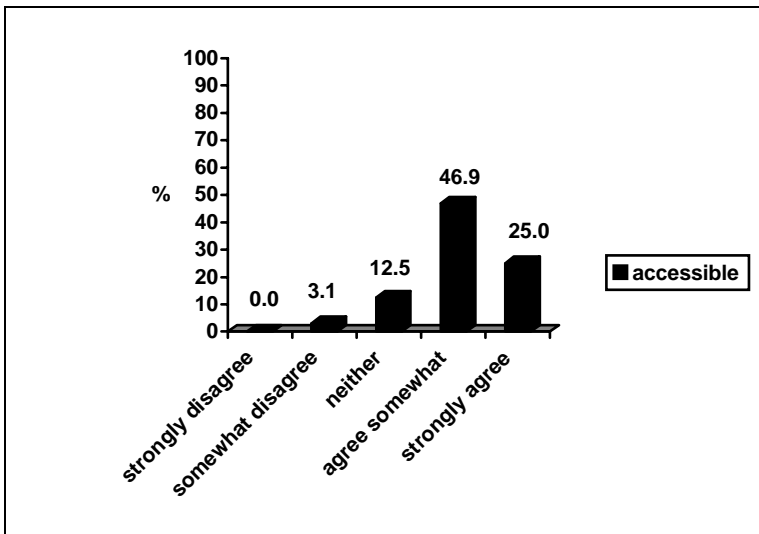


Figure G4-4. Ratings of accessibility of Predictive Services information—non-federal FBANs/LTANs.

A majority agreed that Predictive Services information was timely ($M=3.8$, $sd= .9$, $n=28$, Figure G4-5, 9.4% marked 'don't know' and 3.1% did not respond).

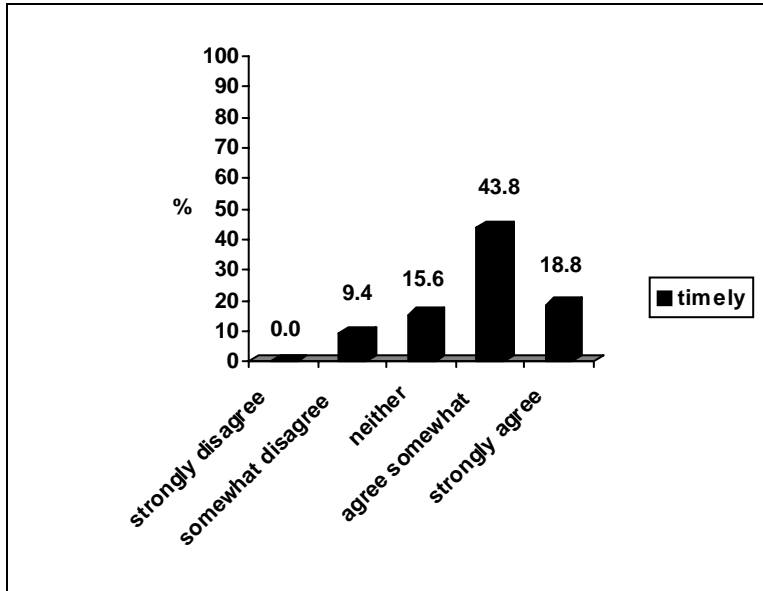


Figure G4-5. Ratings of timeliness of Predictive Services information—non-federal FBANs/LTANs.

A majority agreed that Predictive Services information was relevant ($M=4.2$, $sd= .5$, $n=27$, Figure G4-6, 9.4% marked 'don't know' and 6.3% did not respond).

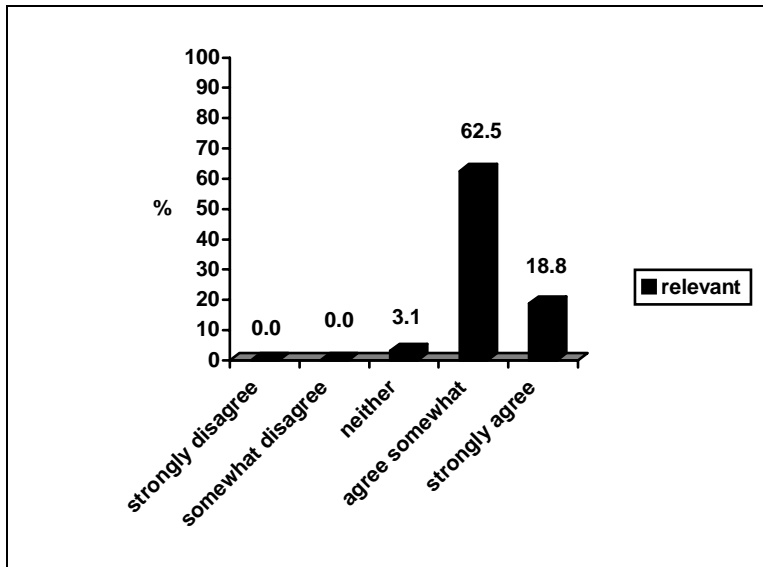


Figure G4-6. Ratings of relevance of Predictive Services information—non-federal FBANs/LTANs.

The majority agreed that Predictive Services information was accurate ($M=4.0$, $sd= .7$, $n=27$, *Figure G4-7*, 12.5% marked 'don't know' and 3.1% did not respond).

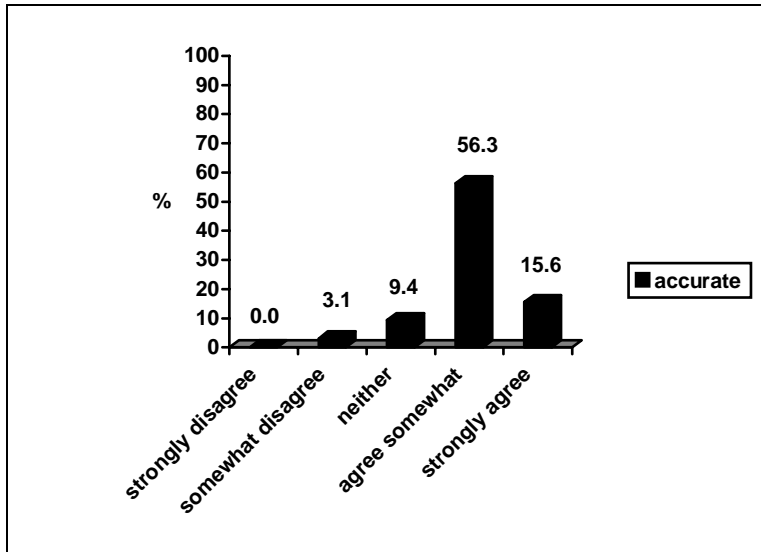


Figure G4-7. Ratings of accuracy of Predictive Services information—non-federal FBANs/LTANs.

A majority also agreed that Predictive Services information was complete ($M=3.8$, $sd= .8$, $n=27$, *Figure G4-8*, 12.5% marked 'don't know' and 3.1% did not respond).

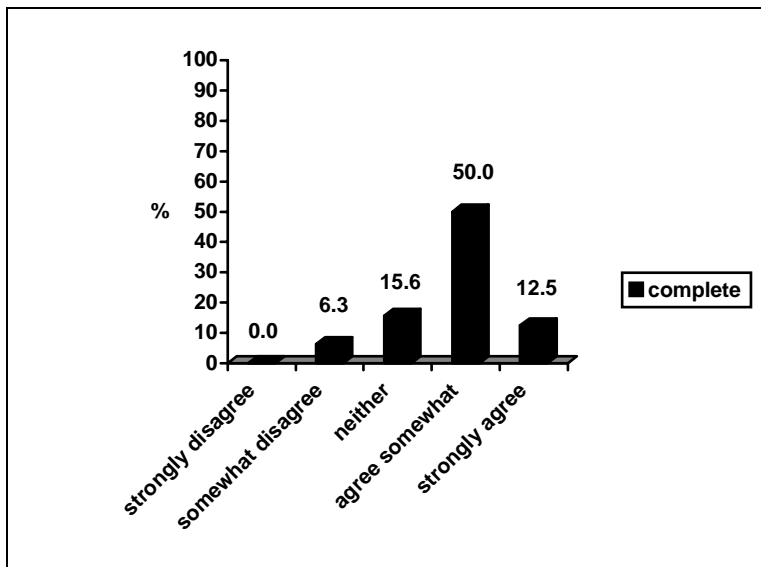


Figure G4-8. Ratings of completeness of Predictive Services information—non-federal FBANs/LTANs.

A majority agreed that Predictive Services information was easy to understand ($M=3.8$, $sd= .8$, $n=28$, *Figure G4-9*, 9.4% marked 'don't know' and 3.1% did not respond).

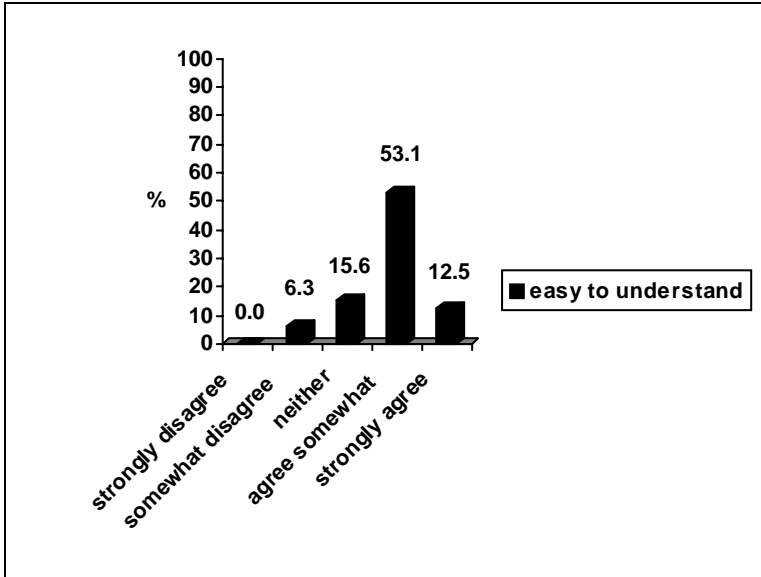


Figure G4-9. Ratings of ease of understanding of Predictive Services information—non-federal FBANs/LTANs.

Satisfaction with Predictive Services contacts—About one-third of these respondents (31.3%) had contacted Predictive Services to report a problem with a product or service. One respondent indicated they were not very responsive, another four (40% of this group) felt they were more or less responsive, three rated them as responsive, and two (20% of this group) rated them as very responsive.

Overall satisfaction—Responses indicate that Predictive Services had met most expectations ($M=3.0$, $sd= .7$, $n=28$, *Figure G4-10*), and respondents were somewhat satisfied ($M=3.9$, $sd= .7$, $n=31$, *Figure G4-11*).

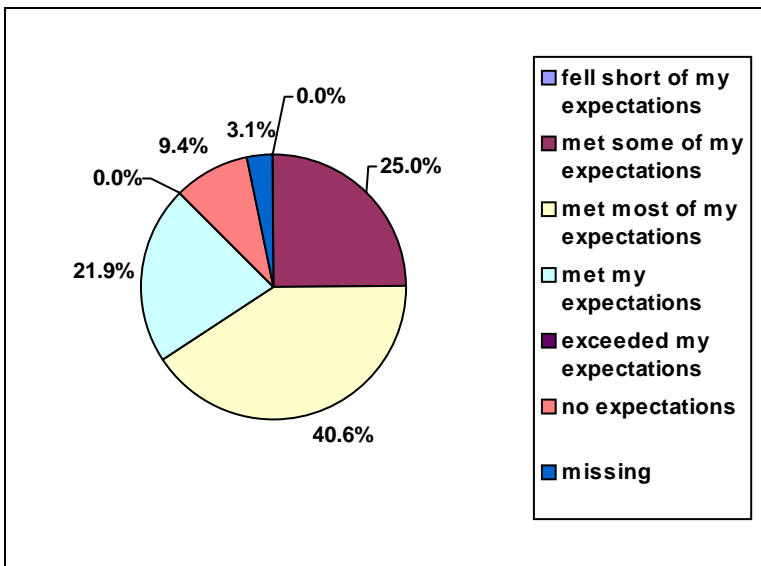


Figure G4-10. Ratings of degree to which Predictive Services met expectations—non-federal FBANs/LTANs.

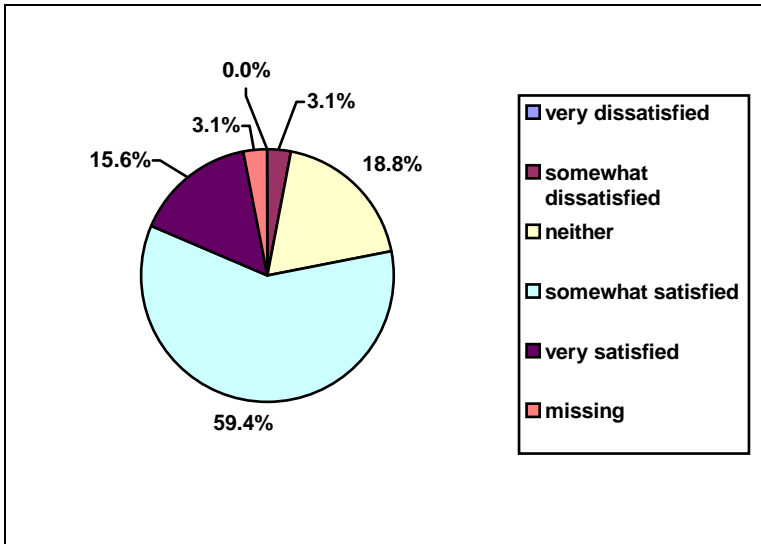


Figure G4-11. Ratings of satisfaction with Predictive Services products and services—non-federal FBANs/LTANs.

Trust and confidence in the information—A majority expressed much, to a great deal of trust and confidence in Predictive Services information (*Figure G4-12*, $M=3.5$, $sd= .9$, $n=31$; 3.1% did not provide a response).

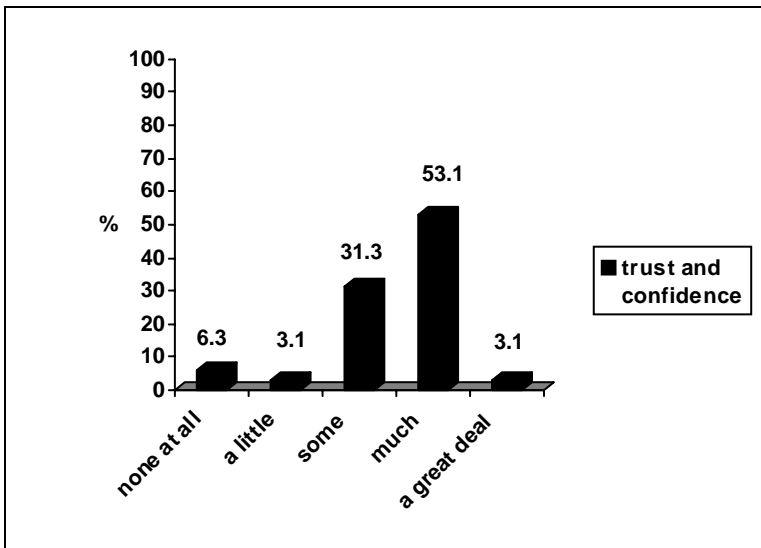


Figure G4-12. Ratings of trust and confidence in Predictive Services information—non-federal FBANs/LTANs.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some, to a great deal) on Predictive Services in making decisions (*Figure G4-13*; 3.1% did not provide an answer).

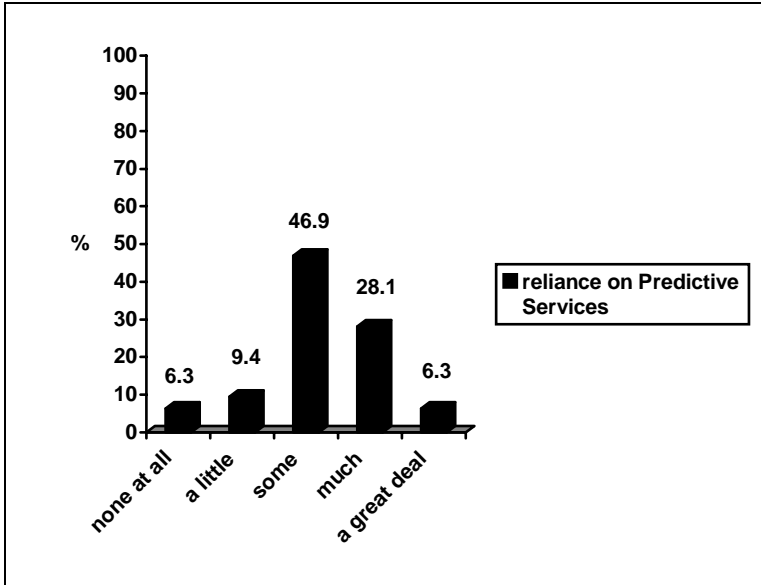


Figure G4-13. Degree of reliance on Predictive Services—non-federal FBANs/LTANs.

More than one-tenth (15.6%, *Figure G4-14*) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services (chose a 4 or 5, where 5=very true).

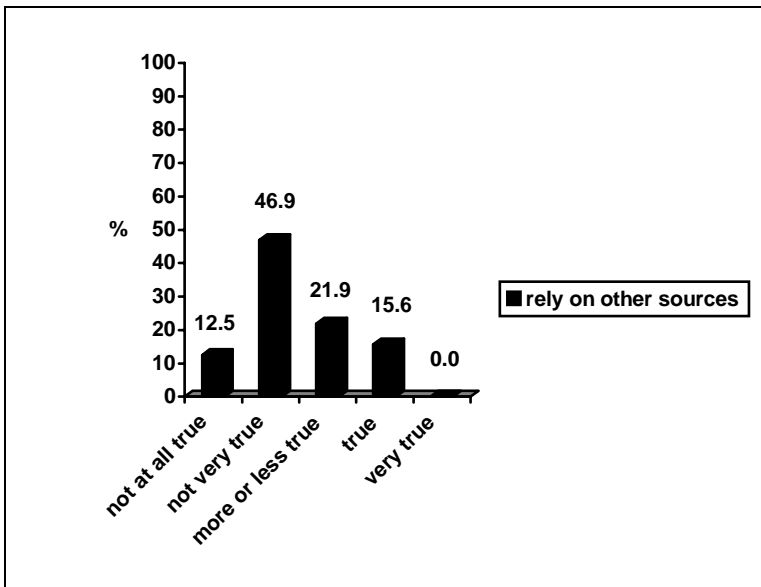


Figure G4-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal FBANs/LTANs.

Those who selected ‘true’ or ‘very true’ were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

- local NOAA office
- National Weather Service, NOAA sites, WIMS, ROMAN

I use NCAR's RAP Real-Time Weather Data site all the time.
NWS / SCO / UNISYS / Wyoming Edu

The likelihood of taking action based on Predictive Services information was examined. About one-third were likely to take action based on Predictive Services information (34.4% chose 'likely' or 'very likely', *Figure G4-15*, 3.1% did not answer this item).

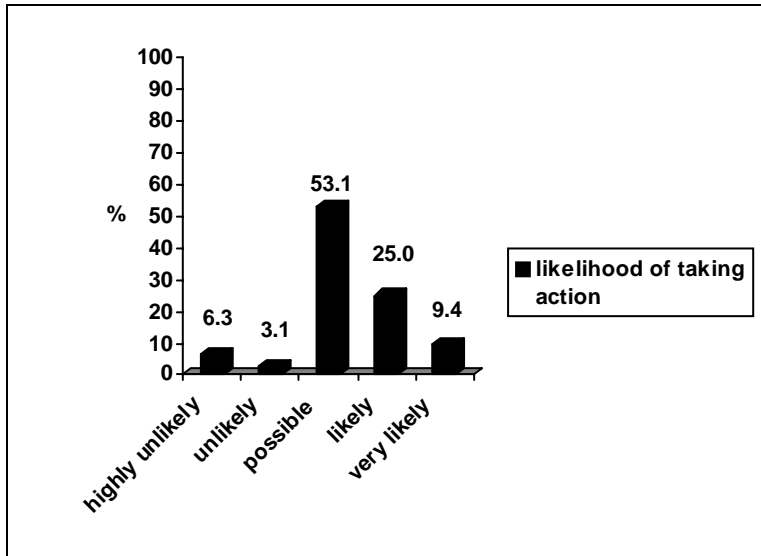


Figure G4-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal FBANs/LTANs.

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). About one-tenth indicated there was no overlap (not at all true, 9.4%), one-fourth chose 'not very true' (25.0%), more than one-third felt it was more or less true (40.6%), and a few felt that it was true (18.8%; 6.3% did not provide a response).

When individuals marked 'true' or 'very true' they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

NWS, state drought monitoring, GACC sit reports
National Weather Service, NOAA, WIMS, ROMAN
Multiple sites for RAWS Data and their format
The overlap is fine
Our own information and NWS
using local FS or BLM websites or local dispatch centers info, then using predictive services as corroborating information

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential

barriers (*table G4-1*). The most frequent reasons provided included: needing information that is site specific, not having thought about using the products and services, and not having the time necessary.

Table G4-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal FBANs/LTANs.

Reason	Percent
I never thought about it.	28.1
My current management practices don't require the types of information provided by Predictive Services	15.6
I need information that is site specific	46.9
I am not mandated to use these products	15.6
I don't have the time to use these products	25.0
I don't know where to get advice about using these products	3.1
I don't know where to get the technology to use these products	0
I don't have the technology I need to use these products	3.1
I don't trust the products and services	3.1
I don't want to use these products	0
I don't think these products support my agency's current practices	3.1
Agency directives/guidelines instruct me to use other information	3.1
I don't have the money to use these products	9.4
I don't trust the advice I get about using these products	0
I don't trust information that is generated by multiple agencies	0

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence “The information and services provided by Predictive Services would be more useful to me if...”. The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

- more utf reporting. more current live fuel moisture and local fuels conditions.
- I could get more site specific information as needed.
- it pertained to my area and timeframes.
- The accuracy was better. The forecasts are generally based upon other long range forecasts that have accuracy issues.
- They maintained a standard format on at all GACCs
- it was completely accurate.
- I would love to be able to obtain information on storm or convective cell tracking from past events.
- it was more detailed in some cases.
- it's availability was current and up-to-date.
- Cooperators would refrain from using intranet sites...Payette National Forest posts their local information on the intranet and can't get WO approval for an internet site.
- they were more localized for NC
- it was accompanied by more explanation of where the trend could differ from predicted values.
- it wasn't so broad scale.
- they incorporated more alternative assessment tools, such as CFFDRS

If they were more timely
I knew more about it.
The web site url's were stable - bookmarks.
I knew what you provided.

Were There Additional Comments?

As is customary in surveys, we offered the opportunity for our respondents in the non-federal sector to tell us if they had any additional comments about Predictive Services that were not covered above or any comments about the survey. In no particular order, here are their responses:

Nothing really. Predictive services is broad brush as it is supposed to be. Timely posting is the only issue I sometimes have problems with. Would help to know when the item will be updated

The amount of money that is invested in these services is not reflected in money saved by decisions made by fire managers. Long-range weather forecasting needs to improve before the products produced by predictive services becomes valuable.

Most of my dealing with predictive services is based on site specific needs for individual fire incidents. I don't get involved with the large scale geographic predictive services that often.

With technology advancement predictive services can be a home base for fire behavior support. Staff predictive services with FBANS all the time. Build a support team. Thank you for all the support..[name and location removed]

The PS process in its infancy and will only get better. Anything to improve fire decision support is a very good thing. [initials removed]

Eastern Area and Alaska need another Met, at least seasonally. [names removed] do a great job but the geographic areas are too big for one person to cover when activity picks up.

Thanks for your efforts. Would like to be able to access data or info showing convective activity/tracking.

I'm concerned that some of the 'Intelligence Officers' providing information do not have adequate experience, training or understanding of the assumptions and limitations of the models and information they are posting.

The persons in PS are bright & serve the Region well. I wish they were better staffed with more personnel to provide better support for the states.

You have come a long way. There needs to be more interaction with FBANS or fire behavior folks, not theorists. Mid and lower elevation emphasis means more than what snow course information provides because of the elevation difference.

Great service to help me acclimate to other GAs.

Valuable service, I use it frequently.

Appendix G5: Public Affairs/Information Officers—Non-Federal Respondents

Public affairs and information officers (PAO/information officers) were grouped into one category ($n=32$). These respondents came from state (96.9%) and county agencies (3.1%).

Who Were the Non-Federal PAO/Information Officers?

The majority was male (62.5%).

Educational background / degree or equivalent—Educational attainment was high among the majority in this subgroup, with the vast majority (96.9%) completing at least a bachelor's degree or equivalent (*Figure G5-1*).

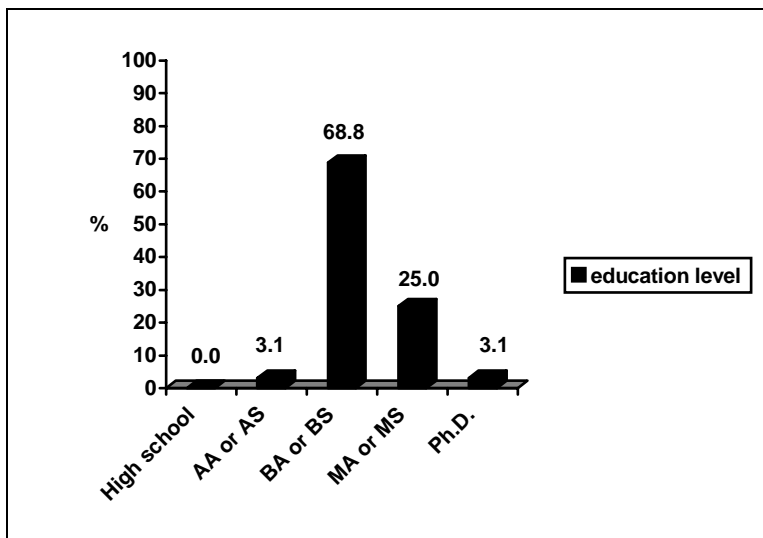


Figure G5-1. Educational attainment—non-federal PAO/information officers.

Respondents reported degrees in the following subjects:

- Business / forestry
- Communication & education
- Environmental science
- Forest biology/ecology
- Forest entomology
- Forest management
- Forest-watershed management
- History
- Journalism
- Natural science and law
- Range management (2 respondents)
- Recreation resource management
- Recreation management
- Urban planning
- Wildlife-fisheries resource management

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the various Geographic Areas (GAs) shown below (Figure G5-2).

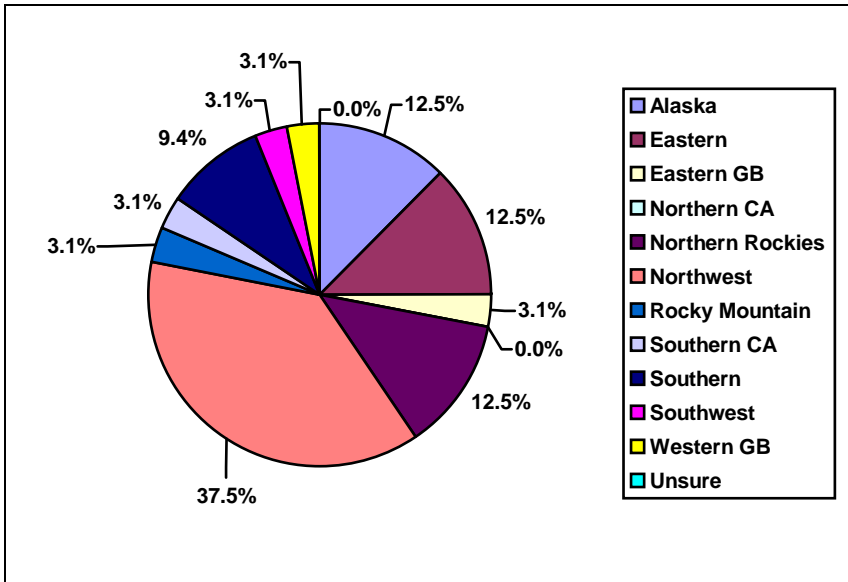


Figure G5-2. GAs—non-federal PAO/information officers.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents provided information regarding specific situations when they access or obtain information from Predictive Services. About half reported accessing Predictive Services during a fire incident (46.9%) and during fire season (50.0%), while a few accessed information when a prescribed burn is taking place (9.4%). About one-third indicated they do not access Predictive Services during any of the listed situations (37.5%). Other situations when they access or obtain information from Predictive Services included:

off season when looking to future weather impacts on public information/prevention issues

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited or GACC’s services they had used, revealing that a near majority had visited/used the National Interagency Coordination Center (NICC—46.9%). The Geographic Area Coordination Center sites from most to least mentioned were the Northwest (25.0%), Northern Rockies (15.6%), Alaska (15.6%), Rocky Mountain (15.6%), Southern (15.6%), Southwest (12.5%), Western Great Basin (9.4%), Southern California (6.3%), Eastern (6.3%), Northern California (6.3%), and Eastern Great Basin (6.3%; responses do not sum to 100% because respondents could select multiple sites). A few (9.4%) were not sure which if any sites they had visited/GACCs used.

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services’ products on the web, the briefings, and the emails. They were not

especially familiar with the web products (*Figure G5-3*, $M=2.3$, $sd=1.3$, $n=27$), the briefings (i.e., national, geographic, situational, or meteorological, $M=2.3$, $sd=1.4$, $n=28$), or the emails (these contain current projections and/or information about Predictive Services, $M=1.6$, $sd= .9$, $n=29$).

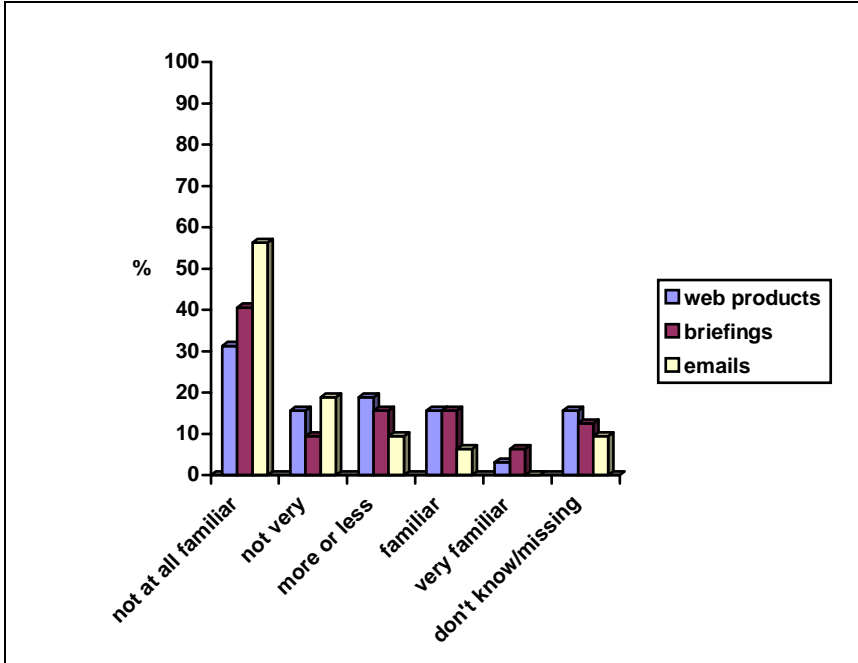


Figure G5-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal PAO information officers.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=3.9$, $sd= .7$, $n=18$, *Figure G5-4*, 40.6% marked 'don't know' and 3.1% did not respond).

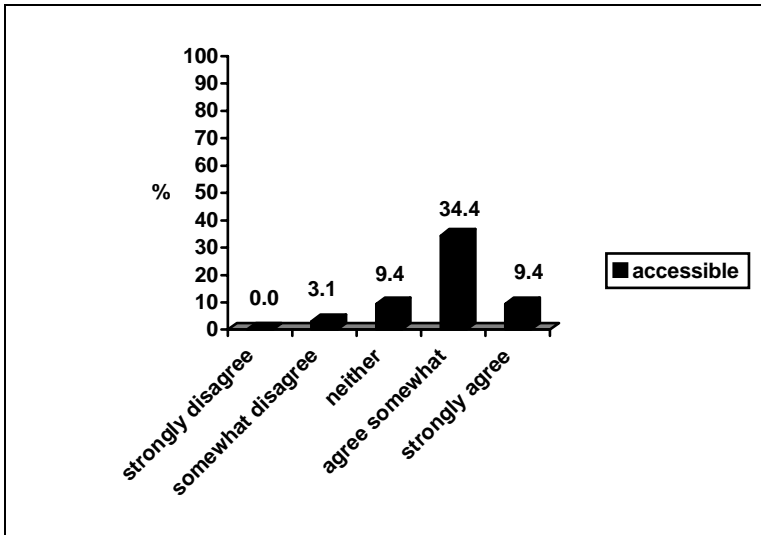


Figure G5-4. Ratings of accessibility of Predictive Services information—non-federal PAO/information officers.

A near majority agreed that Predictive Services information was timely ($M=4.0$, $sd= .6$, $n=17$, Figure G5-5, 43.8% marked 'don't know' and 3.1% did not respond).

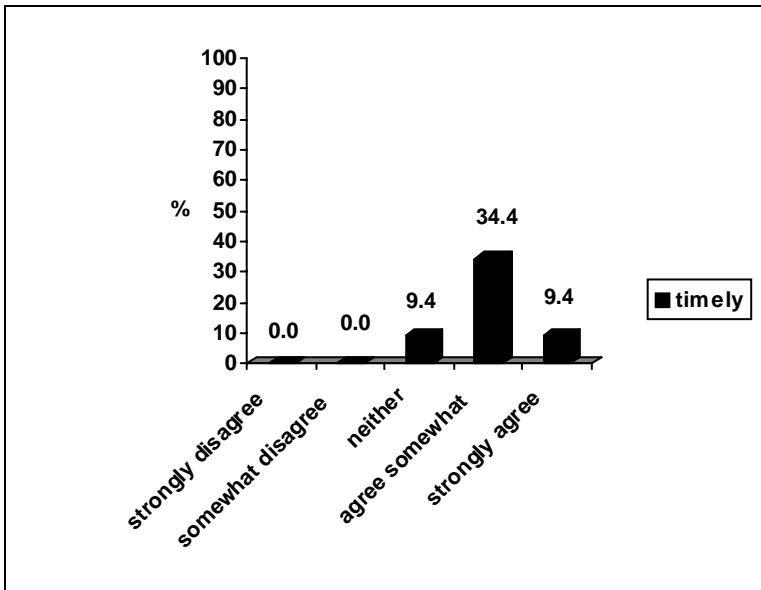


Figure G5-5. Ratings of timeliness of Predictive Services information—non-federal PAO/information officers.

A near majority agreed that Predictive Services information was relevant ($M=4.2$, $sd= .7$, $n=17$, *Figure G5-6*, 43.8% marked 'don't know' and 3.1% did not respond).

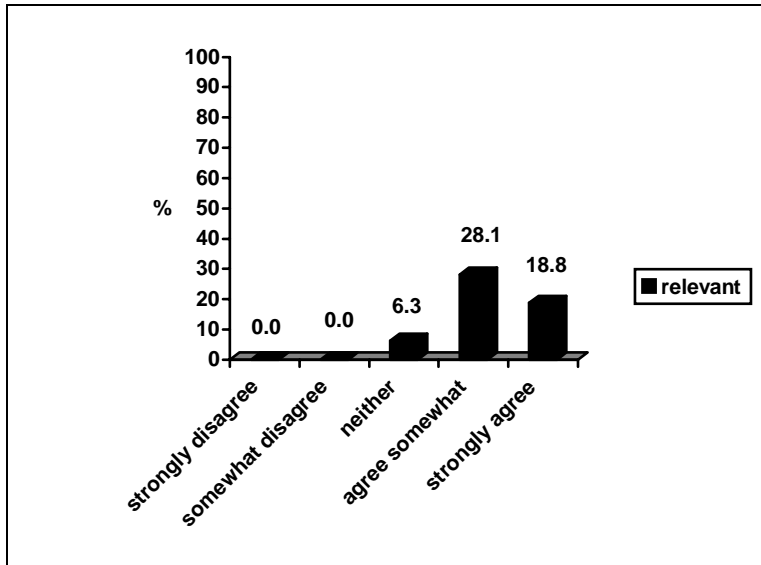


Figure G5-6. Ratings of relevance of Predictive Services information—non-federal PAO/information officers.

More than one-third agreed that Predictive Services information was accurate ($M=3.9$, $sd=1.0$, $n=16$, *Figure G5-7*, 46.9% marked 'don't know' and 3.1% did not respond).

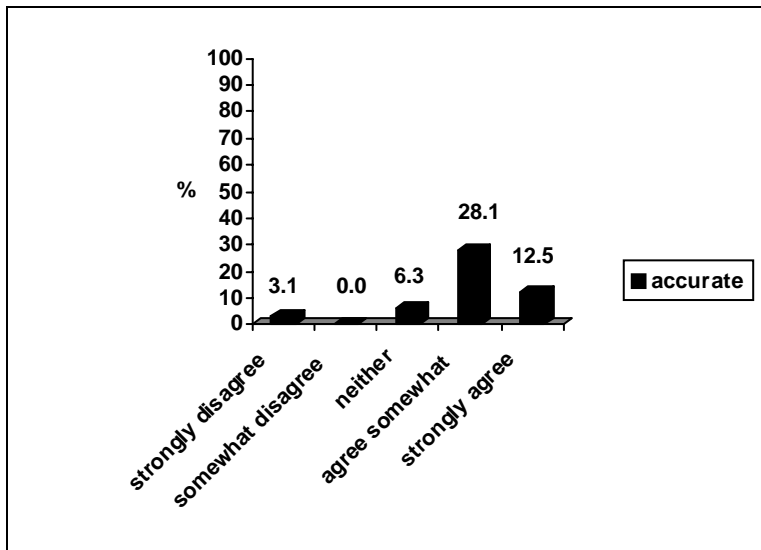


Figure G5-7. Ratings of accuracy of Predictive Services information—non-federal PAO/information officers.

A near majority also agreed that Predictive Services information was complete ($M=4.0$, $sd= .6$, $n=17$, *Figure G5-8*, 43.8% marked 'don't know' and 3.1% did not respond).

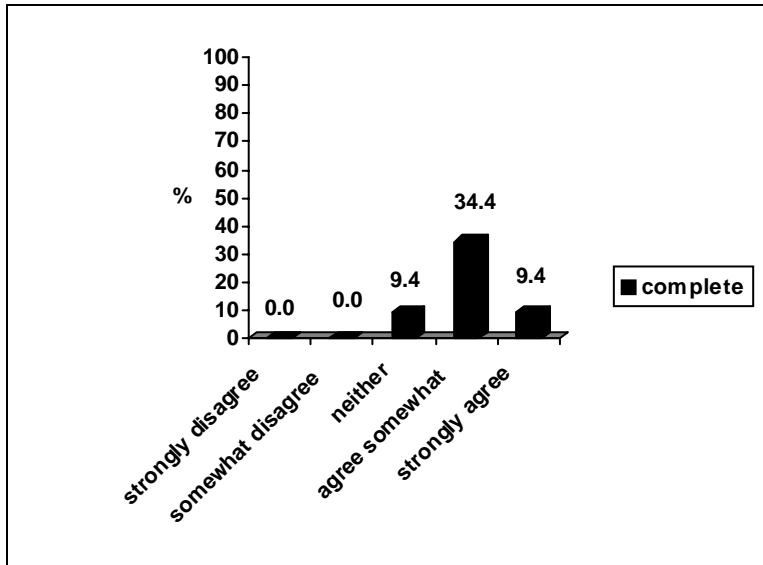


Figure G5-8. Ratings of completeness of Predictive Services information—non-federal PAO/information officers.

About one-fourth agreed that Predictive Services information was easy to understand ($M=3.6$, $sd= .9$, $n=17$, *Figure G5-9*, 43.8% marked 'don't know' and 3.1% did not respond).

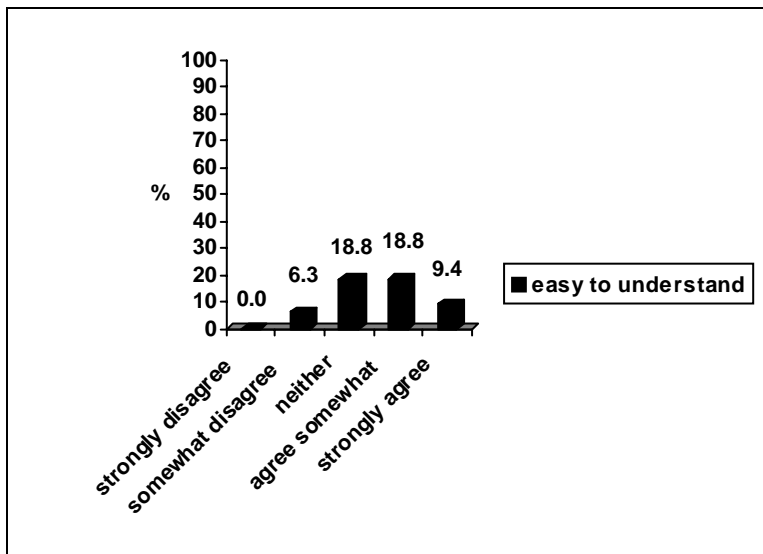


Figure G5-9. Ratings of ease of understanding of Predictive Services information—non-federal PAO/information officers.

Satisfaction with Predictive Services Contacts—None of these respondents had contacted Predictive Services to report a problem with a product or service.

Overall satisfaction—Almost half (46.9%) of the respondents indicated that they did not have any expectations for Predictive Services and about one-tenth did not reply (12.5%) to this question. The most likely response among those providing a rating was that they had some of their expectations met ($M=2.7$, $sd= .9$, $n=13$, *Figure G5-10*). Almost half did not indicate their level of satisfaction or dissatisfaction (43.8%), however among those providing a rating respondents were either somewhat satisfied, or neither dissatisfied nor satisfied ($M=3.6$, $sd= .8$, $n=18$, *Figure G5-11*).

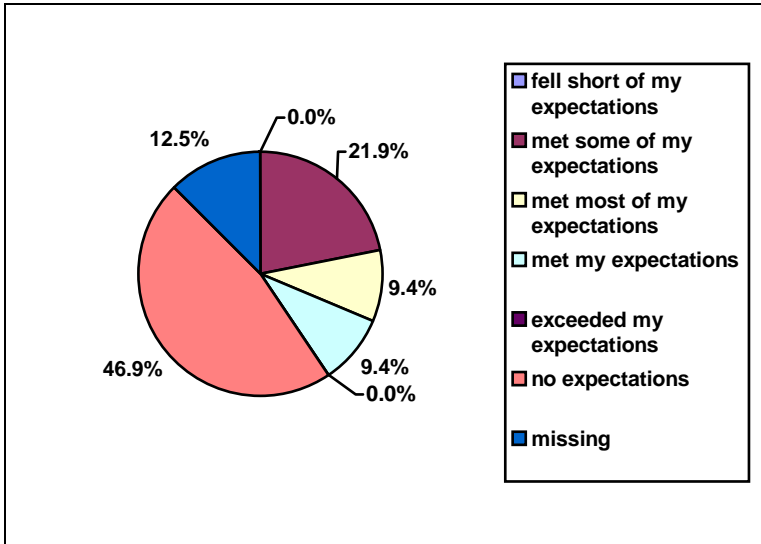


Figure G5-10. Ratings of degree to which Predictive Services met expectations—non-federal PAO/information officers.

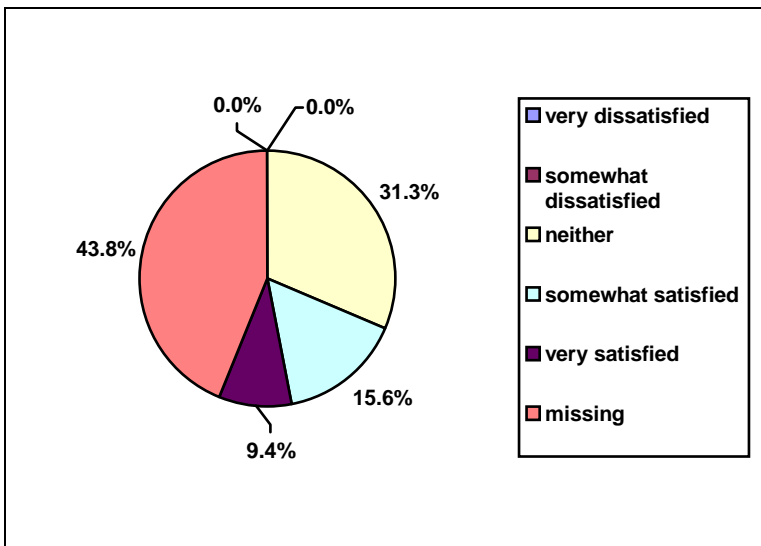


Figure G5-11. Ratings of satisfaction with Predictive Services products and services—non-federal PAO/information officers.

Trust and confidence in the information—A majority expressed some, to a great deal of trust and confidence in Predictive Services information (*Figure G5-12*, $M=3.3$, $sd=1.1$, $n=28$; 12.5% did not provide a response).

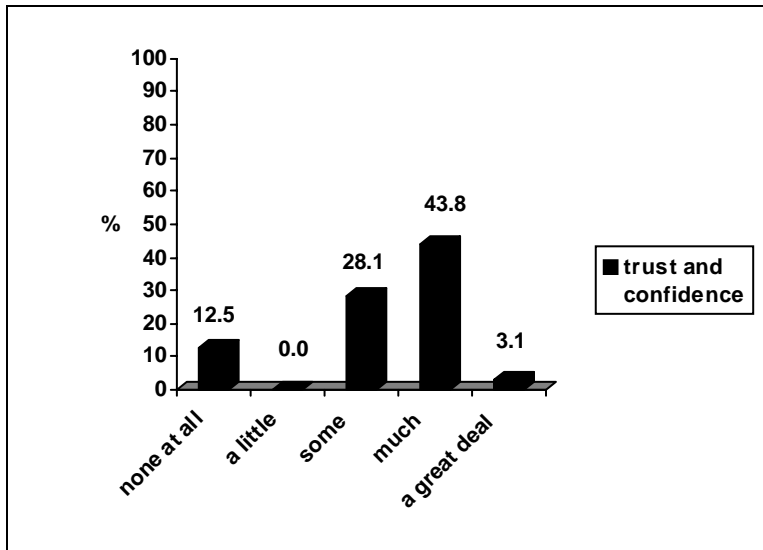


Figure G5-12. Ratings of trust and confidence in Predictive Services information—non-federal PAO/information officers.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some or much) on Predictive Services in making decisions (*Figure G5-13*; 9.4% did not provide an answer).

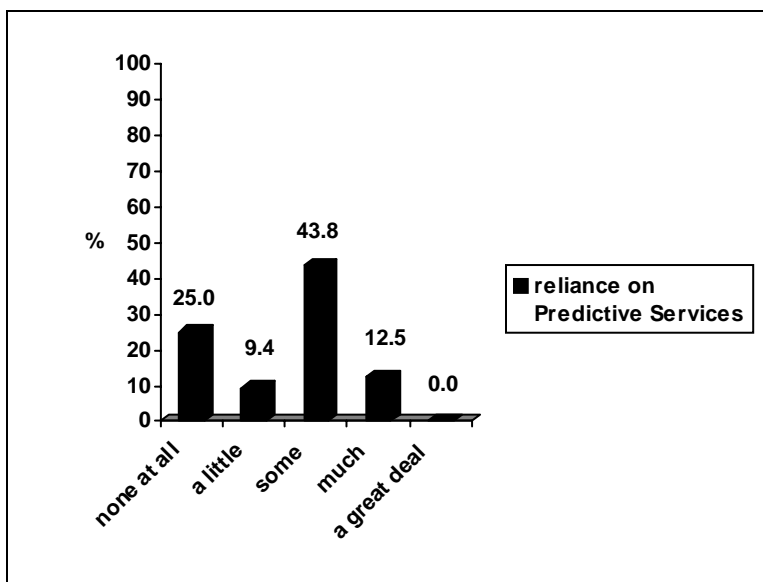


Figure G5-13. Degree of reliance on Predictive Services—non-federal PAO/information officers.

About one-tenth (12.5%, *Figure G5-14*) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services (chose a 4 or 5, where 5=very true).

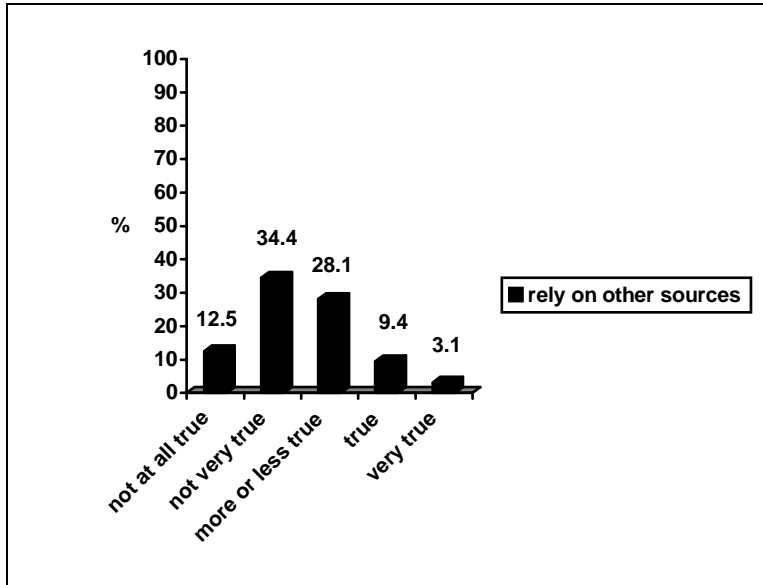


Figure G5-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal PAO/information officers.

Those who selected 'true' or 'very true' were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

- Internet sources/local media information and information provided by citizens living in or near the incidents
- National Fire Reports (209's)
- I rely on other interpretations of Predictive Services
- CDA interagency fire dispatch web site

The likelihood of taking action based on Predictive Services information was examined. More than one-fourth were likely to take action based on Predictive Services information (28.1% chose 'likely', *Figure G5-15*, 9.4% did not answer this item).

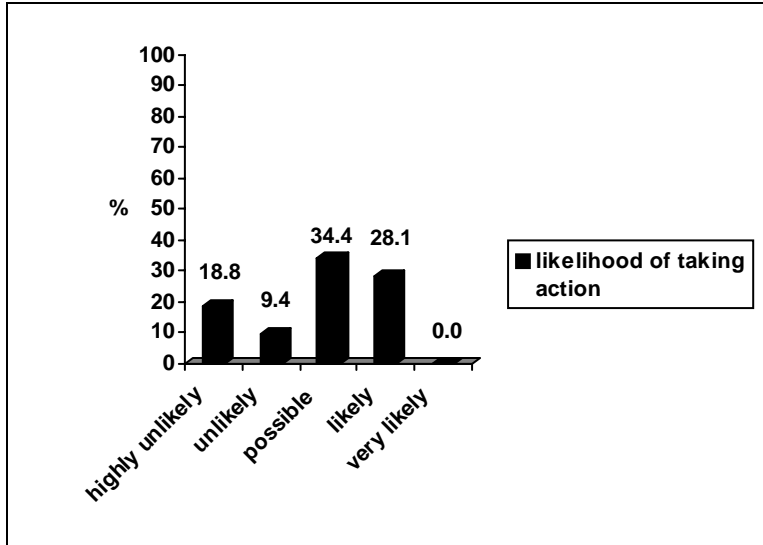


Figure G5-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal PAO/information officers.

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). One indicated there was no overlap (not at all true, 3.1%), about one-third chose ‘not very true’ (28.1%), about half felt it was more or less true (46.9%), and a few felt that it was true (6.3%; 15.6% did not provide a response).

When individuals marked ‘true’ or ‘very true’ they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

It seems as though there is an abundance of fire web sites, making it confusing as to who is providing the information and where it is ultimately coming from

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential barriers (*table G5-1*). The most frequent reasons provided were not having thought about using the products and services, needing information that is site specific, and not being mandated to use the products.

Table G5-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal PAO/information officers.

Reason	Percent
I never thought about it.	53.1
My current management practices don't require the types of information provided by Predictive Services	18.8
I need information that is site specific	25.0
I am not mandated to use these products	25.0
I don't have the time to use these products	3.1
I don't know where to get advice about using these products	12.5
I don't know where to get the technology to use these products	9.4
I don't have the technology I need to use these products	3.1
I don't trust the products and services	0
I don't want to use these products	0
I don't think these products support my agency's current practices	0
Agency directives/guidelines instruct me to use other information	12.5
I don't have the money to use these products	9.4
I don't trust the advice I get about using these products	0
I don't trust information that is generated by multiple agencies	3.1

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence “The information and services provided by Predictive Services would be more useful to me if...”. The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

- updated constantly and always available
- less reliance was placed on models and more on actual experience.
- I sought them out more frequently.
- they were specific to my community relations and and public information needs.
- I knew how and where to access the information.
- I remember to asses them and have the time.
- they are recent and area specific
- I had more information about the information and services available.
- I actually new the information I was getting came from 'Predictive Services'.
- This is the first I have heard of you.
- I know what it is
- I were more familiar with the service.
- I knew more about it. However I have very limited need for it on any regular basis in my normal every day work setting.
- information was always consistent with other resources-conflicting info causes confusion
- my agency ever brought up the subject in front of me.
- I had a direct contact to talk to about the information, if I needed.

Were There Additional Comments?

As is customary in surveys, we offered the opportunity for our respondents in the non-federal sector to tell us if they had any additional comments about Predictive Services

that were not covered above or any comments about the survey. In no particular order, here are their responses:

There is a perception among many of my peers that weather forecasting has become more inaccurate over the past few years

I am not that familiar with it, but will try and update myself.

You luck in your future endeavors...

Was not familiar with it much since I have fire duties very infrequently.

Appendix G6: Dispatchers—Non-Federal Respondents

Dispatchers were grouped into one category ($n=30$). These respondents came from state agencies (86.7%), universities or academic institutions (3.3%), and other agency types (10.0%).

Who Were the Non-Federal Dispatchers?

The majority was male (53.3%; 10.0% did not provide a response).

Educational background / degree or equivalent—Educational attainment revealed almost half (46.6%) completing at least a bachelor's degree or equivalent (*Figure G6-1*, 3.3% did not provide a response).

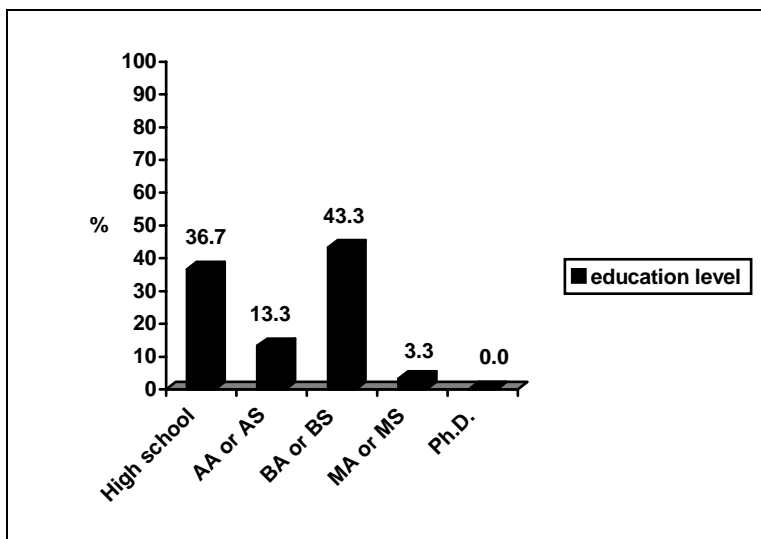


Figure G6-1. Educational attainment—non-federal dispatchers.

Respondents reported degrees in the following subjects:

- Education
- Forest production management
- Forestry (2 respondents)
- Plant science
- Scientific land management

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the various Geographic Areas (GAs) shown below (Figure G6-2).

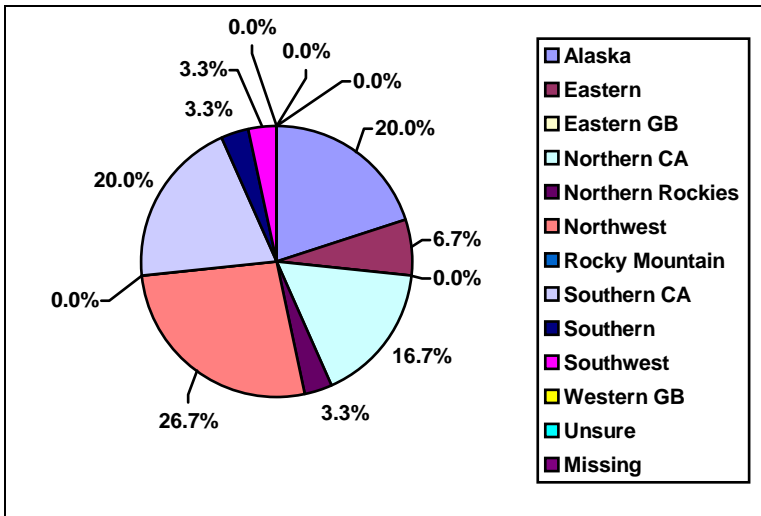


Figure G6-2. GAs—non-federal dispatchers.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents provided information regarding specific situations when they access or obtain information from Predictive Services. A majority reported accessing Predictive Services during fire season (86.7%) and during a fire incident (70.0%), while one-fifth accessed them when a prescribed burn is taking place (20.0%). One indicated they did not access Predictive Services under any of the aforementioned circumstances. Other situations when they access or obtain information from Predictive Services included:

- weekly weather patterns year round
- anticipated significant weather events and resource drawdown
- rainfall events for potential flooding or high winds
- evaluation of Staffing Patterns or Preposition decisions
- daily basis
- For daily strategic planning, GACC/State wide

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited or which GACC services they had used, revealing that almost half had visited/used the National Interagency Coordination Center (NICC—43.3%). The Geographic Area Coordination Center sites from most to least mentioned were the Northwest (36.7%), Northern California (26.7%), Southern California (26.7%), Alaska (26.7%), Northern Rockies (20.0%), Southwest (20.0%), Southern (20.0%), Rocky Mountain (13.3%), Western Great Basin (13.3%), Eastern (10.0%), and Eastern Great Basin (10.0%; responses do not sum to 100% because respondents could select multiple sites). One respondent (3.3%) was not sure which if any sites/GACC services they had visited/used.

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services' products on the web, the briefings, and the emails. They were more familiar with the web products (*Figure G6-3*, $M=3.5$ $sd= .9$, $n=29$), and the briefings (i.e., national, geographic, situational, or meteorological, $M=3.7$, $sd=1.1$, $n=29$), than with the emails (these contain current projections and/or information about Predictive Services, $M=2.8$, $sd=1.0$, $n=29$).

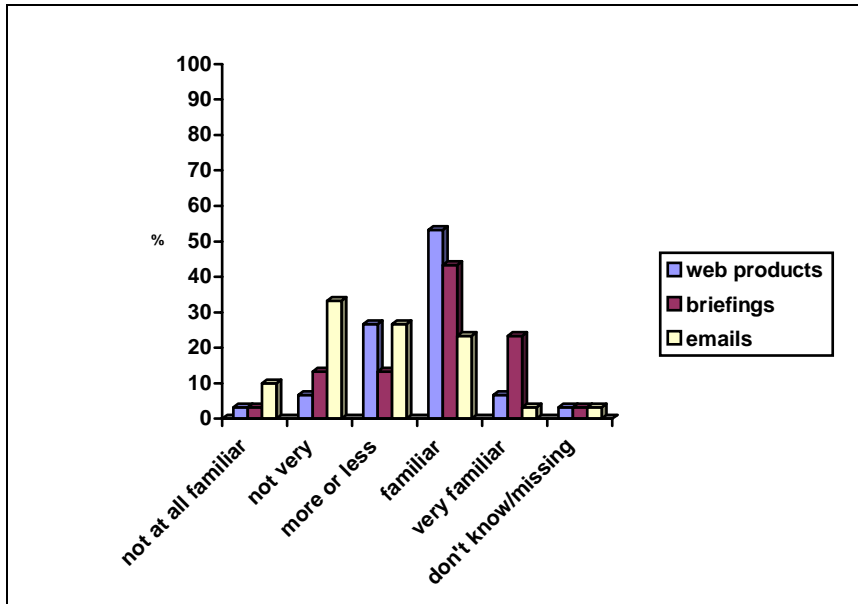


Figure G6-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal dispatchers.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=4.4$, $sd= .8$, $n=28$, *Figure G6-4*, 6.7% marked 'don't know').

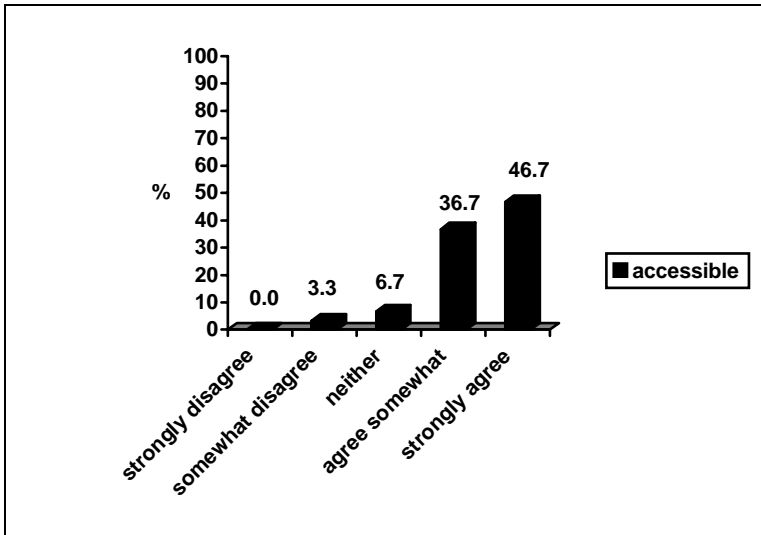


Figure G6-4. Ratings of accessibility of Predictive Services information—non-federal dispatchers.

A majority agreed that Predictive Services information was timely ($M=4.0$, $sd=1.0$, $n=29$, *Figure G6-5*, 3.3% marked 'don't know').

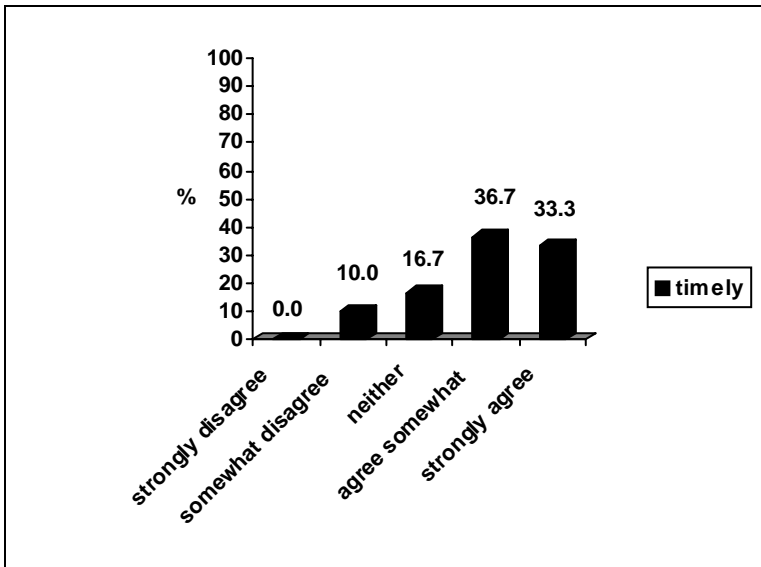


Figure G6-5. Ratings of timeliness of Predictive Services information—non-federal dispatchers.

A majority agreed that Predictive Services information was relevant ($M=3.9$, $sd=1.0$, $n=29$, *Figure G6-6*, 3.3% marked 'don't know').

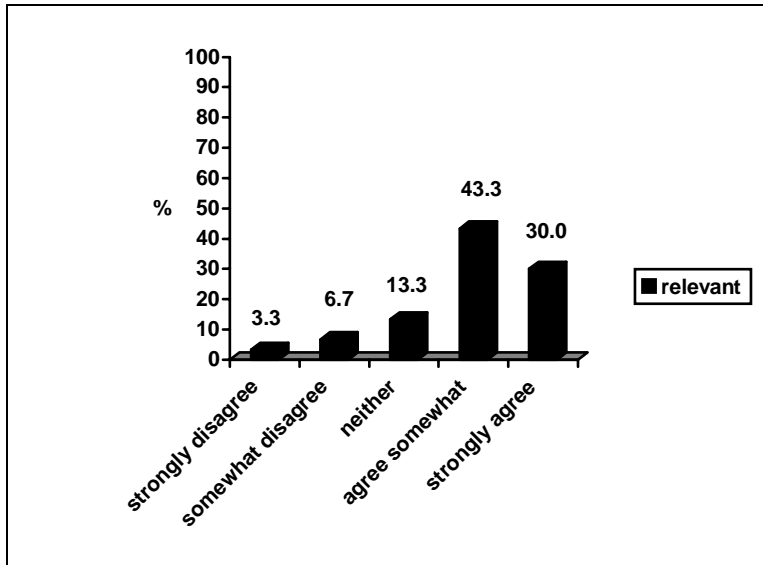


Figure G6-6. Ratings of relevance of Predictive Services information—non-federal dispatchers.

A near majority agreed that Predictive Services information was accurate ($M=3.5$, $sd=1.0$, $n=29$, *Figure G6-7*, 3.3% marked 'don't know').

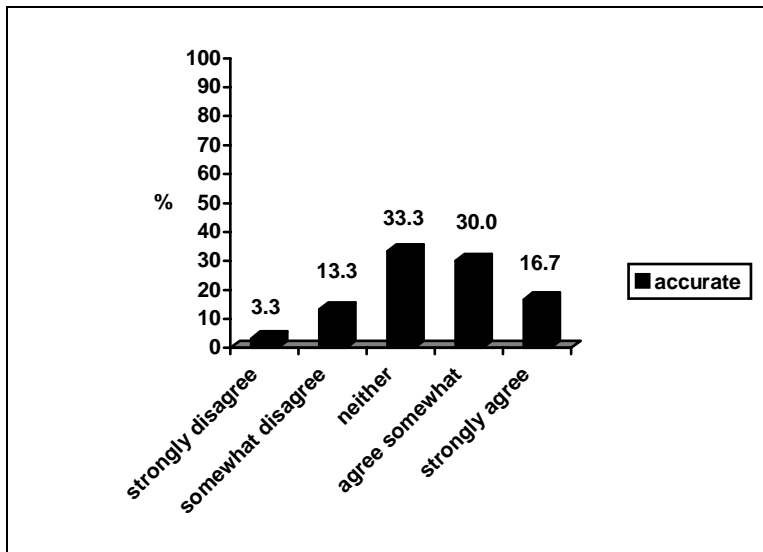


Figure G6-7. Ratings of accuracy of Predictive Services information—non-federal dispatchers.

The majority also agreed that Predictive Services information was complete ($M=3.8$, $sd=1.0$, $n=29$, *Figure G6-8*, 3.3% marked 'don't know').

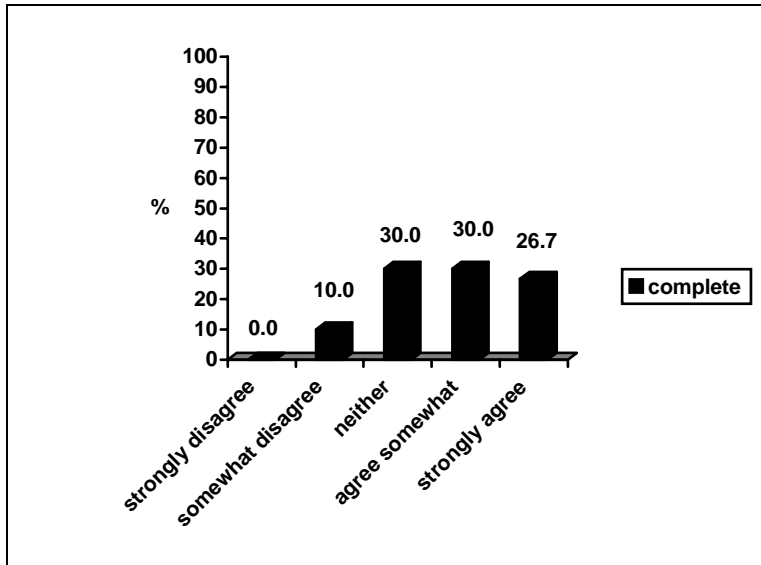


Figure G6-8. Ratings of completeness of Predictive Services information—non-federal dispatchers.

A majority agreed that Predictive Services information was easy to understand ($M=3.8$, $sd=1.0$, $n=28$, *Figure G6-9*, 3.3% marked 'don't know' and 3.3% did not respond).

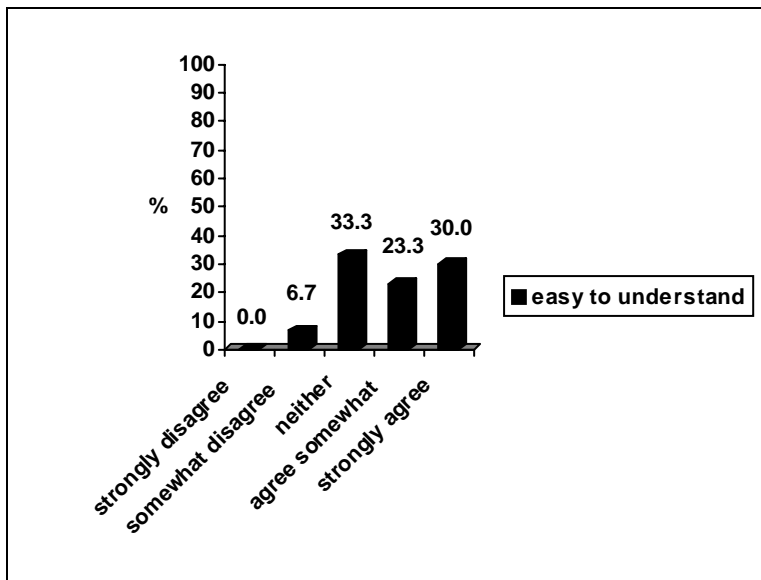


Figure G6-9. Ratings of ease of understanding of Predictive Services information—non-federal dispatchers.

Satisfaction with Predictive Services contacts—One-third (33.3%) had contacted Predictive Services to report a problem with a product or service. Considering only this subset of respondents, one rated Predictive Services as not very responsive (10.0%),

while the remainder rated them as more or less responsive (30%), responsive (30.0%), or very responsive (30.0%).

Overall satisfaction—Responses indicate that Predictive Services met some to all expectations ($M=2.9$, $sd=1.1$, $n=24$, *Figure G6-10*), and a near majority was satisfied ($M=3.6$, $sd= .8$, $n=27$, *Figure G6-11*).

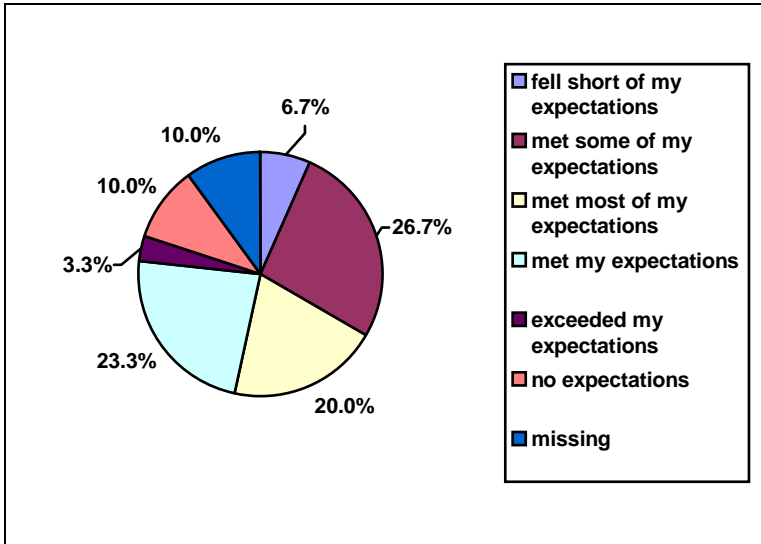


Figure G6-10. Ratings of degree to which Predictive Services met expectations—non-federal dispatchers.

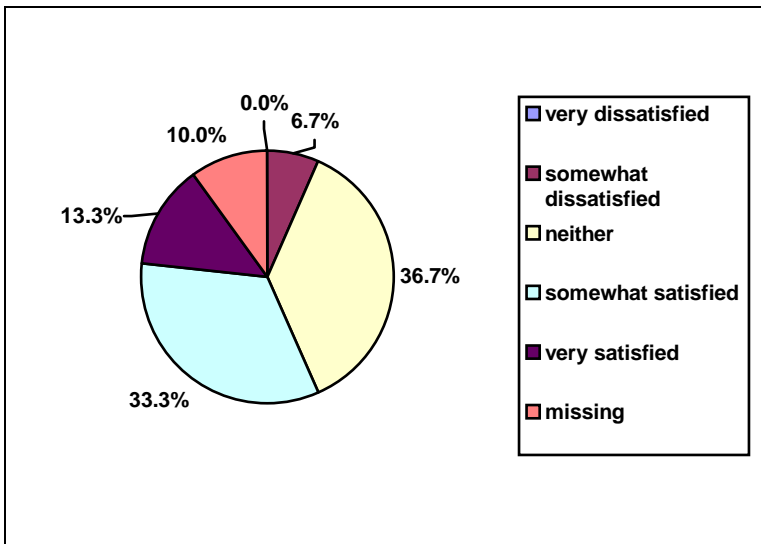


Figure G6-11. Ratings of satisfaction with Predictive Services products and services—non-federal dispatchers.

Trust and confidence in the information—The majority expressed some, to a great deal of trust and confidence in Predictive Services information (*Figure G6-12*, $M=3.4$, $sd= .8$, $n=30$).

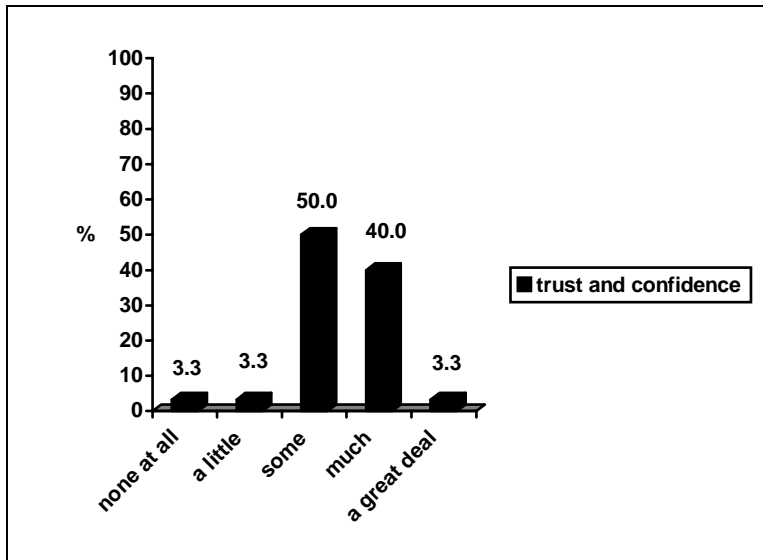


Figure G6-12. Ratings of trust and confidence in Predictive Services information—non-federal dispatchers.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some, to a great deal) on Predictive Services in making decisions (*Figure G6-13*).

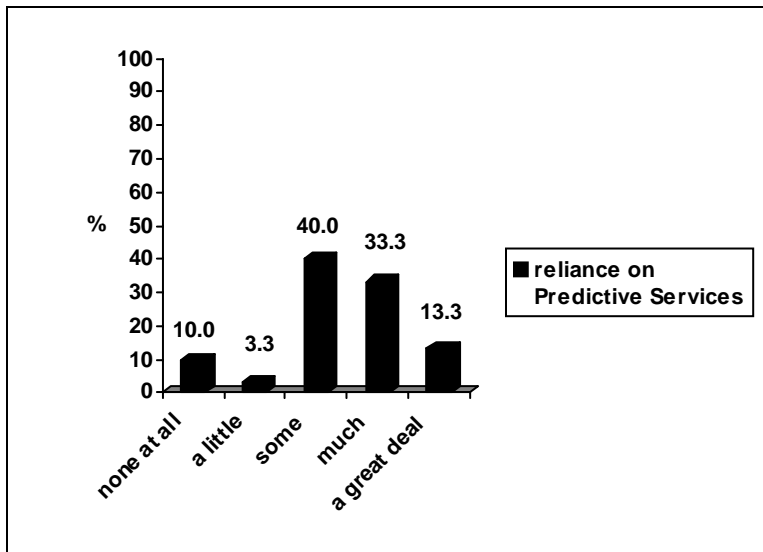


Figure G6-13. Degree of reliance on Predictive Services—non-federal dispatchers.

About one-fifth (16.7%, *Figure G6-14*) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services (chose a 4 or 5, where 5=very true).

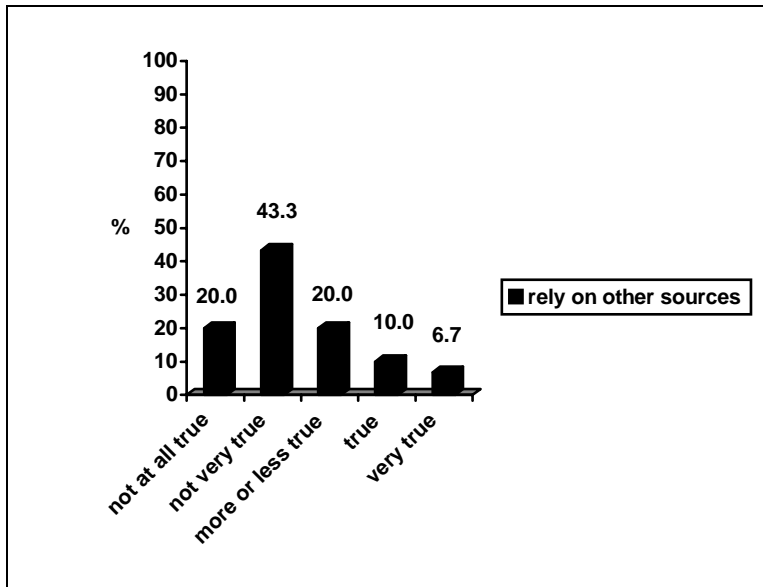


Figure G6-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal dispatchers.

Those who selected 'true' or 'very true' were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

Interactive Weather Obs

NWCC predictive services is too general and does not compare to what the locals are using

I have a library of data covering the past 25 years for this area. I use that.

The likelihood of taking action based on Predictive Services information was examined. Almost half were likely to take action based on Predictive Services information (43.4% chose 'likely' or 'very likely', *Figure G6-15*).

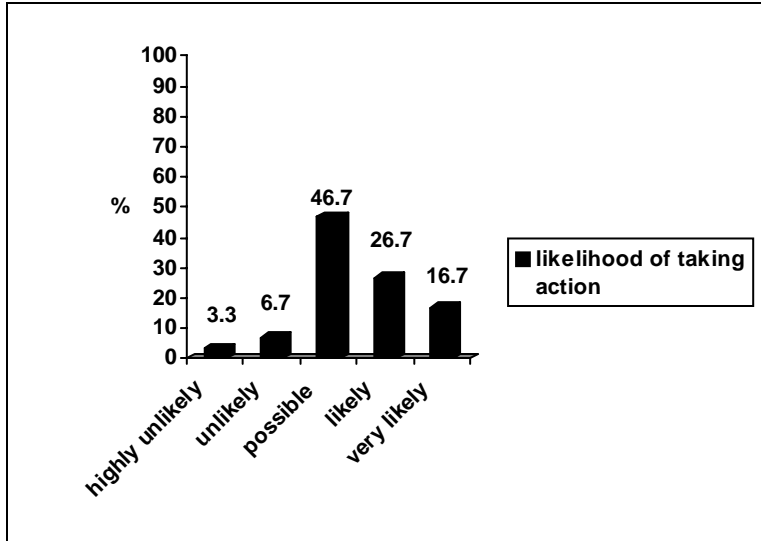


Figure G6-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal dispatchers

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). A few felt there was no overlap (not at all true, 3.3%), one-third chose 'not very true' (33.3%), half felt it was more or less true (50.0%), and about one-tenth felt that it was true (10.0%), or very true (3.3%).

When individuals marked 'true' or 'very true' they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

Interactive Weather Obs
 nfdrs data & weather
 Weather predictions with the NWS - I prefer and use the information provided by
 Predictive Services
 NWS

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential barriers (*table G6-1*). The most frequent reasons provided were not having thought about using the products and services, and needing information that is site specific.

Table G6-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal dispatchers.

Reason	Percent
I never thought about it.	33.3
My current management practices don't require the types of information provided by Predictive Services	3.3
I need information that is site specific	26.7
I am not mandated to use these products	16.7
I don't have the time to use these products	10.0
I don't know where to get advice about using these products	6.7
I don't know where to get the technology to use these products	0
I don't have the technology I need to use these products	0
I don't trust the products and services	6.7
I don't want to use these products	6.7
I don't think these products support my agency's current practices	3.3
Agency directives/guidelines instruct me to use other information	10.0
I don't have the money to use these products	0
I don't trust the advice I get about using these products	6.7
I don't trust information that is generated by multiple agencies	3.3

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence “The information and services provided by Predictive Services would be more useful to me if...”. The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

More site specific..accurate and a little more in depth...
the meteorologists, within the same office, use the same models to deliver briefings and the same process to determine fire potential to ensure daily consistency
it was more site specific
historic and archived data was easier to find.
they matched up to what the locals are using - they cowboy to much - stating that there way is the best way.
I knew what it was.
I don't have a response for this one. I am happy with the current level of the predictive services.
there was an effort to report the accuracy of some of the predictions and products.
For example, during August of the 2000 fire season, we heard a prediction that fire season would continue unabated until October. Fire season ended 2 weeks later. I would like to see a report on the accuracy of such predictions over a 5 or 10 year period. In other words, how reliable have predictions like these turned out to be.
I would use them more.
predictive services had more help. The is only one person in predictive services and it is a very large state, a second position would allow for more in depth products and an increase in services.
really clued in to our area... Not sure that the responses accurately portray our local weather influences.
it were more consistent. Sometimes we get different weather briefing depending on the forecaster. If the forecasters alternate briefings, we get a different forecast

between the two. This makes it difficult to produce an accurate/consistent plan when it flip-flops by briefing
if nws would consult with Predictive Services prior in issuing Red Flag warnings. justification in accuracy was known.
...it were summarized and e-mailed to me on a daily basis through an automatic system.
I have nothing to add the product is adequate.

Were There Additional Comments?

As is customary in surveys, we offered the opportunity for our respondents in the non-federal sector to tell us if they had any additional comments about Predictive Services that were not covered above or any comments about the survey. In no particular order, here are their responses:

The large fire potential product needs to detail more information regarding the meaning of large fires with legends. Additionally the breakpoints need to be verified and reviewed annually by fire experienced personnel.
very happy, keep up the fine work
Some terminology used in forecasts is not always understandable to me or the seasonal dispatchers that use it.
The NICC situation report is not very useful. It's always 36 hours after the fact and has little useful 'real time' information to the firefighting community. It's as if it were written for bureaucrats in Washington
Not as familiar with what is available as I should be; apologies for being late responding to your survey
Planning on using the service more
Southern California GACC Predictive services are not only good they're better than NWS

Appendix G7: Fire Management Officers/Chiefs—Non-Federal Respondents

Fire management officers and fire chiefs were grouped into one category ($n=29$, FMOs/chiefs). These respondents came from state agencies (72.4%), county agencies (13.8%), tribal governments (3.4%), and other agency types (10.3%).

Who Were the Non-Federal FMOs/Chiefs?

All non-federal FMOs/chiefs were male (100%).

Educational background / degree or equivalent—Educational attainment was high with almost two-thirds (62.0%) completing at least a bachelor's degree or equivalent (*Figure G7-1*).

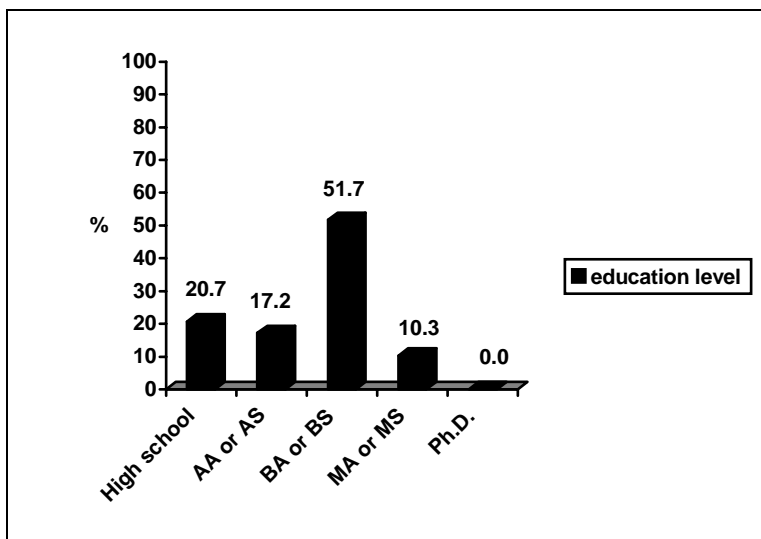


Figure G7-1. Educational attainment—non-federal FMOs/chiefs.

Respondents reported degrees in the following subjects:

- Adult and occupational education
- Fire science/fire service administration
- Fire service administration
- Fire technology
- Forest management (2 respondents)
- Forestry
- Forestry and education
- Journalism
- Management
- Resource mgmt., adult education
- Silviculture

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the various Geographic Areas (GAs) shown below (Figure G7-2).

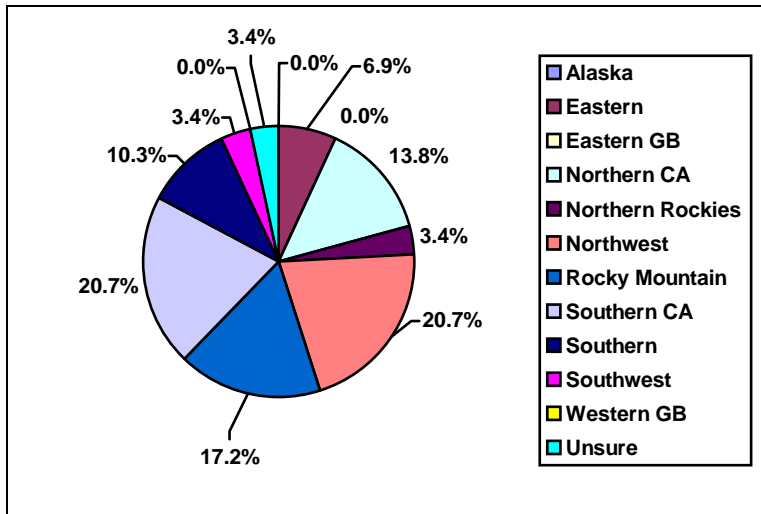


Figure G7-2. GAs—non-federal FMOs/chiefs.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents provided information regarding specific situations when they access or obtain information from Predictive Services. More than half reported accessing Predictive Services during fire season (72.4%), and during a fire incident (55.2%). About one-fourth accessed the information when a prescribed burn is taking place (27.6%). About that same number indicated that they did not access Predictive Services for any of the aforementioned situations (24.1%). Other situations when they access or obtain information from Predictive Services included:

to get a general update on fire activity in the NW & Nationally
information for pre-positioning fire suppression resources
during the fall, winter and spring

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited or GACC services they had used, revealing that a majority had visited or used the National Interagency Coordination Center (NICC—51.7%). The Geographic Area Coordination Center sites from most to least mentioned were the Rocky Mountain (20.7%), Southern (20.7%), Southern California (20.7%), Northern Rockies (17.2%), Northwest (13.8%), Northern California (6.9%), Southwest (6.9%), Eastern (6.9%), Western Great Basin (6.9%), Eastern Great Basin (3.4%), and Alaska (3.4%; responses do not sum to 100% because respondents could select multiple sites). A few (6.9%) were not sure which if any sites they had visited, or indicated they had not visited any of the listed sites/used any of the GACC services (6.9%).

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services' products on the web, the briefings, and the emails. They were more

familiar with the web products (*Figure G7-3*, $M=3.1$, $sd=1.3$, $n=29$), and the briefings (i.e., national, geographic, situational, or meteorological, $M=3.3$, $sd=1.2$, $n=28$), than with the emails (these contain current projections and/or information about Predictive Services, $M=2.9$, $sd=1.4$, $n=29$).

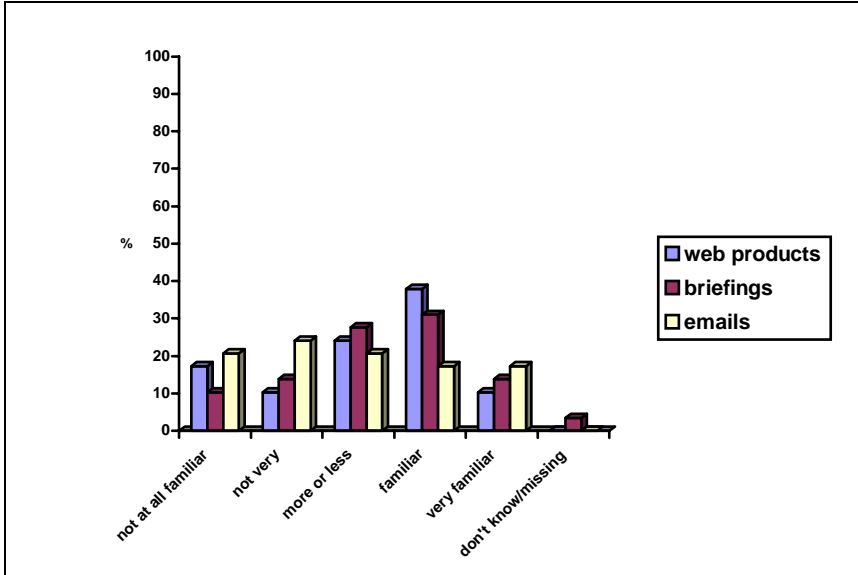


Figure G7-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal FMOs/chiefs.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=4.1$, $sd= .8$, $n=23$, *Figure G7-4*, 17.2% marked ‘don’t know’ and 3.4% did not respond).

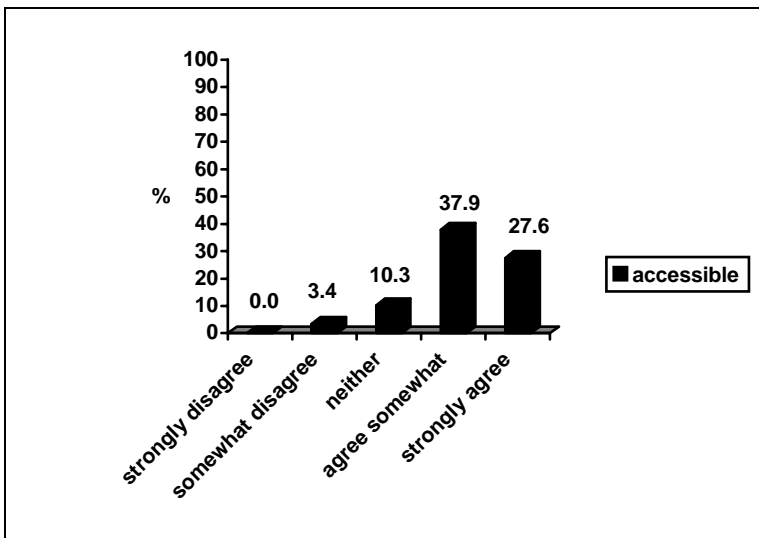


Figure G7-4. Ratings of accessibility of Predictive Services information—non-federal FMOs/chiefs.

A near majority agreed that Predictive Services information was timely ($M=3.6$, $sd=1.0$, $n=25$, Figure G7-5, 10.3% marked 'don't know' and 3.4% did not respond).

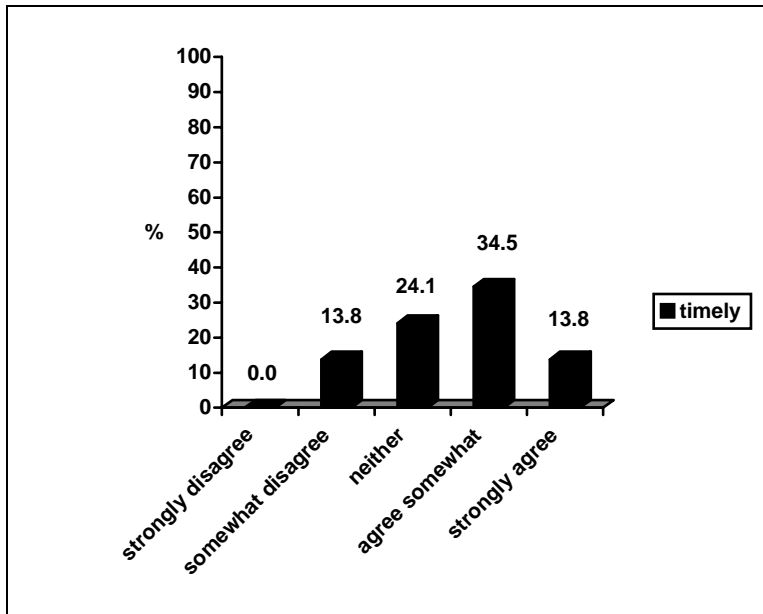


Figure G7-5. Ratings of timeliness of Predictive Services information—non-federal FMOs/chiefs.

A majority agreed that Predictive Services information was relevant ($M=4.0$, $sd=1.0$, $n=24$, Figure G7-6, 10.3% marked 'don't know' and 6.9% did not respond).

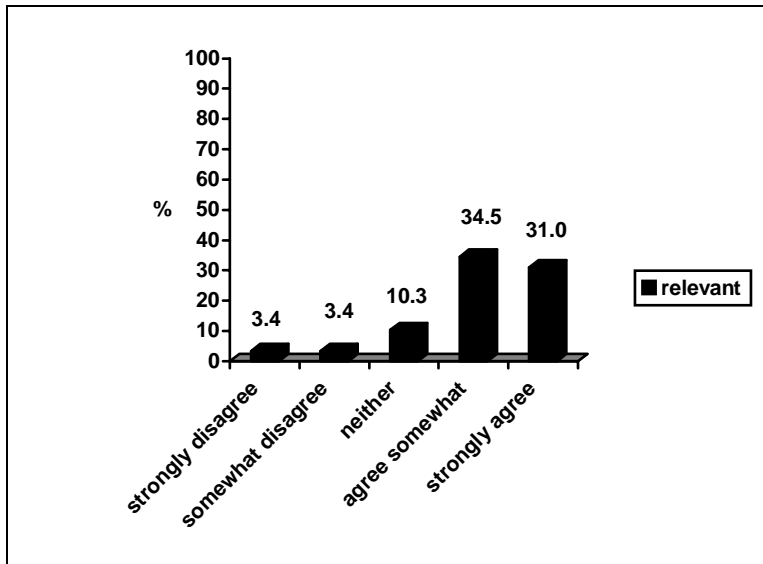


Figure G7-6. Ratings of relevance of Predictive Services information—non-federal FMOs/chiefs.

The majority also agreed that Predictive Services information was accurate ($M=3.8$, $sd= .7$, $n=25$, *Figure G7-7*, 10.3% marked 'don't know' and 3.4% did not respond).

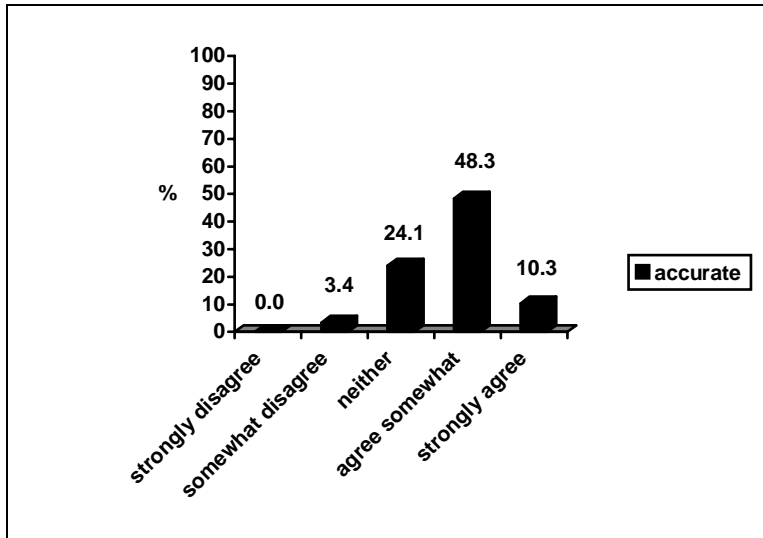


Figure G7-7. Ratings of accuracy of Predictive Services information—non-federal FMOs/chiefs.

A majority agreed that Predictive Services information was complete ($M=3.8$, $sd= .9$, $n=25$, *Figure G7-8*, 10.3% marked 'don't know' and 3.4% did not respond).

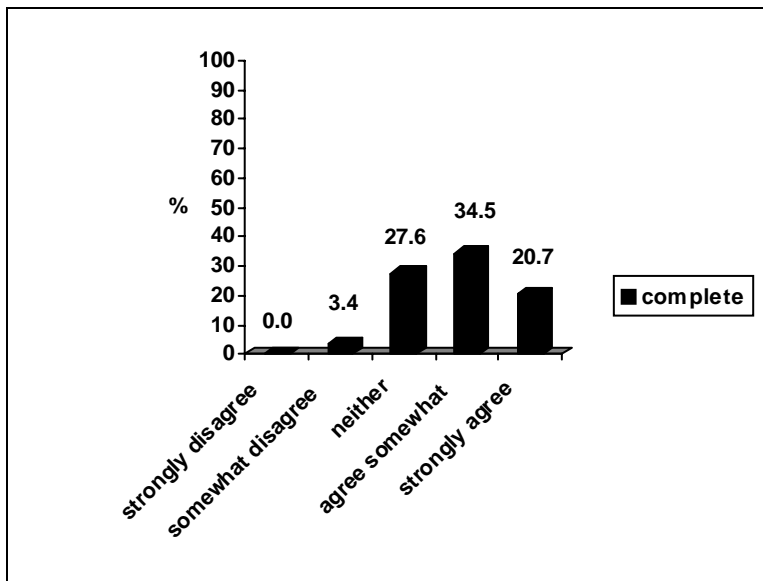


Figure G7-8. Ratings of completeness of Predictive Services information—non-federal FMOs/chiefs.

A majority agreed that Predictive Services information was easy to understand ($M=3.8$, $sd= .9$, $n=25$, *Figure G7-9*, 10.3% marked 'don't know' and 3.4% did not respond).

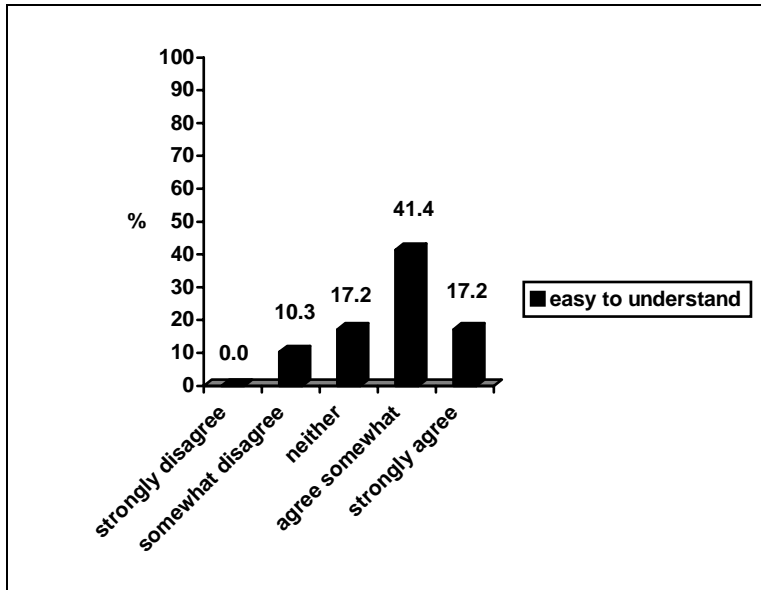


Figure G7-9. Ratings of ease of understanding of Predictive Services information—non-federal FMOs/chiefs.

Satisfaction with Predictive Services contacts—About one-fourth (24.1%) had contacted Predictive Services to report a problem with a product or service. One indicated they were not very responsive (14.3%). However, the majority of this subset of respondents rated them as responsive (71.4%), or very responsive (14.3%).

Overall satisfaction—Responses indicate that Predictive Services had met most expectations ($M=3.1$, $sd= .9$, $n=21$, *Figure G7-10*), and respondents were satisfied with the products and services provided ($M=3.6$, $sd= .7$, $n=27$, *Figure G7-11*).

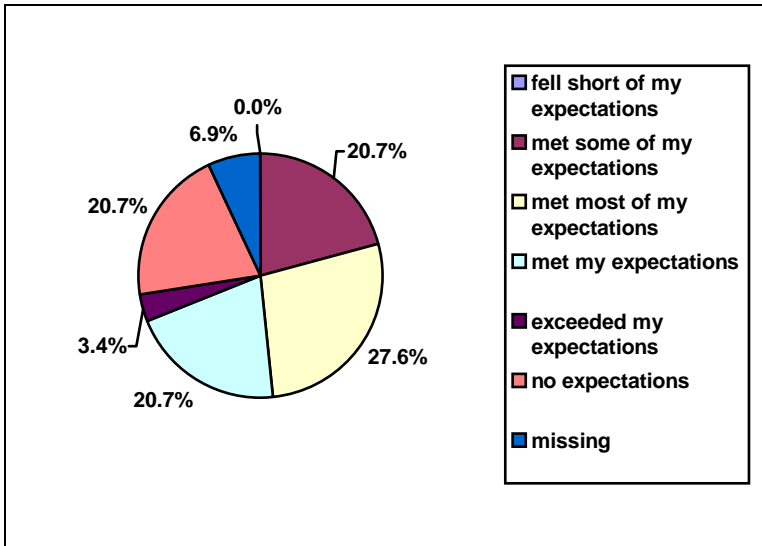


Figure G7-10. Ratings of degree to which Predictive Services met expectations—non-federal FMOs/chiefs.

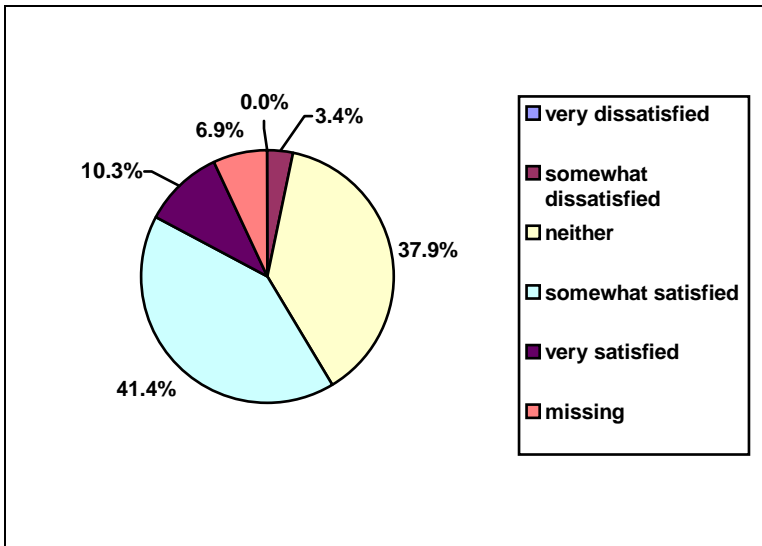


Figure G7-11. Ratings of satisfaction with Predictive Services products and services—non-federal FMOs/chiefs.

Trust and confidence in the information—A majority expressed some, to a great deal of trust and confidence in Predictive Services information (*Figure G7-12*, $M=3.6$, $sd= .8$, $n=27$; 6.9% did not provide a response).

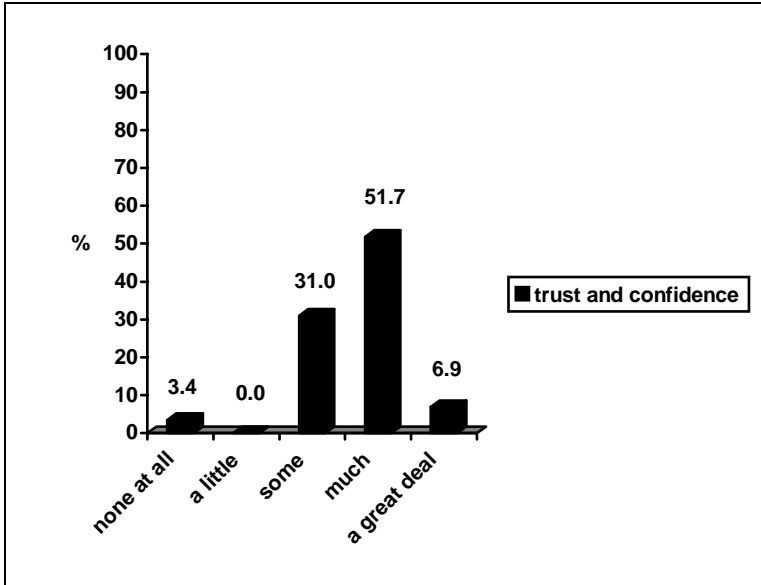


Figure G7-12. Ratings of trust and confidence in Predictive Services information—non-federal FMOs/chiefs.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some, to a great deal) on Predictive Services in making decisions (*Figure G7-13*; 6.9% did not provide an answer).

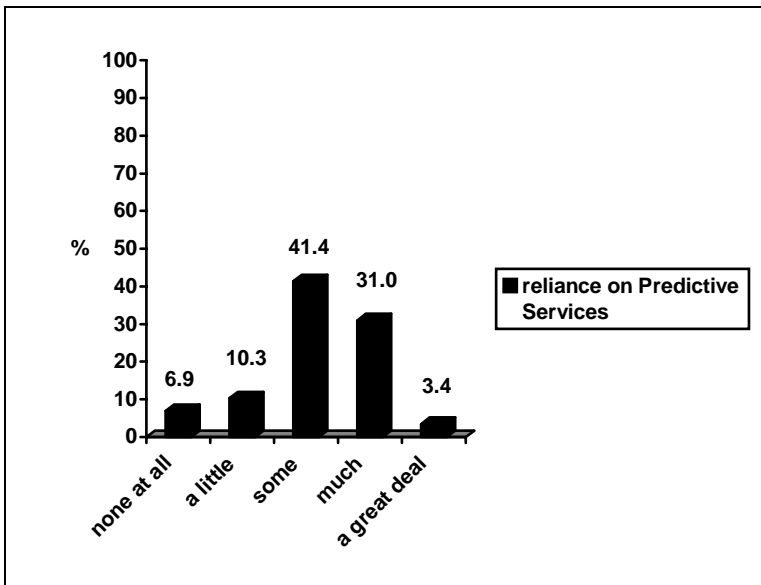


Figure G7-13. Degree of reliance on Predictive Services—non-federal FMOs/chiefs.

About one-fourth (24.1%, *Figure G7-14*, 6.9% did not provide a response) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services (chose a 4 or 5, where 5=very true).

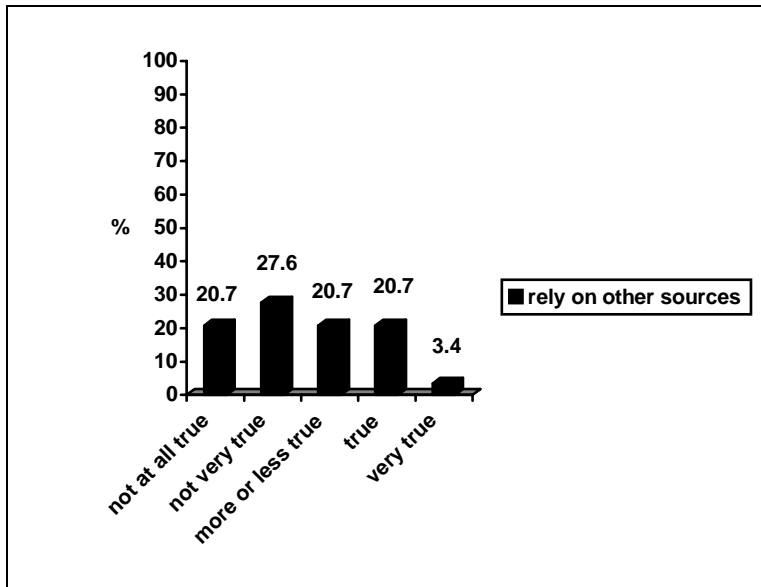


Figure G7-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal FMOs/chiefs.

Those who selected 'true' or 'very true' were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

nws, local weather, rfdi

Oklahoma Mesonet, Oklahoma Fire Danger Model, Oklahoma Climatological Survey
National Weather Service, Greenness from EROS DATA CENTER

I rely heavily on the NWS Fire Weather Forecasts and NFDRS Point Forecasts for my local area.

NWS and Florida Division of Forestry products and services.

Because the county lies on the border of the northern and rocky gacc's that is good to compare.

The likelihood of taking action based on Predictive Services information was examined. About one-third were likely to take action based on Predictive Services information (44.8% chose 'likely' or 'very likely', *Figure G7-15*, 6.9% did not answer this item).

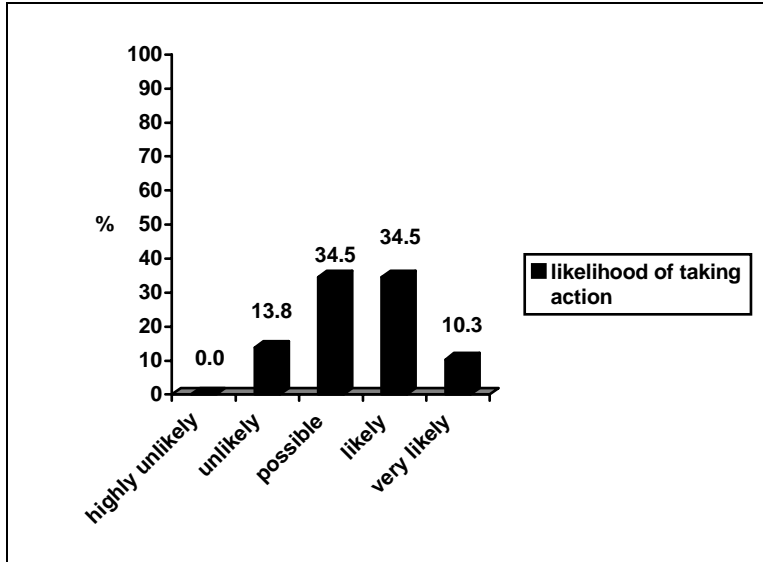


Figure G7-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal FMOs/chiefs.

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). About one-tenth indicated there was no overlap (not at all true, 6.9%), about one-third chose ‘not very true’ (31.0%), about half felt it was more or less true (44.8%), and about one-tenth felt that it was true (10.3%; 6.9% did not provide a response).

When individuals marked ‘true’ or ‘very true’ they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

Dept of water resources, NOAA

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential barriers (*table G7-1*). The most frequent reasons provided were not having thought about using the products and services, needing information that is site specific, and not being mandated to use the products.

Table G7-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal FMOs/chiefs.

Reason	Percent
I never thought about it.	41.4
My current management practices don't require the types of information provided by Predictive Services	10.3
I need information that is site specific	27.6
I am not mandated to use these products	20.7
I don't have the time to use these products	10.3
I don't know where to get advice about using these products	3.4
I don't know where to get the technology to use these products	6.9
I don't have the technology I need to use these products	10.3
I don't trust the products and services	0
I don't want to use these products	0
I don't think these products support my agency's current practices	13.8
Agency directives/guidelines instruct me to use other information	6.9
I don't have the money to use these products	3.4
I don't trust the advice I get about using these products	0
I don't trust information that is generated by multiple agencies	0

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence “The information and services provided by Predictive Services would be more useful to me if...”. The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

- my state's general fuel types were of the same general type as the other 4 states in the region.
- they were more time, they were more locality specific
- I knew more about them.
- I had more time to review them.
- if it was sent to me on a routine basis
- it was more accessible to retired employees that return annually to assist during extreme fire situations.
- I truly felt that the information was specific to my area of concern.
- general use trainings and geographical area workshops/meetings were made available.
- definitions of 'terms of art' were more clearly provided.
- They were available to my area on an as needed basis and were site specific to deal with currant threats.
- I knew more about them, I am brand new in the fire prevention bureau.
- I had the ability to access the information from the field - not your problem!
- the precipitation units of measure were in inches rather than millimeters.
- it were Florida Specific.
- you always try to keep it simple and understandable to the masses.
- they were updated more frequently during the fire season and a more detailed report was available for individual states.

Were There Additional Comments?

As is customary in such surveys, open-ended remarks were invited. Comments received from the non-federal FMOs and fire chiefs were as follows:

Personnel are very cooperative in providing consultation and very good when assisting in training fire personnel.

Over the past 10 years Predictive Services has improved dramatically. The info. avail. is mostly accurate and useful for making important decisions for pre-positioning resources and provides valuable info. for fire suppression decisions. Predictive Services provides many valuable products, but needs more promotion and service exposure for pre- and post-fire season value to users.

Thank you for the opportunity to provide input. I think that the EACC Predictive Services is doing a very good job and their information is useful and usually timely.

Appendix G8: Fire Environment Analysts—Non-Federal Respondents

Fire environment analysts were grouped into one category ($n=27$). These respondents came from state agencies (66.7%), consulting firms (11.1%), county agencies (3.7%), and other agency types (18.5%).

Who Were the Non-Federal Fire Environment Analysts?

The majority was male (81.5%).

Educational background / degree or equivalent—Educational attainment was high with the vast majority (81.5%) completing at least a bachelor's degree or equivalent (*Figure G8-1*).

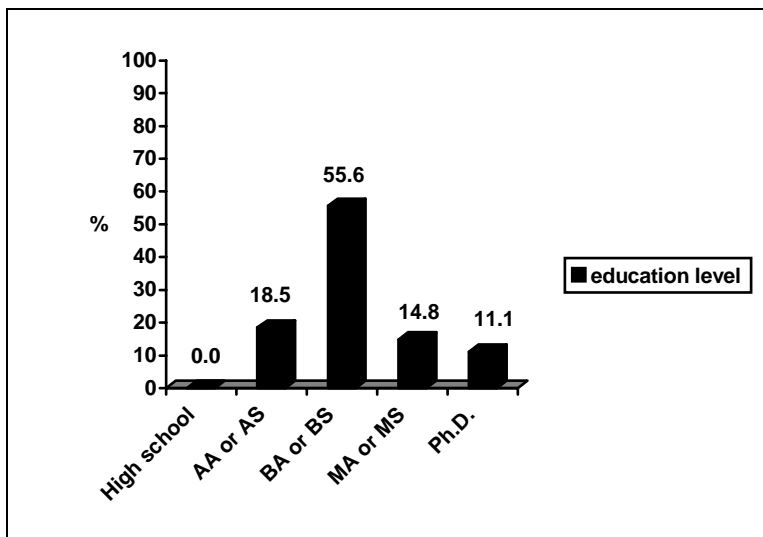


Figure G8-1. Educational attainment—non-federal fire environment analysts.

Respondents reported degrees in the following subjects:

- Biology
- Economic entomology, plant pathology
- Fire technology
- Forestry (2 respondents)
- Forestry and natural resources management
- Forest management
- Meteorology (2 respondents)
- Natural resources management
- Public administration

Home office Geographic Area location—Respondents came from across the United States, with their home offices falling within the various Geographic Areas (GAs) shown below (Figure G8-2).

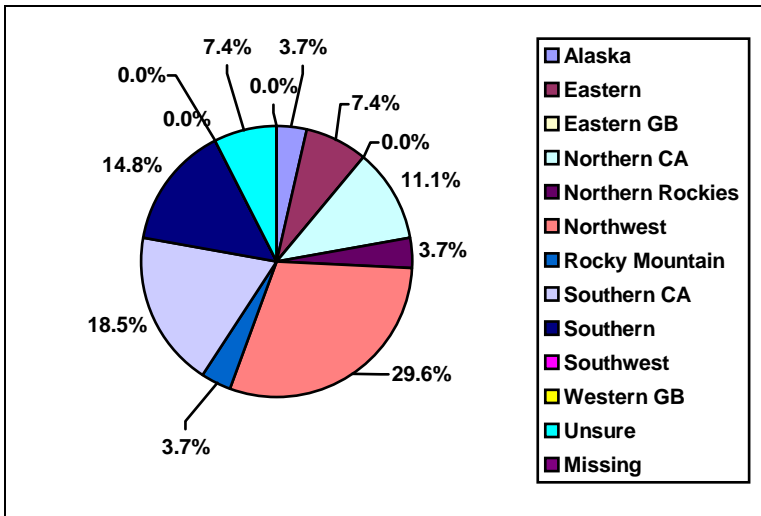


Figure G8-2. GAs—non-federal fire environment analysts.

What are their Levels of Experience with Predictive Services?

Specific circumstances for access/acquisition of information—Respondents provided information regarding specific situations when they access or obtain information from Predictive Services. More than half reported accessing Predictive Services during fire season (70.4%). About one-third accessed services during a fire incident (37.0%), and when a prescribed burn is taking place (33.3%). About one-tenth (11.1%) had not accessed or obtained information under any of the aforementioned situations. Other situations when they access or obtain information from Predictive Services included:

- Close to year round now for assessment products
- During planning for prescribed burns.
- especially during critical fire weather
- Provide user feedback to test products
- pre-fire season
- weather data specific to a region re: forest health assessments
- Hurricane Season

Use of specific websites and services—Respondents were asked to indicate which Predictive Services websites they had visited or which GACC services they had used, revealing that a near majority had been to the National Interagency Coordination Center (NICC—44.4%). The Geographic Area Coordination Center sites from most to least mentioned were the Northwest (33.3%), Northern California (25.9%), Southwest (25.9%), Southern (25.9%), Southern California (22.2%), Rocky Mountain (14.8%), Eastern (11.1%), Northern Rockies (11.1%), Western Great Basin (7.4%), Eastern Great Basin (3.7%), and Alaska (3.7%; responses do not sum to 100% because respondents could select multiple sites). Less than one-tenth (7.4%) were not sure which if any sites they had visited or (7.4%) indicated they had not visited any of the listed sites/used GACC services.

Familiarity with the products and services—Respondents were asked their familiarity with Predictive Services' products on the web, the briefings, and the emails. They were more familiar with the web products (*Figure G8-3*, $M=3.4$, $sd=1.2$, $n=27$), and the briefings (i.e., national, geographic, situational, or meteorological, $M=3.4$, $sd=1.2$, $n=27$), than with the emails (these contain current projections and/or information about Predictive Services, $M=2.5$, $sd=1.4$, $n=27$).

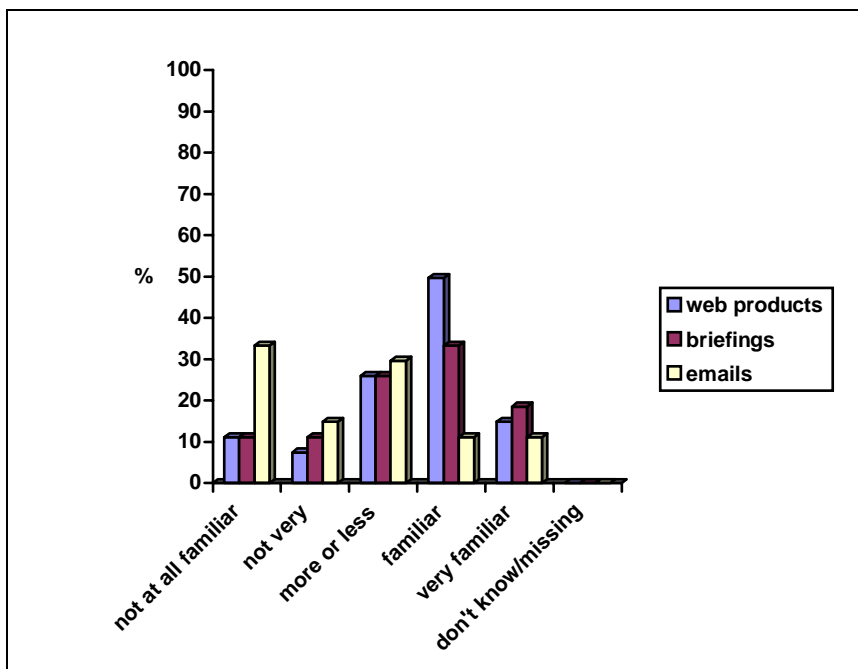


Figure G8-3. Familiarity with Predictive Services products on the web, briefings, and emails—non-federal fire environment analysts.

What are their Opinions of the Products and Services?

Ratings of Predictive Services information—Respondents tended to agree that Predictive Services information was accessible ($M=4.3$, $sd=1.0$, $n=24$, *Figure G8-4*, 7.4% marked ‘don’t know’ and 3.7% did not respond).

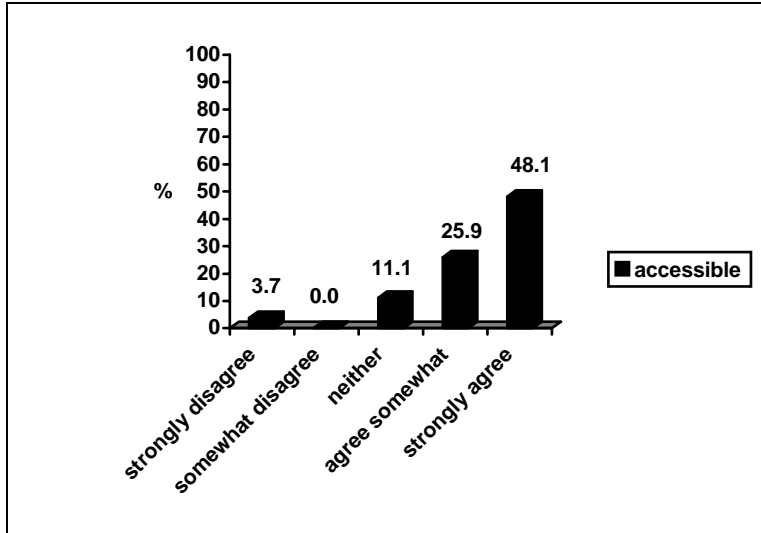


Figure G8-4. Ratings of accessibility of Predictive Services information—non-federal fire environment analysts.

A majority agreed that Predictive Services information was timely ($M=3.9$, $sd=1.1$, $n=24$, *Figure G8-5*, 7.4% marked ‘don’t know’ and 3.7% did not respond).

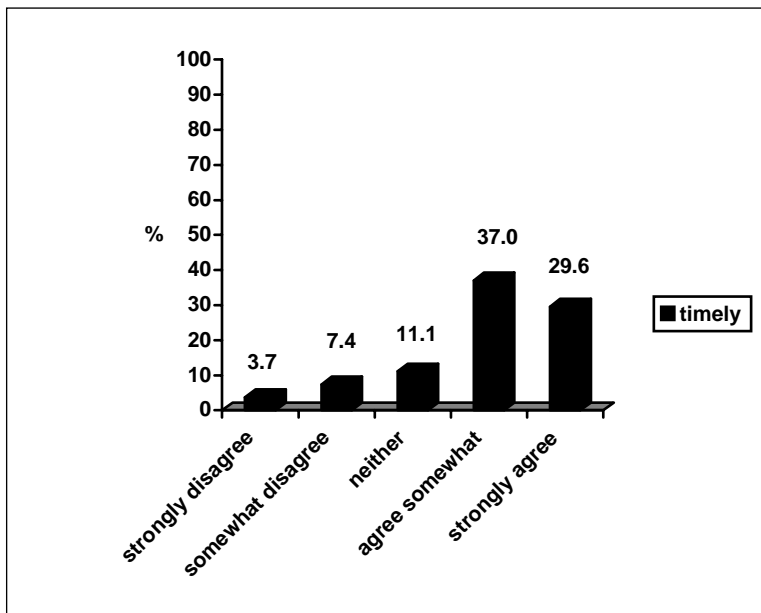


Figure G8-5. Ratings of timeliness of Predictive Services information—non-federal fire environment analysts.

A majority agreed that Predictive Services information was relevant ($M=4.3$, $sd= .9$, $n=23$, *Figure G8-6*, 11.1% marked 'don't know' and 3.7% did not respond).

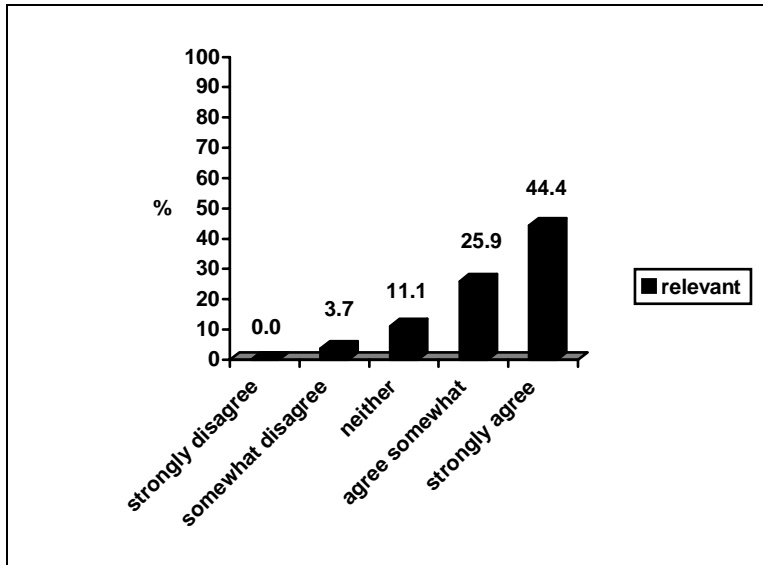


Figure G8-6. Ratings of relevance of Predictive Services information—non-federal fire environment analysts.

Half agreed that Predictive Services information was accurate ($M=3.7$, $sd= .9$, $n=23$, *Figure G8-7*, 11.1% marked 'don't know' and 3.7% did not respond).

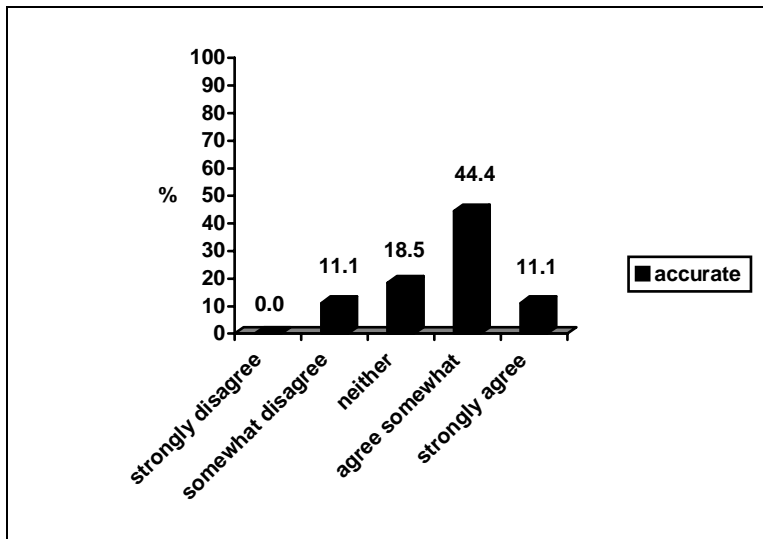


Figure G8-7. Ratings of accuracy of Predictive Services information—non-federal fire environment analysts.

A majority also agreed that Predictive Services information was complete ($M=3.8$, $sd=.8$, $n=23$, *Figure G8-8*, 11.1% marked 'don't know' and 3.7% did not respond).

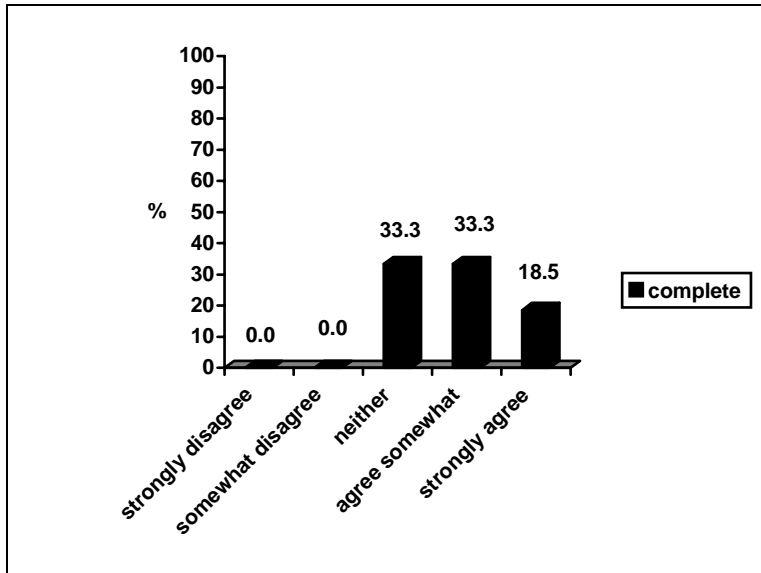


Figure G8-8. Ratings of completeness of Predictive Services information—non-federal fire environment analysts.

A majority agreed that Predictive Services information was easy to understand ($M=4.0$, $sd=.7$, $n=23$, *Figure G8-9*, 11.1% marked 'don't know' and 3.7% did not respond).

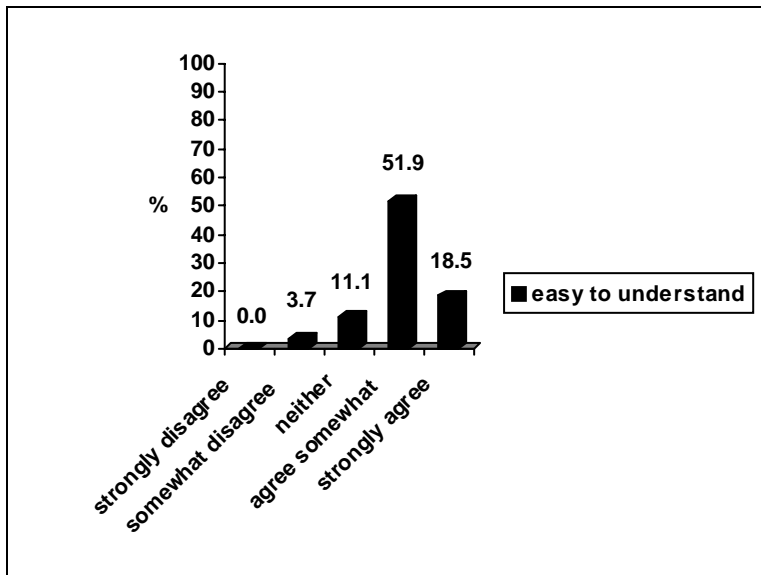


Figure G8-9. Ratings of ease of understanding of Predictive Services information—non-federal fire environment analysts.

Satisfaction with Predictive Services contacts—About one-fourth (25.9%) had contacted Predictive Services to report a problem with a product or service. All of them provided

positive ratings, where the majority (71.4%) rated Predictive Services as responsive, the remainder as very responsive (28.6%).

Overall satisfaction—Responses indicate that Predictive Services had met most expectations ($M=2.9$, $sd= .8$, $n=20$, *Figure G8-10*), and respondents were somewhat satisfied, or neither satisfied nor dissatisfied ($M=3.7$, $sd= .8$, $n=24$, *Figure G8-11*).

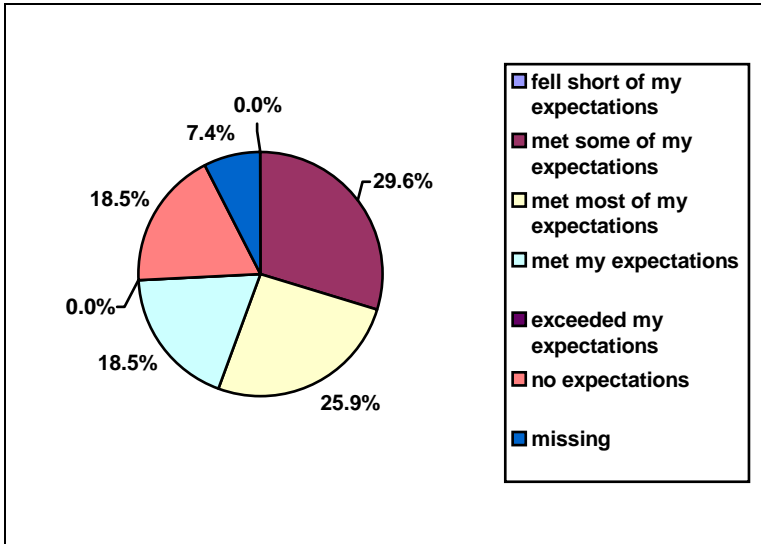


Figure G8-10. Ratings of degree to which Predictive Services met expectations—non-federal fire environment analysts.

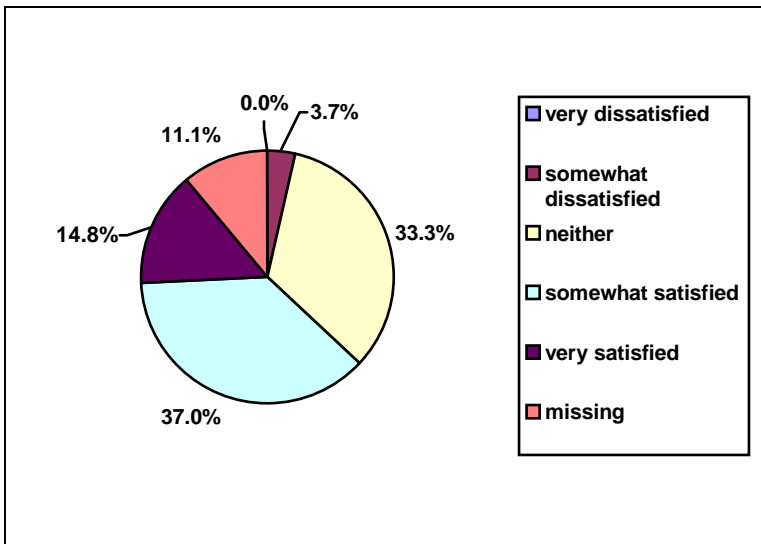


Figure G8-11. Ratings of satisfaction with Predictive Services products and services—non-federal fire environment analysts.

Trust and confidence in the information—A majority expressed some, to a great deal of trust and confidence in Predictive Services information (*Figure G8-12*, $M=3.4$, $sd= .9$, $n=26$; 3.7% did not provide a response).

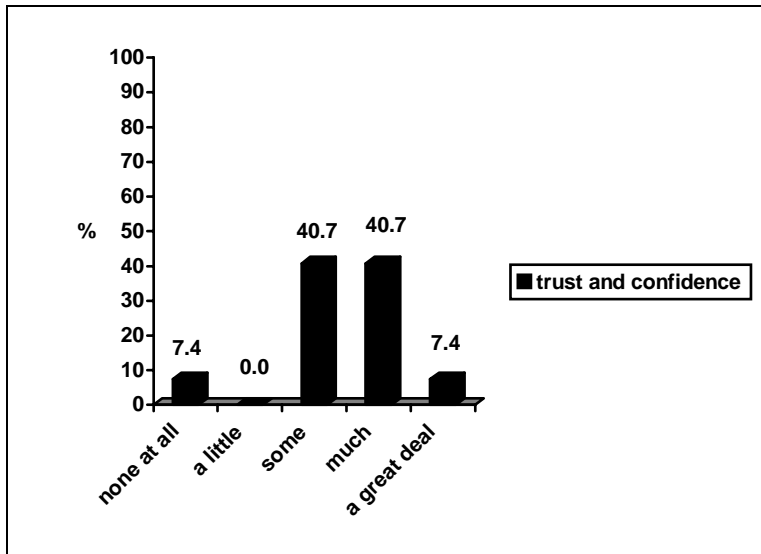


Figure G8-12. Ratings of trust and confidence in Predictive Services information—non-federal fire environment analysts.

Are Respondents Relying on and Taking Action Based on Predictive Services?

Reliance on products and services—A majority indicated that they *do* rely (some, to a great deal) on Predictive Services in making decisions (*Figure G8-13*; 3.7% did not provide an answer).

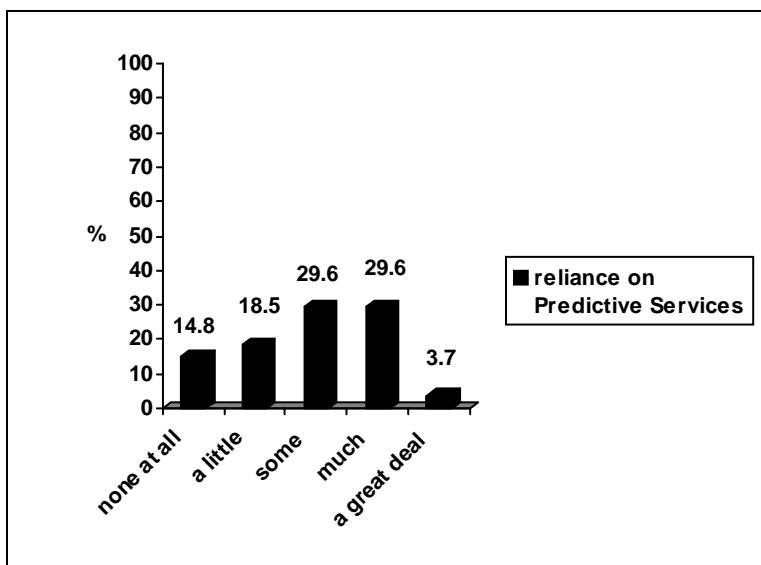


Figure G8-13. Degree of reliance on Predictive Services—non-federal fire environment analysts.

More than one-fourth (29.6%, *Figure G8-14*) indicated that they relied on other sources more heavily than the products and services provided by Predictive Services (chose a 4 or 5, where 5=very true).

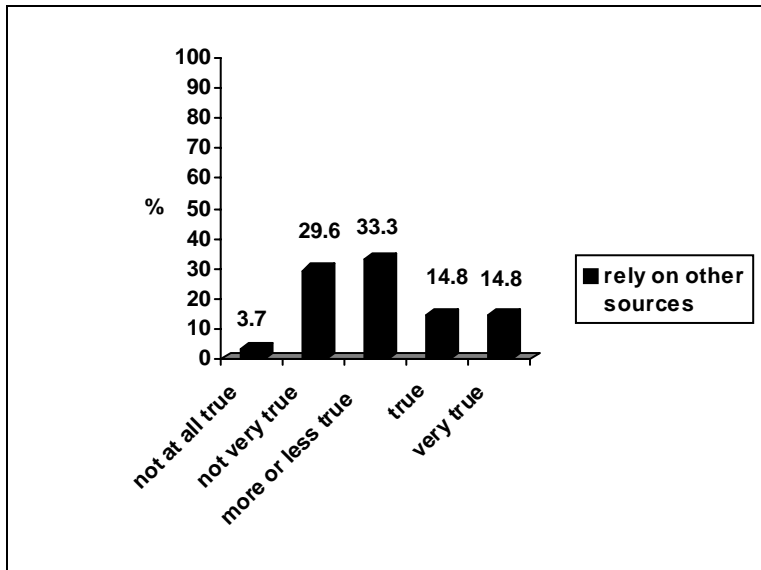


Figure G8-14. Rely on other sources more heavily than the products and services provided by Predictive Services—non-federal fire environment analysts.

Those who selected ‘true’ or ‘very true’ were asked to specify the other sources relied upon. Answers included these sources along with any additional comments:

There are numerous weather based websites that I use.
 Redding Fire Weather
 Various web sites providing raw meteorological output and FCAMMS modeling.
 local news, printed material, verbal communications
 Depends on the product of course. The NWS sometimes has climatic/forecasting info that is above or different from what the NPS products provide.
 In-house fire weather forecasts.
 NOAA
 NWS Weather Information

The likelihood of taking action based on Predictive Services information was examined. A near majority was likely to take action based on Predictive Services information (44.4% chose ‘likely’ or ‘very likely’, *Figure G8-15*, 7.4% did not answer this item).

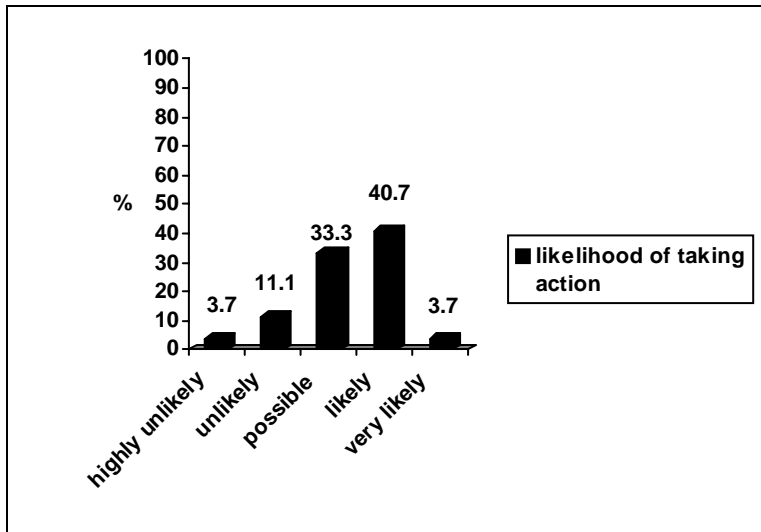


Figure G8-15. Likelihood of taking action based on Predictive Services information received, or gathered from a website—non-federal fire environment analysts.

Did Respondents offer Insights into Reliance and Barriers?

Perceived overlap—Respondents were asked how true or untrue it was that there is overlap in the type of information that can be obtained from Predictive Services and other sources (rated on a scale from 1 to 5, 1=not at all true, 5=very true). A few indicated there was no overlap (not at all true, 3.7%), about one-third chose ‘not very true’ (33.3%), about one-fourth felt it was more or less true (25.9%), about one-fifth felt that it was true (22.2%), and one-tenth very true (11.1%; 3.7% did not provide a response).

When individuals marked ‘true’ or ‘very true’ they were asked to specify the other sources. Answers included these sources, along with any additional remarks:

Primarily weather data.

National Weather Service

National Weather Service, Oxnard; NWS, LOX

Redding Fire Weather (old name) on Airport Rd.

A good Intell Ofcr/Coord will learn to use other sources even if they sometimes overlap. I don't see that as a negative, it confirms trends.

Seasonal outlooks from NWS site in Norman OK., Drought monitoring info from NWS

In-house Fire Weather Forecast, NWS Fire Weather Forecast

weather briefings provide a 'short term' prediction similar to the short synopsis in the predictive services screen.

NOAA

Barriers to use of products and services—There were various reasons why respondents did NOT use the products and services offered by Predictive Services, although no one overwhelming reason or set of reasons emerged among the 15 offered as potential barriers (*table G8-1*). The most frequent reasons provided included needing information that is site specific, and not being mandated to use the products.

Table G8-1. Reasons why they had not used the products and services offered by Predictive Services—non-federal fire environment analysts.

Reason	Percent
I never thought about it.	18.5
My current management practices don't require the types of information provided by Predictive Services	14.8
I need information that is site specific	55.6
I am not mandated to use these products	33.3
I don't have the time to use these products	3.7
I don't know where to get advice about using these products	18.5
I don't know where to get the technology to use these products	3.7
I don't have the technology I need to use these products	0
I don't trust the products and services	0
I don't want to use these products	3.7
I don't think these products support my agency's current practices	14.8
Agency directives/guidelines instruct me to use other information	11.1
I don't have the money to use these products	7.4
I don't trust the advice I get about using these products	0
I don't trust information that is generated by multiple agencies	0

How can Existing Products and Services be Improved?

Improving existing products and services—Respondents were asked to complete the sentence “The information and services provided by Predictive Services would be more useful to me if...”. The following responses were provided (note that these are not in any particular order and are not modified to create groupings but appear in their verbatim form):

I knew what they were.

it wasn't federal centric

I was acquainted with the individual forecast, could provide verbal feedback, and could occasionally meet with them in the field (on a fire)

there was more site-specific information for my area.

If they offered products that we don't already have on the TICC page. I do use their extended outlooks, which is a help to our strategic planning.

the products could be more tailored to my specific needs.

The products are useful, they just aren't site specific enough for a high level user to rely on in his/her local unit or even region sometimes.

The fire statistics reflect protection area rather than ownership at point of origin.

more site specific and took into account the influences of the cold ocean waters in the formation of sea breezes.

I were asked what I needed.

The new website's fire weather forecasts were area specific like the old website.

They were able to be focused more at the local level.

the information wasn't emailed to everyone and his brother and sister and cousins on multiple email lists!

they were real time - i have found that some fire info is outdated or stays on web longer than fire

it was coordinated with local fire weather.

Streamlines, too many different places on the web to get a 'National Sit Report' for example. One stop shopping should for info should be the intel goal.

I needed the information for my daily job responsibilities.

Were There Additional Comments?

As is customary in surveys, we offered the opportunity for our respondents in the non-federal sector to tell us if they had any additional comments about Predictive Services that were not covered above or any comments about the survey. In no particular order, here are their responses:

The LA County Fire Dept Vegetation Management Unit relies on predictions to determine Go/No Go for prescribed burns. Predictive services are readily available to determine trends. Highly useful.

I am aware that there have been years of controversy behind this issue. As a 'consumer' I felt that my agency's needs were minor considerations. I hope that this survey is not designed to validate a previous decision. Who are the people who commissioned this survey?

I would like to see more risk-oriented products from Predictive Services in general. I would like to see more site-specific information for my area. Some of the GACCs are being creative in the products they are issuing. I would like to see more of that across the GACCs, which I think would further the science more.

My responses are due to my not using the GACC web sites very often. I generally see them as serving mainly federal needs. We have spent quite a bit of time and money developing a predictive services program to meet the needs of our agency, and the state of Texas. We have over this time though, I think had a good relationship with SACC and SWACC, and share information and products on a regular basis. We would like to continue this relationship, and are always available to take advantage of any opportunities to cooperate.

I think the National Program is fine overall, it sometimes wants to put too much emphasis on the terms...'above or below normal', or 'normal'. Without specific national quantifiable criteria for those terms it is not always easy to adhere Site specificity. Your survey is the worst aspect of predictive services. If I don't have an issue why do I have to choose a reply?

Difficult for an outside consultant to answer some of the questions as we are not direct users of the products.

This is a good service at bringing timely information of where to augment initial attack resources and when. Any information that assists in repositioning resources to improve the potential for success is a welcome tool in my box. It can be a bit broad as opposed to specific fire weather forecasts, but it lets me have a better 'big picture' look at what will (or may) be about to impact me.

I am interested in knowing more about Predictive Services' overall mission and objectives (goals?) in providing electronic data.

Define what predictive services is and what products they offer, and provide one stop shopping for the information. Better update cycle for seasonal outlooks.