

MEMO

DT: June 30, 2010

TO: ABAG Earthquake and Hazards Outreach Committee and ABAG Lifeline Infrastructure and Hazards Committee

FR: Jeanne Perkins, Hazards Consultant, and Danielle Hutchings, ABAG Earthquake and Hazards Specialist

RE: Focus Groups for ABAG Website

ABAG has held two focus group meetings related to the update and redesign of the ABAG Earthquake and Hazards Program website.

San Ramon Focus Group – Focus on Hazard Education and Younger Users

The San Ramon Focus Group was held on June 24, 2010 at a Community Center in San Ramon. It was attended by two 11-year-old girls, two 18-year-old boys, the mom of one of the girls, and two members of the Bay Area Earthquake Alliance.

Question 1: Curious or Concerned

When you hear “Earthquake and Hazard Map Information” what do you think? Are you scared and concerned – or curious – or somewhere in between? What would you see on this web page to change that?

Participants were, in general, curious when they viewed the current graphics on the web site. The younger teenagers were generally afraid of earthquakes. However, they were concerned – and maybe even afraid – when they saw the word “failure” and then graphic with the man in the hazmat suit. In general, the older teenagers and adults felt that a bit of fear might be a useful motivator, but they saw the current layout as reasonable. They believed that the “contact us” button looked more like something that should be used to report a web technical problem, not to ask a question.

Question 2: Why Use Web?

How do you currently use the web? For work or school? For home?

The younger children used the web almost entirely for school and very little for fun. The older teenagers used it for both.

Question 3: Web Tools

Do you use search engines like Google? Others? Facebook or Myspace? Twitter?

All of the participants used Google.

The two youngest participants both were not allowed to have Facebook accounts, but the two teenagers were on Facebook, as well as the mom. All of the participants thought it would be very strange to befriend a website like this on Facebook. The Earthquake Alliance members felt that businesses would befriend other businesses to see what the competition was doing on Facebook, but that teenagers would never become a “friend” of a business or educational website. The adults on Facebook also did not use it to check on businesses, but rather to keep in touch with actual friends. They also had no interest in receiving updates from Facebook or a text message of earthquake preparedness information, even if it occurred after an earthquake. One possible option would be to make the information more location specific so that updates on status of water or road closures could be forwarded, if the Internet were working.

None of the participants used Twitter and thought that it was a bit strange to waste time using such an application. However, something like an RSS feed that you might sign up for was thought to be more useful, but still not something that they would personally sign up for.

Question 4: Libraries and the Web

Do you spend time at a library? Have you ever used a library to access the internet?

While the children and teenagers had spent time at a school library, the younger children had never accessed the internet from a library. While the teenagers had accessed the internet from their school library, they never go to the library unless their class was held there. It was much easier to access the internet from home than walk/drive all the way to the library.

Question 5: Trust and Credibility of a Web Site

Do you believe everything that is on the internet? How do you decide what to believe and what not to believe? How do you decide whether or not to trust a website? Would you be more likely to trust a website if you know who paid for the website? ...if the website listed any awards that it had received for content? ...if someone recommended that website? (If so, who would you trust to recommend a website?)

This question provided some of the most interesting discussion of the entire focus group. All of the participants, even the two youngest children, were very aware of the possibility of inaccurate information on a website.

They all consistently looked at who was publishing a website. Interestingly, they were very interested in who was sponsoring a website and where it received funding, but less concerned about what awards it might – or might not – have received. All believed that the current information on the ABAG earthquake and hazard program website about ABAG and the sponsors and funding for the website was inadequate. They also acknowledged that this basic information should be present on all of the subsequent pages.

Some of the examples of websites that should not be trusted were those prepared by school children as class projects and those supported by commercial companies attempting to sell something. One of the teenagers noted that, although Wikipedia might be known as a site that should not be trusted, that he visits it often because it is well organized and easy to navigate. While he doesn't trust it for political information, he is inclined to trust it for scientific information because he views the possibility of people wanting to provide misinformation on something like earthquakes as minimal.

All four students agreed that the people that they would most trust to recommend a website were teachers. Another possible trustworthy person mentioned was someone who worked for a fire department.

It was agreed that the title of ABAG's website should be changed to sound more official. For example, write out Association of Bay Area Governments or be more specific in naming the department that sponsored the site.

Question 6: Earthquake Knowledge

What do you think causes earthquakes? If you didn't know what causes earthquakes, where do you think you might learn that information? From the web? Going to the library?

The students felt that they would first go to their science textbook. If they did not have the "correct" textbook, then they would use Google and the web.

Question 7: Preparedness

A - How prepared do you believe you are for an earthquake?

Participants felt that they were only moderately prepared.

B - Prepared might mean:

- Knowing basic first aid
- Having spare food in case you couldn't get to a store
- Having extra water in case the water became unsafe to drink
- Having a family plan to know how you might find each other afterwards
- Having a plan for who might take care of your pets – and get them food and water
- Having basic supplies at home (and, if you drive, in your car)

C - Now how prepared do you believe you are for an earthquake?

Participants, in general, were well aware of what being prepared means and viewed their previous assessment of their state of preparedness as accurate.

Question 8: Mitigation

Do you know the difference between “hazard mitigation” and “emergency preparedness” for earthquakes? What do you think you might do to make your bedroom (or home) safer? Do you think it would be more or less dangerous to be live San Francisco or here in an earthquake? Why? Would it make any difference in what you did to prepare or mitigate if you thought that earthquakes were more common/less common or more of a danger/less of a danger?

In general, the participants did not understand the term “mitigation” but they appreciated the difference between preparedness and mitigation when explained to them. The mom felt that her family had actually done much to mitigate their home's structural problems, motivated, in part, by what she felt was high earthquake insurance premiums. The children and teenagers felt that they were not in a position to mitigate their home's potential problems. The teenagers felt that they could do something about bookcases and not putting their bed under a window, however.

All had a fairly sophisticated knowledge of the relationship between earthquake location and size to potential safety issues of a specific location in San Francisco or the San Ramon Valley.

Question 9: Kid Zone

Are you likely to click on the “Kids Zone” link? Are games related to earthquake information useful or interesting to you?

All four students agreed that they would not click on the “Kids Zone” link because it sounds too young for them. The only reason they would be at this website in the first place is if they were looking for information for a school report. The mom said that she would use the “Kids Zone” section to find games to teach her younger children about

earthquakes. It was agreed that there should be a section with information for older students doing school research and a separate section for younger students who might play the games either as an assignment from a teacher or with the help of their parents.

Wrap Up

The discussion concluded with a discussion of the possibility of adding some “sub-regional” earthquake hazard information to the ABAG website. All felt that this would be particularly useful because it could distinguish between the problems in San Francisco and in areas such as the San Ramon Valley.

The idea of further personalizing the road closure information by making it more similar to a “traffic report” news story was felt to be excellent by both the students and the Earthquake Alliance Members.

They felt that the site could build on the idea of reusing large water containers or barrels, rather than purchasing small water bottles, for emergency supplies. An explanation about how to sterilize this water by using a few drops of bleach was thought to be useful. They also thought that tips on how to circulate current food supplies through an emergency kit so that “special” food would not have to be purchased would be useful.

There was discussion about a “Myth Buster” section that discussed common misconceptions about earthquakes and their mitigation. All participants noted that they would be more likely to follow standard FEMA or Red Cross recommendations for preparedness if there was an explanation for why those recommendation were made, for example if they knew that grocery stores would not be open and that gas stations cannot pump gas without electricity, or that roads in their neighborhood would be impassable.

The Northern California Earthquake Alliance representatives noted that the CERT links needed to be expanded and updated, particularly for the Contra Costa and Alameda County areas. These representatives also noted that the website felt a little “cartoony” and would like a more professional look more appropriate for their business interactions. It was also noted that it is difficult to find the maps he is looking for on the webpage and instead used Google to search for the information he is looking for on the ABAG site.

The GIS maps were felt to be extremely useful, but felt that if the link said “See the impact on your home or business- click here”. Instead of “GIS mapping” people would be more likely to click on it. GIS doesn’t mean anything to most people

In conclusion, all participants were fully engaged in the focus group discussion and felt it to be worthwhile. The younger children were impressed that they were able to talk and participate in the discussion.

Oakland Focus Group – Focus on Web Usability

The Oakland Focus Group was held on June 29, 2010 at ABAG's offices in Oakland. It was attended by six women of various ages. (Those men who were invited did not show up.)

Question 1: Earthquake Understanding

How well do you understand earthquakes and earthquake hazards? Where have you learned what you know about earthquakes and earthquake hazards in the Bay Area?

Participants listed:

- Experienced an actual earthquake
- Reading books (including text books) and newspapers (which are generally more likely to talk about earthquakes after one has occurred)
- Classes
- TV specials and news coverage
- Radio

Participants said that they have accessed information about earthquakes by going to the internet. Typically, they use news story links and Google search to find the information they need. They noted that all of the above sources were easily accessed over the internet. They felt that experiencing an earthquake was a big motivator to learn more about earthquakes.

Question 2: Preparedness

A - How prepared do you believe you are for an earthquake?

Participants felt that they were only moderately prepared (with responses ranging from 0-90% prepared).

B – Being prepared might mean:

- Knowing basic first aid
- Having spare food in case you couldn't get to a store
- Having extra water in case the water became unsafe to drink
- Having a family plan to know how you might find each other afterwards
- Having a plan for who might take care of your pets – and get them food and water
- Having basic supplies at home (and, if you drive, in your car)

C - Now how prepared do you believe you are for an earthquake?

Some of the participants felt that they were more prepared than they had previously believed based on this list.

D – What motivates you to prepare for an earthquake? What kind of information would make you more likely to prepare? Was the information on the website useful? What was most useful? Least useful? Was anything that you were looking for missing?

Motivations listed by participants included money and time to purchase supplies, getting organized, and parent activities with children (such as PTA, schools, and scouting). Participants noted that being a bit “scared” such as occurred after the earthquake in Haiti was a major motivator.

The participants thought that the website was relatively easy to navigate from the home page. Participants also noted that once they were more than two clicks away from the home page, navigation began difficult. Many thought that the maps of shaking intensity were an “eye opener”. One participant now has walking shoes at her office as a result of some of the “scary” statistics about traffic issues.

The principal problems were with the “Kid Zone” and the interactive maps. They felt that “Kid Zone” might be renamed “Education” or “Learn About Earthquakes.”

Question 3: Mitigation

Do you understand the difference between being prepared and hazard mitigation? Have you mitigated potential damage to your home or its contents? What motivated you or people you know to mitigate hazards? Did the hazard maps make you feel differently about mitigating and preparing for natural disasters?

The participants found the personalized maps “shocking”. One person said that she had moved out of the Marina District in San Francisco after learning what had happened in the Loma Prieta earthquake.

Another woman said she had taken care to not move into a “soft-story” building, and that the section on “soft-story” buildings was well done.

Other participants who owned their own home had attached the water heater to a wall and bolted bookcases into the wall. One participant wanted to have advice on what to do about a piano.

Question 4: Location and Hazard

Do you believe that it would be more or less dangerous to be in San Francisco or here in Oakland in an earthquake? Why?

The uniform conclusion was, “it depends.” Factors that would contribute to that danger listed by participants were the fault that the earthquake was on, the height and age of the building you were in, the density of the area, the soil or depth to bedrock, the public

reaction to the earthquake, and the disaster response of the city. In particular, one participant felt that it should be easier to access the work being done by cities, particularly since ABAG is an organization of local governments.

Question 5: Motivators for Action

Would it make any difference in what you did to prepare or mitigate if you thought that earthquakes were more common/less common or more of a danger/less of a danger?

Participants would do more if they felt that the next earthquake would be larger than Loma Prieta, and if they felt that earthquakes were more common in the Bay Area. They felt that, however, the California native was less likely to act than the Minnesota transplant.

One disincentive for action was if you felt that Loma Prieta wasn't THAT bad for ME. Another observation was that earthquake risk for another large earthquake is increasing over time, while the public memory of past earthquakes is decreasing. Another idea was that California school children have drills in school, but adults typically are not exposed to these drills. Education needs to be a continual process. Outreach to businesses could be particularly effective. One example of an effective outreach program is the "Disaster Days" of UC Berkeley.

Question 6: Hazard Maps

Did you understand what the maps were showing? Did you make a connection between the hazard maps and ideas for mitigating hazards? How was your experience navigating to the hazard maps and back to the website? Was it easy to navigate the GIS site?

One woman had not been able to access the maps due to an error message (because her monitor window was too large). Based on this problem, there was a discussion on how to warn users of this issue.

The group felt that on most of the maps, the "legend" should be the first thing on the right, not "layers." They felt that the term "layers" was inappropriate. The one exception was when you are selecting a fault scenario. The facilitators explained that this had been changed at the request of FEMA. The participants laughed and said that the site should be driven by user needs, not FEMA needs.

The participants felt that some sort of FAQs on how to navigate the maps was needed.

Then the participants engaged in an active discussion of the "ideal" hazard map website. In it, rolling over a map color would "pop up" an explanation of what that color meant.

A link would be included on what you should do given that you live in that zone. The legend itself should be a series of links to more information.

However, overall, the participants found value in the hazard maps. They felt that even a few changes to the features on the maps would make them more user-friendly and more useful.

Question 7: Web Site Aesthetics

Is the color combination appropriate? What does it remind you of? Are there enough pictures? What kinds of pictures would you like to see? Are the graphics appropriate or inappropriate? Is the text difficult to read? Should the text be a different color/font/size?

The participants felt that the graphics and design made the website seem childish and amateurish – as well as “unreliable.” The clip art was felt to be “high school” quality. To avoid the fear associated with earthquakes, photos should be of people preparing for an earthquake rather than damage, especially on the home page.

The home page should spell out ABAG and explain what it is. It should ask questions, such as “Are you prepared?” Some felt that “fear” and “motivation” should come from some other outside website and the focus should be on what I can do to be ready. Others felt that some fear was an effective motivator.

Participants found the amount of information on the home page to be overwhelming. The website should use links on the side – as well as links on the top – to ease navigation.

Videos of shake table tests can also be an effective tool. However, they should be paired with ways to make your home safer and a positive message.

The participants were then shown the mock up of a revised home page.

Participants were very excited about the “calming” professional color scheme. They found value in the tabs at the top of the page highlighting different users and thought that they would make the site more user-friendly.

They felt that it still needed work in terms of what to highlight. Ideas such as “Top 10 things YOU should do” or “Are you prepared?” were suggested. They felt that “Order Reports” should be changed to “Technical Reports.”

Participants discussed the benefits of a “clutter-free” home page. There was also discussion of the layout of the news section and the hazard map section. They felt that it was unclear how much space should be devoted to “news” and what that section might include.

Finally, there was a discussion about the need to hire translators versus recommending use of Google Translator.

Wrap Up

While the “Driving” section was most difficult to navigate, this was the section that caused the woman to take walking shoes to her office.

They did not believe that the “Kid Zone” was appropriately named or contained enough information. It should be called “Education” or “Students.” The EPA “Kid Zone” was felt to be an excellent model.

Eliminating graphics might cause some issues for those with limited language skills.

The technical quality of the information was felt to be excellent and extensive. The graphics, color scheme, and font made the website seem less reliable.

In conclusion, all participants were fully engaged in the focus group discussion and felt it to be worthwhile and at least as good as other focus groups they had attended. They were particularly impressed that they were given a “pre-questionnaire” to prepare for the focus group.