



### INTRODUCTION

**Objective** 

This document will identify and analyze existing USDA customer data, organize it as a useful reference, develop a composite picture of key customers, and provide some forward-thinking on how this information might be leveraged to transform USDA web presentations around customer preferences.

USDA has multiple sources of customer research within the organization. A number of these materials hold isolated insights into the actions and habits of USDA.gov Web customers, yet there is no summary of all user profiles.

In addition to group profiles, audiences have also been personified by individual user personas. User personas are depictions of categories of site users and their requirements for interaction with USDA via the Web site. When analyzed and aggregated into personas these insights become easily referenced, useful, and effective business tools. Understanding users and their needs helps:

- •target site functionality and messaging to specific USDA customer groups, and
- •reach and serve all customers better online.

**Document Summary** 

This Audience Analysis provides both a generalized and a myopic view of key customer groups within USDA.gov's user base.

To develop a high-level sketch of each user group, the document describes each composite customer group including audience size and identified demographics. It examines the group's current methods of interaction with USDA, as well as the information the users seek during those interactions. Finally, the document assesses each group's readiness to leverage electronic government (eGovernment) initiatives that use Internet-based technology to ease interaction with the government, reduce costs, and streamline citizen-to-government communications.

This analysis focuses on the following key customer groups:

- producers,
- agribusiness and cooperatives,
- •low-income families and individuals,
- •children and caregivers,
- •rural communities and businesses,
- •researchers and the academic community,
- •landowners and conservationists,
- policymakers and influencers,
- •national and local media,
- •the general public, and
- •USDA employees.

The user personas focus on the traits and challenges of key customer groups and offer a more detailed view of the user group. Personas are not intended to perfectly represent each member of the whole, but construct an individual characteristic of the group. The individuals depicted are fictitious. USDA's development teams must remain cognizant of these users' needs throughout the redesign process.

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After creating a good site structure, everything else will fall into place. A well-designed structure makes it easy to define a navigation system, and the two together make designing page layouts and templates a snap.

- John Shiple.1

### **AUDIENCE TYPES**

**Universal Findings** 

Universally, all of these audience groups have pressing offline tasks – raising a family, raising crops, raising funds, raising profit margins – that the online experience must support. Users require a USDA.gov that enables them to quickly find information to support them in those offline tasks. For them, the site is a means to vital information, not an end unto itself.

While each group requires content that will help meet distinct offline needs, the demand for fluidity and ease-of-use is common to all audiences. Findings support development of a consistent visual design in which content for all of these users can be presented. Further, a site structured around common user tasks ensures access to the content users need.

Many user groups - particularly the general public, the media, and researchers - interact with multiple USDA agencies. These cross-agency audiences would benefit from a cohesive experience across USDA's and the Federal Government's Web presentation. They should not need to learn a new navigational system as they retrieve information from each of the department's programs. A consistent site architecture represented by parallel navigation systems will enable users to confidently dive into content provided by any agency.



Companies that create design personas have the necessary foundation for crafting a great user experience.

-Harley Manning, Forrester Research<sup>2</sup>



### PRODUCERS: AUDIENCE PROFILE

#### Potential audience

Includes 2.2 million ranchers, agricultural, aquacultural, and specialty crop producers.

### **Demographics**

The vast majority of this audience is male and over 50. However, they range in age from 25 to 65. While educational level varies, the majority have at least a high school education.

The majority of producers fluently speak and read English. Yet, a significant minority are Spanish-speaking.

### Interaction with USDA

USDA is essential to producers' businesses, both as an information source and as a subsidy provider. Currently, only the most tech-savvy producers communicate with USDA through its online offering. Many find current USDA applications difficult to use or access. Farmers indicated that USDA already knows relevant information about their farm size, output, and income, so they would prefer forms that prepopulate with known data about their enterprise, rather than having to spend time reentering it on multiple pages.

The average producer still leverages traditional methods of interacting with USDA agencies in order to determine program eligibility and complete application processes. Most make in-person visits to FSA offices about four to eight times annually and rely heavily on the staff in those offices for support. They also interact with USDA through traditional mail or with the support of intermediaries.

### Informational Needs

Regardless of the channel through which they seek it, producers want information about farm loans, price supports, export assistance, marketing assistance, grain inspections, crop insurance, risk management, agricultural research, and agricultural policy including the farm related legislation such as the Farm Bill.

This group is highly motivated to complete tasks. They view time spent completing paperwork or online forms as pulling them away from production duties and would rather minimize time spent at a desk. Agricultural producers would be interested in more efficient methods of:

- determining benefit eligibility,
- applying for benefits, and
- •completing application forms.





### Computer and Internet Access

Fifty-four percent of producers own or lease a computer. They might also have a laptop computer or a cell phone. They are less likely to have a personal digital assistant, such as a Palm Pilot or Pocket PC.

As with the general population, Internet access is on the rise among this audience group with the highest penetration of access among the group's most prosperous members. A total of 43 percent of US farms now have Internet access, compared to 29 percent with Internet access in 1999. Most have dial-up access, but a significant minority have adopted broadband.

Even as producers' access to technology increases, computer access is still highest among the most profitable farms and lowest among farms with lower sales. In 2001, 73 percent of US farms with sales of \$100,000 and more had access to a computer, 69 percent owned or leased a computer, 55 percent used a computer for farm business, and 58 percent had Internet access. Of farms with sales between \$10,000 and \$99,999, 53 percent had access to a computer, 47 percent owned or leased a computer, 30 percent used a computer for their farm business, and 39 percent had Internet access. For farms with sales less than \$10,000, 50 percent reported having computer access, 45 percent owned or leased a computer, 20 percent used a computer for farm business, and 40 percent had Internet access.

Of the US farms with Internet access, 6 percent use the Internet to purchase agricultural inputs, to conduct agricultural marketing activities, and to access National Agricultural Statistics Service reports, while 9 percent access other USDA reports and research information. Single-digit statistics on eCommerce usage indicate that this group may not be ready to leverage eGovernment initiatives fully.

With less than half of US farms able to access the Internet, any online services for this audience will need to remain accessible via traditional channels. Dependence on in-person interaction will likely remain high until this audience not only increases its levels of Internet access, but gains experience and therefore comfort online.

Because more large producers have access, initial efforts might prioritize content for this audience. Online initiatives targeting smaller and disadvantaged farmers might be more appropriate when Internet access grows among this audience.

### Internet Access among US Farms

1999 **[29%]** 2003 **[43%]** 

### Computer Access among US Farms

Sales of >\$100k **[73%]**Sales of \$10k-99k **[53%]**Sales of <\$10 **[50%]** 

When it comes to our customers, we need to realize that the vast majority of people use technology not for what it is, but for what it does."

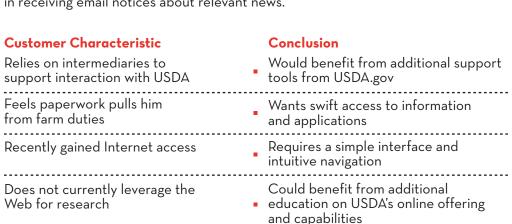
- Sean Carton<sup>3</sup>

### PRODUCERS: PHILIP MACON USER PERSONA

Philip is a 53-year-old farmer in Walla Walla, Washington. He has a high school education, but was always more interested in farming than academics. He doesn't like getting tied up with paperwork; he would rather be working outdoors. He goes to his local Farm Service Agency (FSA) office somewhat regularly to fill out paperwork and get information on specific programs. He likes talking face-to-face with people, so he doesn't mind making the trip to the office occasionally. When he has a quick question he would prefer to use a faster avenue.

Though he has limited computer experience, Philip owns a desktop computer. At his tech-savvy neighbor's urging, he recently got a dial-up Internet connection and an email account which he shares with his wife. When Philip has a simple question, he wants to go online and find the information quickly. He also wants to be able to fill out necessary forms without having to interrupt his work schedule too much. He requires easy-to-understand navigation and quickly loading pages.

Philip also likes to keep up-to-date on farming news and programs but does not always have time to sit down and read lengthy articles or new government legislation. He would like to access current news from his local FSA Web site about the Farm Bill and other programs or changes that may affect his region. He would be interested in receiving email notices about relevant news.





### AGRIBUSINESS AND COOPERATIVES: AUDIENCE PROFILE

### **Potential Audience**

Approximately 100,000 stakeholders in non-farm agriculture-related businesses including processors, packers, and cooperatives.

### **Demographics**

This audience is highly educated. The majority hold a 4-year college degree, and many have earned graduate degrees.

### Interaction with USDA

Obtaining information from USDA is essential to business. Users look to Economic Research Service (ERS) and National Agricultural Statistics Service (NASS) for economic analysis and data. They go to USDA.gov and other government sites for information on trade policy, regulation, and legislation issues.

Agribusinesses and cooperatives often serve as vital resources for producers in helping them to understand and correctly complete program applications. Better support tools and streamlined online application processes for producers could lift some of this responsibility from them, enabling increased focus on the business.

### Informational Needs

This audience is interested in quickly locating agricultural research, market news, grading information, market access, rural business support, and cooperative resources. Programs, policy information, notices, directives, and laws are also relevant.

Agribusiness users typically want ready access to public meeting announcements, enforcement reports, Hazard Analysis and Control Critical Points plans, technical assistance, and other activities aimed at the regulated industry. Some of these users may be looking for temporary food licenses and should also be directed to appropriate Food and Drug Administration (FDA) resources.

#### Computer and Internet Access

These users have access to a desktop at their office. They may have a laptop computer, and in some cases a PDA. Members of this group are very comfortable with a computer, and regularly access the Internet via dial-up or broadband.

Agribusiness users leverage the Internet for research daily. On the whole, these users are on the Web two to three hours each day, leveraging a variety of online sources including periodicals, commodity industry resources, and government sites.

They leverage sites that enable them to research market trends and forecast the way the market will affect the business' bottom line. They also use research to analyze current and future company procurement strategies, and prepare reports and presentations to business executives, shareholders, and directors. Because of their existing understanding of USDA programs, their access to technology, and their technical savvy, agribusinesses and cooperatives are ripe for a Web-enabled offering. They are second only to researchers in their ability to take advantage of eGovernment programs and services.

## eGovernment Readiness HIGH MEDIUM





### **AGRIBUSINESS AND COOPERATIVES:** SEAN JACOBS PERSONA

Sean runs a grain elevator and seed store outside Des Moines, Iowa. He has a dual degree in Agribusiness and Applied Economics from Ohio State University. He has a good relationship with his customers and, because of his breadth of knowledge, often serves as a resource for the local farm community. He knows that sometimes the support he provides them pulls him away from other tasks, but a strong rapport with producers is important to him.

He has a desktop computer with broadband Internet access. He is very comfortable doing Internet research and he spends about two hours online each day researching market trends and how those trends will affect his bottom line. He also uses the Internet as a resource to analyze procurement strategies and prepare reports and presentations for business executives. Most often, he visits USDA sites for economic data and analysis, as well as information about trade policies and legislation issues. The tech-savvy businessman has futures prices delivered to his cell phone at the end of each day.

Sean interacts often with USDA contacts but would benefit from quicker and more efficient communication through email or other resources online. He is concerned with his bottom line and wants to stay on top of business so as to remain successful.



### **Customer Characteristic**

### Uses the Web daily

### Devotes time to supporting producers in their interaction with USDA

Wants to provide local producers with support

Experienced online and with his PC

### Conclusion

- Expects to find fresh data that is regularly updated
- Expanded content targeting producers could relieve some of his support role
- Would be interested in downloadable materials to provide to his rural customers

Capable of downloading materials

and installing new applications

### LOW-INCOME FAMILIES AND INDIVIDUALS: AUDIENCE PROFILE

#### Potential audience

The 20 million low-income families and individuals that receive assistance from USDA.

### **Demographics**

Communication with low-income families is complicated by the group's illiteracy rate and language barriers. While all Web content should use a straight-forward writing style, content aimed at these users should adhere to a more basic reading level and vocabulary.

A significant number of the beneficiaries of Food and Nutrition Service (FNS) programs are seniors or disabled individuals. In 2000, 17.2 percent of food stamp benefits were distributed to households with disabled residents, and 7.2 percent went to households with elderly members.<sup>4</sup>

Compliance with 508 standards for accessibility will be important for these members of the audience. Seniors may have poor eyesight or dexterity limited by arthritis. Disabled users might depend on assistive technology to navigate the Web, such as a modified keyboard, joystick, mouth-stick, or foot pedals. For this audience subgroup, dynamic menus, small navigational buttons, and long listings of links could prove problematic.

### Interaction with USDA

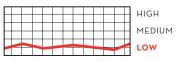
Low-income families interact with USDA's FNS through programs like:

- Child and Adult Care Food Program (CACFP),
- Community Food Security,
- Food Stamp Program,
- National School Lunch Program,
- School Breakfast Program,
- •Summer Food Service Program, and
- Supplemental Food Program for Women, Infants and Children (WIC).

The Rural Housing Service (RHS) also provides housing assistance for low-income families in rural areas.

USDA eGovernment Readiness Assessment identified a lack of relevant content for low-income families on the current USDA.gov Web site. While this audience may not rely heavily on the Web for interaction with USDA, the success of Food Stamp Electronic Benefit Transfer (EBT) programs demonstrate that eGovernment opportunities exist for the audience. Nearly 85 percent of all food stamp benefits are currently issued via EBT systems.<sup>5</sup>

#### eGovernment Readiness





17.2% of food stamp benefits went to households with disabled residents



**7.2%** went to households with elderly members



**85%** of food stamp benefits are issued via digital systems

### Informational Needs

Low-income families are primarily interested in information on food stamps, the Supplemental Food Program for Women, Infants, and Children (WIC), rural housing, community development, Child and Adult Care Food Program (CACFP), and other Food and Nutrition Service (FNS) programs.

### **Computer and Internet Access**

In the last year, Internet access among the low-income audience has increased by 78 percent. Though Internet use is markedly increasing, access for this user group is still very low. Only 12.7 percent of low-income families and individuals have Internet access.

Their access, if any, is through a public machine at a library or community center. They may need to wait in line for a turn on the machine or face time limitations on their use. As well, these users may be leery of entering personal data in a public space. Personalization features become less feasible on shared computers, as the use of cookies to recall personal data could jeopardize users privacy and security.

Overall, this group falls on the lowest end of the spectrum in terms of eGovernment readiness. Any materials or information designed for them should be available in both digital and printed formats.



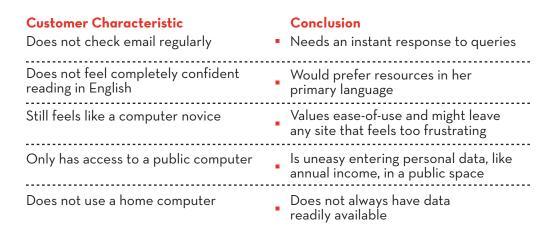
**12.7%** of low-income families have Internet access

### LOW-INCOME FAMILIES AND INDIVIDUALS: SELENA MARTIN PERSONA

Selena is a single mother of two who lives in rural Maryland. She cannot afford to purchase a computer. She uses the computers at her town's public library, even though she usually has to wait for a computer to become available. She gained a fair amount of knowledge about computer applications and the Internet through a training class, but still considers herself a novice. She is particularly hesitant to use sites that require a login since she uses a shared computer. She is also hesitant to enter personal information in a public computer. She would feel embarrassed if someone caught a glimpse of her income or other sensitive data.

She has a Web-based email account but is only able to check it every few weeks. Because of this, she is frustrated when she has to request information by email rather than simply locate it online.

Selena needs to find the latest information on food stamps and rural housing programs. She knows limited English. Her first language is Spanish and she has a lot of trouble finding resources she can confidently decipher. She is further inhibited by a time limit on computer use at the library. She does not have a lot of time to search around, but must get the information she needs quickly. Filling out forms online is an especially difficult process because she often does not have all the information she needs. She must then retrieve it from home and start all over again, beginning with the wait in line.





### CHILDREN AND CAREGIVERS: AUDIENCE PROFILE

### **Potential Audience**

Includes more than 55,000 child nutrition professionals who range from food service employees and managers, to nutrition services coordinators, to principals and superintendents.

This audience also includes 30 million children receiving the benefits of child nutrition programs including school meals, the Child and Adult Care Food Program (CACFP), and other Food and Nutrition Service (FNS) sponsored programs.<sup>6</sup>

### **Demographics**

This audience encompasses the child nutrition professionals and caregivers nationwide who administer schools' participation in FNS programs. Users are geographically dispersed across the country's 14,800 school districts.

In addition, this audience includes America's school-age children, from 4 to 18-yearsold. Their reading and cognitive abilities vary by age group.

### Interaction with USDA

While USDA's FNS administers programs at the federal level, school food service directors interact primarily with state education agencies in the routine management of their district's child nutrition programs.

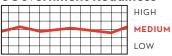
However, USDA's Healthy School Meals Resource System does provide online support for the child nutrition professionals who plan, purchase, prepare, and serve meals. The site's Mealtalk, Successtalk, Foodsafe, and CACFP-Summertalk email discussion groups allow professionals to share best practices.

Also, caregivers and school food service professionals might interact with the department via Team Nutrition. Through Team Nutrition grants offered to state agencies, thousands of school food service personnel have been trained in using the USDA Dietary Guidelines For Americans in school meals, and instructional curricula have been developed for educators.

To the students who benefit from them, programs like the National School Lunch Program, Special Milk Program, and School Breakfast Program are largely transparent. Even savvier, older students would not regard purchasing one of the 4.7 billion school lunches served in 2002 through the school lunch subsidy as an interaction with USDA.

Students may be slightly more cognizant of nutritional messaging from USDA in the classroom. Educators often post nutritional posters in their schools. Albeit subtle, students' most palpable contact with the organization is through its nutritional education programs.

### eGovernment Readiness





### Informational Needs

School food service staff look for program participation guidelines, food-buying support, and menu-planning options. While USDA currently provides food-buying and meal-planning documentation in .pdf format, searchable, interactive iterations of this content could help meal planners and purchasing agents more readily find the nutritional information they need. School districts could also benefit from improved commodity availability and purchase data.

Caregivers might also look for printable posters and handouts to provide students with information about nutrition and health. To best communicate with their students, they will seek materials targeting the appropriate age group.

Students might seek out or be directed to USDA by instructors in order to complete research on nutrition. By their nature, kids would gravitate toward fun activities, but ultimately the site's ability to help them complete the assigned task would determine their satisfaction with the experience.<sup>7</sup>

### Computer and Internet Access

Nearly all schools provide Web access to caregivers and students; the majority have high-speed Internet connections. In 2001, 99 percent of US schools had Internet access with 85 percent of schools leveraging broadband connections. Between 2000 and 2001, the ratio of low-income schools (those with 75 percent or more students eligible for free or reduced-price lunches) using broadband rose from 75 percent to 90 percent.

Nearly 23 percent of students access the Web only at school, while close to 57 percent can get online from both at home and at school. However, low-income children are less likely to have access at home, limiting their Internet use to school hours.

### Children's Online Access

School Only [23%]

Home and School [57%]

Home Only [9.9%]

### CHILDREN AND CAREGIVERS: JEANETTE STEVENS PERSONA

Jeanette is a food service administrator at a school system near Cleveland, Ohio. She plans meals and oversees the lunch program and safe food handling in the school's cafeteria. Her concern about students' health has prompted her to post nutritional posters in the cafeteria and encourage students, in and out of the classroom, to eat healthfully.

Jeanette has an office with a desktop computer, high-speed Internet, and an individual email account. She has spent some time researching, nutrition but would like to find more educational materials directed at parents and children. A colleague at another school told her about USDA's Center for Nutrition Policy and Promotion Resources and she hopes to be able to access materials she can provide classroom teachers about nutrition and the Food Guide Pyramid.

Food safety is important to her as she also educates the cafeteria's cooks on safety procedures. She is aware of USDA's food safety education programs and hopes she can find suggestions on how to educate her staff. She's on the lookout for supplementary materials, such as posters, that she can put up around the kitchen and in the bathrooms to remind kitchen staff of safety procedures and how to avoid contamination hazards.

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### **Customer Characteristic**

### Checks email regularly

Has high-speed access

Seeks nutritional and food safety materials to support classroom teachers and staff

### Conclusion

- Would be interested in email updates and forums
- Can download large images, applications, and utilities quickly -----
  - Would be interested in downloadable resources

### RURAL COMMUNITIES AND BUSINESSES: AUDIENCE PROFILE

### **Potential Audience**

Encompasses approximately 2 million rural families directly and indirectly receiving loan aid, approximately 4,700 rural businesses and cooperatives with 4 million members, and some 3,000 rural utility cooperatives.

### **Demographics**

According to the U.S. Census, 56.1 million residents lived in rural areas in the United States in 2000. Rural areas grew by 3.5 million people through migration between 1990 and 2000. Rural counties near a metropolitan area grew more rapidly than those further away from cities.<sup>8</sup>

Approximately 7.5 million Americans (or 14.2 percent) in non-metropolitan areas live below the poverty line. 9

### Interaction with USDA

Rural communities and businesses currently interact with USDA through the following agencies:

- Rural Housing Service,
- Rural Business-Cooperative Service,
- Rural Utility Service,
- Farm Service Agency,
- •Office of Community Development,
- Grain Inspection, Packers, and Stockyards Administration, and
- Animal and Plant Health Inspection Service.

### Informational Needs

This audience is most interested in information about empowerment zones and communities; rural utility, business, and cooperatives programs; credit guarantees; and export assistance.

### **Computer and Internet Access**

Current statistics demonstrate that 42 percent of rural families use the Internet, while 48 percent of rural businesses and cooperatives use the Internet.

# eGovernment Readiness HIGH MEDIUM LOW

#### Internet Access Among...

Rural Families [42%]

Rural Business [48%]

### RURAL COMMUNITIES AND BUSINESSES: DAVID CALDWELL PERSONA

Thirty-four-year-old David currently lives in rural Wisconsin with his wife and four children. He was just offered a job in the city of Madison, but does not have enough money to afford city real estate. He is interested in purchasing a single-family home outside the city in an area that is still considered rural.

David would like to learn more about government assistance programs that can help him in his purchase. After hearing about Rural Housing Service's (RHS) Direct Loan program, he signed onto USDA's Web site. He is particularly interested in eligibility requirements for Rural Housing Programs, but the Web site instructs him to contact USDA via phone.

David has access to a computer and dial-up Internet at work, but not at home. He needs to be able to conduct his research quickly and completely so as not to detract too much time from his job. He does not have time to make lengthy phone calls and would prefer to find all the information he needs online.



# Customer Characteristic Wants to purchase a home in a rural community Has limited awareness of USDA site offering USDA site offering Conclusion Would benefit from online information about USDA's Rural Housing Program Information should be displayed prominently and organized efficiently Cannot download large files

Does not have time to make phone calls

Wants to be able to find all needed information online

### RESEARCHERS AND ACADEMIC COMMUNITY: AUDIENCE PROFILE

#### **Potential Audience**

Includes university-based professionals at more than 3,300 colleges and universities, as well as 1.3 million corporate and academic researchers. This group might also include K-12 teachers, student teachers, and group leaders.

### Demographics

Men and women in this audience work in scientific fields such as human nutrition, food science, biology, horticulture, and veterinary medicine. Members of the research and academic community could also conduct applied or behavioral research in fields such as social marketing. They might also work in a corporate setting or serve in the public health fields.

On the whole they are well-educated; the majority hold at least a 4-year degree. They are likely to hold more advanced graduate degrees.

### Interaction with USDA

This community regularly interacts with USDA via online channels. They seek data relevant to their topic of study from the Economic Research Service (ERS) and National Agricultural Statistics Service (NASS). They might look for research from the Agricultural Research Service. Or they might seek information about grants from Cooperative State Research, Education, and Extension Service (CSREES).

### Informational Needs

Researchers are motivated by their career or specialty. They have either already achieved expert status or are working to assert their expertise. Therefore, they seek very specific information about their field for projects, papers, thought leadership pieces, or theses.

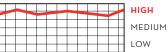
Corporate researchers would be likely to seek trade data or industry regulations. Members of the academic community, on the other hand, might look for material for classroom lectures, discussions, and lesson plans. They also seek research grant information, as well as internship and fellowship opportunities.

The primary challenge for this group is not accessing the Internet, but locating the very specific information they need. In addition they are challenged by:

- •reliance on paper-based processes,
- •need to create and present methods of applying research findings, and
- desire to make scientific research more interesting and accessible by presenting it in innovative ways.

Middle and high school educators and student group leaders look to USDA for support in creating student activities. They seek free or low-cost teaching aids and lesson plans. County extension agents and other USDA resources may or may not be able to provide them support materials depending on the reach and depth of the state's system.

### eGovernment Readiness





### **Computer and Internet Access**

The corporate and academic researchers make up the most technically savvy user group. These users are likely to have a computer in their office or home. They might even have a personal digital assistant.

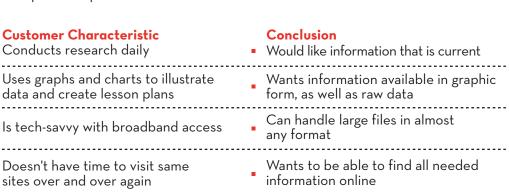
All colleges and universities and most corporate environments offer Internet access. Many have high-speed networks and Internet connections, enabling advanced applications. This group uses the Web as a primary information gathering tool. They are comfortable with the medium, using it to read publications, subscribe to topical listserves, visit relevant Web sites, and communicate with colleagues.

### RESEARCHERS AND ACADEMIC COMMUNITY: CAROL PRINCE PERSONA

Carol is a graduate student and teaching assistant at the College of Veterinary Medicine at the University of Georgia. She is currently researching the most widespread diseases affecting farm animals for an academic paper. At the university, Carol has access to an office with a desktop computer with a broadband Internet connection. She is very tech-savvy and conducts research online daily. She regularly accesses USDA's Web sites for research material.

While she is interested in facts about animal diseases, Carol would like charts and graphs that illustrate and analyze raw data. Visual aids also help her translate information into engaging lesson plans for her students.

Since Carol is constantly doing research and looking for more information, she would benefit from an email or electronic newsletter that lets her know when new information or reports are posted on the site.



sites over and over again



### LANDOWNERS AND CONSERVATIONISTS: AUDIENCE PROFILE

#### **Potential Audience**

Encompasses 10 million private forest and landowners and members of environmental groups. This group also includes recreation users, ranchers, forest producers, and mining industries.

### **Demographics**

Landowners tend to be middle-aged and male. For example, in the state of Michigan, landowners are on average 55-years-old and 66 percent are male. Over half do not have children currently living at home, but 74 percent have children who will inherit their land. 10

Environmental groups include the 4.2 million members in the Sierra Club, Natural Resources Defense Council, Friends of the Earth, and Greenpeace alone. Among environmental activists there is no significant gender skew, and age varies.

### Interaction with USDA

Some of these users manage USDA lands and participate in activities such as fire protection, land rehabilitation, managing public lands, and managing natural resources such as coal and timber. Others assist communities and private landowners with conservation and rehabilitation activities, such as conservation planning and management and direct administration of rehabilitation activities.

Best practices and other knowledge currently are shared informally between users. There is no specific knowledge-sharing system online for the Natural Resource Conservation Service (NRCS) and district staffs. Security, especially with respect to sensitive data, such as watershed information, is a primary concern of users desiring to share such information online.

### Informational Needs

These users would benefit from a standardized, unified forest permits system (ePermits) that would be less confusing and save time and effort. In addition, eReservations for forests and parks through Recreation.gov and eForms would also be of interest to this audience. NRCS, Farm Service Agency (FSA), Forest Service, and Rural Development (RD) already provide agency forms and published information online, largely based on an agency-by-agency basis.

### **Computer and Internet Access**

Thirty-three percent of ranchers have Internet access and 87 percent of forest product and mining worksites have Internet access.



### Internet Access Among...

Ranchers [33%]

Forest and Mining Worksites [87%]

### LANDOWNERS AND CONSERVATIONISTS: JAMES GREEN PERSONA

James is a 45-year-old business professional who recently bought a single-family home to share with his wife and kids in the North Carolina suburbs. Although the area around him is moderately developed, James has a large backyard with a couple acres of trees. James has always been environmentally conscious, but now he is beginning to think more about what he and his family can do to preserve and enjoy the natural world. He would like to find educational outdoor activities that he and his kids can do together, and also find out what sorts of recreational activities the parks in his area offer.

James has a computer with broadband Internet access at work. He is fairly tech-savvy and has little to no trouble downloading and printing large files. He has found the Backyard Conservation tips from the NRCS very helpful, but would also like more activities geared toward younger children. He would benefit from simpler how-to guides that could engage his 8 and 10-year-old kids.

James also loves visiting parks and going camping with his family. He would like to be able to take care of any technical issues involved with these visits before embarking on the journey. He would also like to find and enroll in conservation and wildlife programs at his local parks. James would benefit from eReservations for camping sites and available programs because he feels secure in entering his credit card information online if the site is credible.

### Customer Characteristic

Interested in simple conservation activities for the backyard

Likes to go camping and take advantage of park programs and facilities

#### Conclusion

Wants to find ideas and instructions on what he and his family can do

Would benefit from online information about park programs and eReservation

forms for camping sites

Has computer with broadband Internet • Can handle large files with graphics



### POLICY MAKERS AND INFLUENCERS: AUDIENCE PROFILE

#### **Potential Audience**

Includes USDA's internal policy makers, as well as 7,382 state legislators and 541 members of Congress.

The group also encompasses the 295,000 employees of more than 147,000 associations and interest groups, and an estimated 10,000 D.C. lobbyists."

### **Demographics**

Legislators are predominantly male, while females make up only about 22.3 percent of state legislatures and 13.6 percent of Congress. The average age of US congressional representatives is 53.9 years and the average age of senators is 59.5 years. An overwhelming majority have a college education. Their dominant profession is law, followed by business. The senators is 13.0 years and the average age of senators is 59.5 years. An overwhelming majority have a college education. Their dominant profession is law, followed by business.

Lobbyists are also well-educated. Most lobbyists are college graduates, and many have advanced degrees. Most come from a legal background, while others bring communications, teaching, public relations, and journalism qualifications.<sup>14</sup>

### Interaction with USDA

Legislators and policy influencers interact with USDA to get valuable, decision-steering information. They do a significant amount of research online and use AgWeb.com for timely news, National Agricultural Statistics Service (NASS) for raw data, and Economic Research Service (ERS) for in-depth reports. Accuracy and credibility of the information is a priority. USDA is valued as an objective source for data and free, expert analysis. Members of this group are focused and detail-oriented but need to remain flexible to deal with unexpected "issues of the day" and often operate under aggressive deadlines.

### Informational Needs

Legislators and their staffers have broad knowledge of agricultural legislation and issues but want to find accurate, credible, and customized data and analysis, based on changing environmental needs and economic trends. They must research information pertinent to current legislation so they can prepare economic analysis for committee members and staff. Staying on top of current issues that may impact or have been impacted by policy and legislation is important, as is gathering information that helps perform briefings.

In addition to presenting members' concerns to policymakers, associations and interest groups fulfill a broad spectrum of functions. Most offer member and public education programs for which they may seek educational resources. They might look for regulations and guidance from the USDA in order to establish ethical codes, as well as professional and safety standards. Because 71 percent of all associations conduct industry research or develop statistical information, members of this set might also function in ways parallel to the research audience group.

Lobbyists require information outside of standard business hours as policy negotiations often take place in conferences held on weekends or late at night. A 24/7 source for information could meet these users' informational needs when USDA contacts are unavailable. <sup>15</sup>

# eGovernment Readiness HIGH MEDIUM LOW

Average Age of...

Congressional Rep [53.9]

Senator **[59.5]** 



### **Computer and Internet Access**

Most legislators have computers with a high-speed connection in their homes or offices. They are comfortable with technology. Most use email extensively, search the Web several hours a day, and are comfortable with other Web-based services. Many do significant amounts of research online using resources such as Food and Agricultural Policy Research Institute (FAPRI), the Library of Congress' THOMAS system, Congressional Research Service, and the Mann Library at Cornell University.

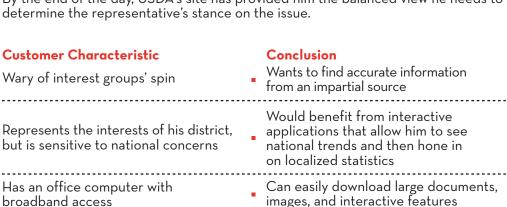
Associations and interest groups are also well-connected. These groups spend \$2.2 billion annually on technology. Lobbyists say they communicate almost solely via email with time-starved legislative staff, most of whom don't have time to take calls. To send emails even when they are away from their personal computers, many lobbyists carry BlackBerry devices. <sup>16</sup>

### POLICY MAKERS AND INFLUENCERS: ADAM WEBER PERSONA

Thirty-four-year-old Adam is a legislative assistant to the congresswoman representing Ohio's 9th district. Another congressman in the House has asked for her help in drafting a wetlands protection bill that could affect the thousands of agricultural producers and rural residents in the 9th district. Always politically cautious, the representative asks Adam to give the issue thorough due diligence before she decides whether to associate herself with this legislation.

Adam wants to find statistics on wetland acreage and usage that would help him assess whether this initiative would serve the interests of citizens not only in his district, but nationwide. While environmental and agricultural lobby groups provide information on the issue, he is apprehensive about the accuracy of their data. He needs un-slanted, unbiased information to steer his decision.

Adam first researches existing legislation on the Library of Congress' THOMAS system, he then navigates to USDA.gov. He locates raw data on the issue provided by National Agricultural Statistic Service (NASS). He then locates in-depth reports from Economic Research Service (ERS) on the links between agriculture and the environment. An ERS map shows him the geographic areas with high proportions of wetlands, so he can quickly recognize the parts of the country that would be most affected by the proposed law. A variety of resources on wetlands provided by Natural Resource Conservation Service (NRCS) help complete his view of the public debate. By the end of the day, USDA's site has provided him the balanced view he needs to determine the representative's stance on the issue





### NATIONAL AND LOCAL MEDIA: AUDIENCE PROFILE

### **Potential Audience**

Includes all reporters and freelance journalists for major newswires, radio, TV, and publications.

### **Demographics**

This audience is well-written and well-spoken in the English language. Their minimum education is a 4-year college degree. They are motivated, persistent, and on a deadline. They seek information on a need-to-know basis. They do not want to spend a lot of time searching for data because in their deadline-oriented field "time is money."

### Interaction with USDA

Journalists interact with USDA both online and via interviews with subject matter experts and USDA personnel.

They use the Web to verify information, provide background, and add hard facts to stories and primary source material. They want credible information that is relevant and current. They view USDA as a valuable benchmark and objective source of data. They desire a broad subject matter focus.

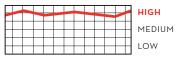
### Informational Needs

They especially need hard facts, but sometimes the media also need analysis. Financial reporters, in particular, need to find and quickly act on relevant market-moving information.

### **Computer and Internet Access**

Almost all members of the media have desktop or laptop computers in their office or home. Internet connections are mostly broadband at work and dial-up at home. Many also have cell phones and some have personal digital assistants. They are technology savvy, use email extensively, and go to the Internet regularly for research and personal purposes.

#### eGovernment Readiness



### NATIONAL AND LOCAL MEDIA: LAURA SMITHSON PERSONA

Laura, 32, is a health reporter for the Houston Times and has a daily deadline of 2 p.m. for her stories. One of the areas she frequently writes about is food safety. At noon, she receives information about a beef recall and must find out the details immediately so she can prepare a story before deadline.

Laura is constantly doing research online. She heads straight to USDA's FSIS web site for details about the recall. Because she is on a tight schedule, Laura needs to find the information as quickly as possible. She also needs information that is precise and accurate. The health of her readers could depend on the accuracy of her story.

Laura has a broadband Internet connection at work and a dial-up connection at home. Because of the demands of working in the media, Laura uses both connections frequently to conduct research. She also occasionally connects her laptop through wireless systems at cafes and other public places. Laura needs to be able to load pages and download information quickly at any connection speed.



### **Customer Characteristic**

### Has a daily deadline

..... Responsible for providing the public accurate information

Uses varied Internet connection speeds

Often needs an expert perspective on the issue

### Conclusion

Needs quickly accessible information

• Must find current, accurate facts

· Must be able to access needed

> information quickly at any connection speed

Seeks current contact details for USDA experts

### GENERAL PUBLIC: AUDIENCE PROFILE

### **Potential Audience**

USDA serves all 285 million Americans.

### **Demographics**

As of the 2000 U.S. Census, an overwhelming majority of Americans have completed a high school education. Census Bureau data indicated 29 percent of Americans are high school graduates, 21 percent have attended some college, 15 percent hold a bachelor's degree, and nearly 16 percent hold a graduate degree. The aging of the baby boom generation (defined as those born between 1946 and 1964) has led to the highest median age in American history at 35.3 years.

The 2000 US Census also demonstrated changes in the composition of American households. From 1990 to 2000, the number of non-family households rose at twice the rate of family households. Families maintained by unmarried women increased three times as fast as married-couple families. Overall, 60 percent of American families owned their own homes. The median household income was \$42,257, while the average household contained 2.59 members.

At 13 percent of the overall population, the 37 million Hispanic residents of the United States represent an important minority. Roughly half are fluent in both English and Spanish, while half are Spanish-dominant. About 50 percent of Hispanics remain concentrated in Texas, California, and New York. Fifty-four percent of Hispanics live in the suburbs.<sup>18</sup>

Another portion of the public noteworthy for USDA are the almost 130 million overweight or obese Americans – 64.5 percent of the population. The prevalence of overweight and obesity generally increases with age, then starts to decline among people over 60. The group spans all genders, ages, ethnic groups, and educational levels. 19

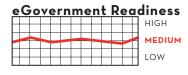
### Interaction with USDA

The general public may interact with USDA for information about nutrition, food safety, recreation, disaster, or other areas of concern. They also may take part in USDA programs such as the food stamp program or housing assistance program. On the whole, however, the role of USDA in their daily lives is transparent to most members of the general public. Awareness of the department's expansive responsibilities is limited.

### Informational Needs

Some might seek information about nutrition and dietary guidelines. Others might seek information on food stamp programs, school lunch programs, or housing assistance programs. Many people are also interested in conservation programs, food safety, public health programs, travel and recreation, and disaster assistance.

Of the email inquiries the site receives, the largest percentage consistently relate to Animal and Plant Health Inspection Service (APHIS) programs. In August 2002, about 15 percent of email requests related to animal care and welfare, or agricultural import restrictions. No other agency garnered more than 10 percent of email requests.



Our January 2002 tracking survey shows that 58 percent of American Internet users, or 68 million adults, have visited at least one government Web site and most have visited more than one.

- Pewinternet.org,17



Spanish-speaking constituents need to be able to access information and fill out necessary forms on programs and services in Spanish, as roughly half are Spanish-dominant. Disaster assistance would be of special concern to this group because 50 percent live in Florida, Texas, and California where hurricanes and earthquakes are more frequent.

### Computer and Internet Access

Overall, there is significant variation in Internet access among the general public. However, current data reflects that about 42 percent of households now have Internet access. Nielsen/Netratings reports that nearly 65 percent of US home Web users connect at speeds of 56k or less. However, broadband access has increased 49 percent in the last year. Thirteen percent of Americans now connect via broadband.<sup>20</sup>

Seventy-eight percent of Hispanics in the US who use computers have a computer at home. The average US Hispanic computer user is approximately 30-years-old. The average Hispanic user accesses the Web 6.6 times per week and spends 58 minutes online per session. US Hispanics spend 55 percent of their online time with Spanishlanguage resources.<sup>21</sup>

### Internet Connection Speed in Wired US Households

56k or less **[65%]** 

Broadband [13%]

### GENERAL PUBLIC: VICTOR KRAUSS PERSONA

Victor lives in San Bernardino, which is currently suffering from the worst recorded drought in California history. He read in his local newspaper that USDA allocated a large amount of money to protecting the San Bernardino National Forest from the threat of wildfire. Krauss wants to know more about how USDA money will be used and if any will go toward protecting the communities that, like his, border the forest. He would also like to find out what he and his family should do in the event of wildfire. They live relatively close to the forest and Victor wants to take any steps necessary to ensure the safety of his family.

Victor uses the computers with dial-up Internet access at his local library. His son taught him some computer basics, but Victor is not very comfortable using the Web. He is easily frustrated when he has to scour a site to find the information he needs. He usually tries to usurp site navigation by using in-site search tools, but the results are too often disappointing. The organization of information must be straightforward and intuitive so that he does not get lost or flustered. He prefers finding links to related topics, such as wildfire information, from pages outlining the San Bernardino Forest project.



#### **Customer Characteristic**

Lives in area affected by droughts and wildfires

Local forest has received direct aid from USDA

Not very experienced using a computer or the Web

Often uses in-site search tools instead of navigation

#### Conclusion

- Would like basic safety information on these natural disasters
- Wants details about the funds and how they will be applied

Information must be efficiently organized and easily accessed

Needs accurate and useful search results

### USDA EMPLOYEES: AUDIENCE PROFILE

### **Potential Audience**

There are approximately 100,000 USDA employees.

### **Demographics**

About half of USDA's employees are Service Center employees and Forest Service employees. Forest Service employees comprise about 25 percent of total USDA employees.

### Interaction with USDA

Employees work in headquarters, state and regional offices, field offices, and foreign locations.

This audience interacts with USDA human resources staff and managers offline. Staff also leverage departmental and agency intranets, as well as the federal government's Employee Express and GovBenefits sites.

#### Informational Needs

The informational needs of USDA employees are so distinct from those of other users. They are not a primary target for this analysis. Thus, a persona has not been developed for this audience .

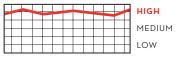
Employees use USDA.gov for business purposes, research, and submission of forms; yet only some of the information that employees seek is accessible on the public site. Other online resources are housed on password-protected internal sites. The implementation of a content management system across the department should enable relevant content to be re-purposed across the public-facing site and the internal communications channels.

### **Computer and Internet Access**

According to a 2001 USDA eGov survey, most USDA employees have a desktop or laptop in their office or at home. About 40 percent have mobile phones, 20 percent have PDAs, and 11 percent have pagers or handheld Internet devices.

Most employees have access to high-quality Internet connections, especially those who work at headquarters and Service Centers. Field, inspection, and foreign office employees are less likely to have access, particularly high-speed access.

#### eGovernment Readiness



### Technology Among USDA Employees

Mobile Phones [40%]

PDAs **[20%]** 

Handheld Internet Devices



### **APPENDIX**

### **How to Use Customer Personas**

Personas serve as representations of the customer groups. They can be used to create a shared understanding of USDA's target audiences.

With constant attention to the customer needs and care-abouts identified by personas, USDA can ultimately save time and money because personas can help:

- Ensure the most important customer groups are adequately served.
- Simplify design decisions by focusing on customers' needs. Sites created for everyone are doomed to satisfy no one.
- Provide a disciplined approach to design. Ensure that Web sites are designed with the customer in mind by integrating personas into the design process. Use the personas as a consistent point of reference.

To be effective, the personas presented in this document and the accompanying illustrations must be internalized by agency project team. Forrester Research recommends that each team member display a visual representation of the user at their desk, to ensure they never lose sight of the needs, preferences, and personality of the user. Increased attention to user personas will inherently foster a user-centric design approach.<sup>21</sup>

### Methodology

In addition to input from key stakeholders, USDA leveraged existing USDA documentation. Unless otherwise noted, all data for this analysis was derived from:

- •USDA Marketing and Grower Relations Assessment,
- •USDA eGovernment Readiness Assessment,
- ERS User Personas,
- •US Census Bureau data,
- Commodity Market Information User Analysis for One-Stop Portal,
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