



ERS Online: Strategic Plan For FY 2003 & Beyond

January 14, 2003

**Web Center of Excellence Team &
Mind & Media / Forum One Communications**

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I EXECUTIVE SUMMARY

This plan is the product of work by Economic Research Service (ERS/USDA) staff and Mind & Media / Forum One Communications to aid ERS in its strategic planning of Internet services for Fiscal Year (FY) 2003 and beyond. This plan provides ERS with a "Master Web Team Plan" outlining an approach to prioritizing key initiatives.

At present, the state of ERS' online effort ("ERS Online") can be summarized as:

- The ERS Web site has been an important and successful service for ERS, helping it to better reach key audiences and showcase ERS' work.
- Much has been accomplished in 2001 and 2002, with several initiatives still in the works.
- Expectations are rising for enhanced and new services, increasing the volume of work required to sustain the Internet efforts.
- ERS staff has identified a wide array of planned (and in-progress) improvements that are stretching the current staffing capacity.
- There is a need for guidelines to steer staff efforts and to help prioritize new investments and activities.

In response to these factors, ERS and Mind & Media and Forum One have defined a strategic mission, vision, and goals for ERS Online.

The recommended mission, vision and specific goals for ERS Online are:

Mission of ERS Online Services		
"ERS Online" enhances ERS' impact in the debate on key policy issues.		
Vision for ERS Online		
<ul style="list-style-type: none"> ● ERS Online strengthens ERS' role as a proactive information leader ● ERS Online is devoted to serving and collaborating with ERS' key customers ● ERS Online provides the best timely and reliable information on the issues ● ERS Online has transformed ERS into a digitally focused organization, improving how it works, collaborates, and serves its core audiences 		
Goals		
For its key audiences, ERS Online will:		
Public	Core audiences	ERS and USDA
<ul style="list-style-type: none"> ● Enhance their understanding of agricultural issues and ERS 	<ul style="list-style-type: none"> ● Provide information leadership ● Provide tools to support their work ● Foster collaboration 	<ul style="list-style-type: none"> ● Enable collaboration ● Improve service delivery ● Support internal work processes

From this base, we have identified five keys areas of focus for ERS to prioritize its Web team initiatives, as well as several strategic principles for managing ERS Web growth.

Five Strategic Focus Areas for ERS Online

For FY 2003 and Beyond

- 1. Provide high value service to ERS' core audiences**
Expanded services for ERS' core customers will help ERS have a more substantial impact in its mission.
- 2. Enhance the user experience**
ERS can improve customer satisfaction and success for all audiences by improving the quality of its services and their usefulness.
- 3. Leverage and extend core ERS data products**
ERS should invest in building on the strength of its data products – assets that are unique and central to ERS' work and reputation.
- 4. Improve operations and management**
To manage its online services as a key strategic asset, ERS needs improved administrative tools, systems to track service performance, and procedures to use such information in planning and prioritizing.
- 5. Enhance technical infrastructure**
ERS' technical infrastructure needs to support the increasing needs of ERS staff for new services, for more efficient processes, and for improved customer service.

While pursuing these priority areas of focus, we believe that ERS will benefit from adhering to a set of three proven guiding principles for Web management:

General Guidelines for World Class Web System Operations

Remain Audience-focused

ERS Online services should be tightly tailored to the needs of its core audiences. ERS needs to know its audiences' needs well, base design and technology decisions on those needs, and actively track how it is serving those needs.

Think " Internet First" as an Organizing Principle

The Internet offers ERS great opportunities to transform how it generates, analyzes, and disseminates information. To realize those opportunities ERS needs to take an "Internet-first" approach - considering the role of Internet services early on and as a primary component for new programs.

Build an Internet Strategy – Not Just a Web site

ERS should implement an integrated "Internet strategy" that uses the Internet as a hub to manage and disseminate information across many online and offline outlets. For example, ERS content should be available widely across the Internet, on various ERS and USDA Web sites and e-mail newsletters, as well as on other organization's Web sites and newsletters.

In implementing these new priorities, we reviewed ERS' long list of current, pending, and suggested initiatives and recommend the following priorities:

Near Term:

- Focus on High value / low-cost investments
- Complete long-term planning
- Implement new management approaches
- Begin technical platform and CMS preparation

Medium Term:

- Focus on important / medium-cost efforts
- Implement changes to operations and management
- Complete infrastructure investments (technical platform and CMS)

Long Term:

- Invest in pilot projects
- Instigate new routine operational systems

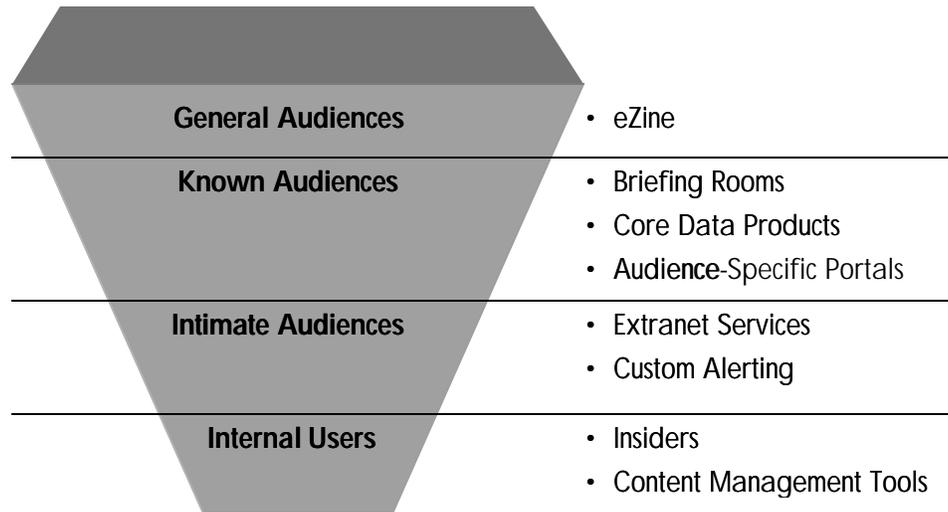
In more detail:

High Priority Activities			
Strategic Foci	Near term (0-6 mo.)	Medium (6-18 mo.)	Long (18 + mo.)
1. Core audience services	Use "User Personas" in planning and implementing new services (home page, audience portals, eZine).	Enhance existing services to provide increased value to core audiences.	Interact with users, and explore collaborative efforts.
2. User experience	Incremental clean-ups and initial customer assistance services (e.g. "People are Asking ERS...").	Enrich site content with multi-media offerings. Improve customer assistance and other site tools.	Standardize IA/design reviews.

	Create archive and improve search services. Revamp home page.		
3. Data products	Enhance data products usability.	Improve existing functionality; develop meta-data schema.	Integrate core data sets and invest in new pilot projects.
4. Management	Define and track metrics of success.	Increase testing and learning from users. Reassess organization of Web operations, roles and responsibilities.	Ongoing assessment and internal dissemination of metrics of success.
5. Technology	Improve WebAdmin tools. Define technical infrastructure and CMS needs.	Upgrade technical platform and complete CMS implementation.	Ongoing technical improvement, and planning to support new services.

And in implementing these new services, we suggest that ERS use a “portfolio management approach”. The below diagram illustrates the several audiences ERS serves, and the range of services for each. ERS should serve each of these audiences with distinct high-value services, but also find the common or highly leveraged resources that can serve across every audience.

ERS Online: Audience-centric View of Services



This document is to serve as a Master Plan to guide ERS staff in prioritizing and implementing various Internet projects for the next year and beyond. More specifically, this plan outlines:

- Mission, goals, and vision for ERS Internet strategy
- General guidelines for managing ERS Internet services
- ERS' current needs and opportunities for Internet services
- Evaluation factors for prioritizing new services
- Recommended Implementation plan for new services

This plan is intended for three primary audiences:

- **ERS Management:** to provide the broad vision and priorities for ERS Online
- **ERS Web Team:** to provide a framework for managing and prioritizing new initiatives
- **ERS Staff:** to provide the overall context of the direction of ERS Online to help guide the implementing of new services

This report was prepared by ERS staff and Mind & Media and Forum One Communications by reviewing current and past Web planning documents and interviews with ERS staff and Division Directors. We reviewed and incorporated recommendations from 2001 documents such as the Branding Report, New Services Recommendations, Data Products review, and Metrics Assessment. We were also able to incorporate insights from other ongoing ERS work on a CMS review , "user personas" development, and the initial results from ERS' Web site customer satisfaction survey.

ERS' online investments will be most effective if guided by a clear understanding of how the online operations will compliment ERS' core work. After reviewing ERS prior planning and assessing what is important for Internet services planning, we recommend the following definitions for ERS:



- **Mission:** the ultimate desired outcome of ERS' online investments.
- **Vision:** how ERS is going to achieve the necessary outcomes.
- **Goals:** what ERS aspires to accomplish with the public, with ERS' core audiences, and for ERS and USDA staff.

Mission of ERS Online Services		
ERS Online enhances ERS' impact in the debate on key policy issues		
Vision for ERS Online		
<ul style="list-style-type: none"> • ERS Online strengthens ERS' role as a proactive information leader • ERS Online is devoted to serving and collaborating with ERS' key customers • ERS Online provides the best timely and reliable information on the issues • ERS Online has transformed ERS into a digitally-focused organization, improving how it works, collaborates, and serves its core audiences 		
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IV GENERAL GUIDELINES FOR WORLD CLASS WEB SYSTEMS OPERATIONS

A number of guidelines will assure that ERS' Internet investments continue to provide real value for ERS and establish it as a leader within USDA and among other agencies in high impact online services. These principles should help guide ERS in improving the value of existing services, in implementing new services, and in planning its ongoing management efforts.

Remain Audience-Focused

A key factor in developing successful online services is to incorporate a very strong focus on the needs and interests of the intended audience into design, function, language, and even operations. This is in contrast to the (still common) use of an "organizational chart" approach to publishing online services, using terminology and a presentation more suited to the perspective of the host organization than the end users.

To date, ERS has made solid progress in an audience-centric approach, with, for example, its task-oriented and topic-focused services. ERS should continue this approach, and keep in mind:

- **Know thy user:** Through research, analysis and planning, assure a clear understanding of the interests and needs of ERS' target users.
- **Tools and information:** ERS should do more than just posting static information for its users and provide tools that accomplish important work for ERS' target users, answering their questions, solving their problems, and helping them performing useful analyses.
- **Prioritize:** An important service that ERS can and should provide its core audiences is to prioritize the wide range of resources it has. ERS should make clear to users which of the many available resources are most valuable, most timely, best practices, and recommended readings.

Think "Internet First" as an Organizing Principle

The Internet offers ERS great opportunities to improve how it generates, analyzes, and disseminates information. To realize those opportunities, ERS needs to take an "Internet-first" approach - considering the role of Internet services early on, and as a primary component, for any new projects or programs.

An Internet-first approach should entail:

- **Early planning:** The online dimension of a new program or activity should be considered early in its planning phase, as an integral part of assessing how to accomplish the objectives. This early planning can yield efficiencies in how ERS' work is done, enhance services for ERS' end users, and lead to valuable interconnections between related efforts. For example: a standard research project may result in a PDF copy of a report. In contrast, an Internet-first approach could involve: online data collection, an online data modeling tool, data consistency with existing datasets, online record of commentary on the

report, and a Q&A series with the authors. Many of these offshoots of the research project can provide valuable services for key audiences apart from and beyond the final research report.

- **“Metrics of success”:** To actively manage its online services to achieve real benefits, ERS needs to be able to measure the effect of its online services. ERS should establish “metrics of success” for the desired outcomes of its Internet services, measure progress towards those goals, share that information widely within the organization, and use that information in planning how to make new investments (online and offline).

Build an Internet Strategy - Not Just a Web site

A key objective of ERS Online services should be to reach and serve its key audiences -- not simply to increase traffic to a single Web site. Effective Internet strategies need to be based on a multi-dimensional approach to reaching and serving key audiences -- wherever they may be on the Internet. ERS has done this well in many ways, with its use of the Web to complement its print products, its use of e-mail as a key notification vehicle, and by linking print and CD products with online offerings.

In continuing these efforts, ERS should keep in mind these factors:

- **Web as hub for assets:** ERS should use its Internet infrastructure as the central organizing structure for all of its intellectual assets. Such a central repository can support and help coordinate a wide range of ERS needs to serve and communicate with ERS and USDA staff, with core audiences, and also with the public. Such a “hub” approach will require both technical investments and an “Internet-first” approach to how ERS approaches its work.
- **Go beyond your Web site:** A key goal for ERS should be to get its information and services in front of its key audiences wherever they may be on the Internet. This should involve disseminating information much more widely than to just one Web site, such as: aggressive use of “opt-in” e-mail services, ERS content across a number of ERS and USDA Web sites, and Web services to distribute ERS content to others’ (non-USDA) Web sites.
- **Get it right – gradually:** Operating a successful Web site is more akin to running a general store than running a library. ERS needs to be attentive to the interests of its users, learn from them, and continually adjust its offerings to better serve them. Thus, experimentation and incremental change need to be key parts of ERS’ approach.
- **Online/offline integration:** ERS will realize real value from tightly integrating its online and offline activities. Offline activities such as print publications, CDs, meetings and press conferences can be enhanced and facilitated by online services. And these offline activities should also relentlessly cross-promote ERS’ online offerings.

ERS Online today is a very important and successful contributor to the work that ERS does, raising the profile of its work, extending the value of its products, and providing opportunities for innovation in new services and products. At the same time, with this success and increasing expectations, the Web team is finding it an increasing challenge to manage the volume of work for the Web site. Increasing demands are also being made for more sophisticated services, such as new data services and collaboration services.

The status of the current ERS Internet efforts, based on discussions with ERS staff, is:

- Overall, the **Web site is viewed as very successful**. ERS staff and management are generally satisfied with the quality of the information and services on the ERS Web site.
 - ERS Online had 97,000 visitors in September 2002, up from 57,000 in September 2001, and delivered the equivalent of 60,000 “books” of content in September 2002, up from 25,000 the year before.
 - In January 2003, www.ers.usda.gov received an American Customer Satisfaction Index (ACSI) score of 71, which compares favorably with the average ACSI score for federal Web sites (74).
 - ERS Online services are routinely featured in major media outlets and the farm press.
 - ERS is playing a lead role in USDA e-government initiatives.
- ERS is **regularly introducing innovative new online services**, such as the Farm Bill comparisons, the rural Map Machine, and other data query and comparison tools.
- With the growth in Web site services, there have been **some declines in consistency** of online service quality, design and usability.
- **Expectations from ERS management and staff are high** for new online services and features. This includes services to integrate ERS work and products, and to enable collaboration with key partners and other USDA efforts.
- The **Web team is feeling stretched** with the workload, rising demands, and challenges of staying up-to-date with new skills.
- **Staff skills and time are in short supply** for information architecture, Web project management, design consistency, usability assessment, Web writing and editing, data products strategy and implementation, ERS Web training and staff support, and others.

VI ERS NEEDS

To continue the growth and success of ERS Online for the next two years and beyond, there are several core needs that must be addressed. These recommendations are based on a review of the current Web site, past planning work, current ERS planning reviews, discussions with ERS staff, and ongoing CMS review, User Personas definition, and monitoring of ERS' American Customer Satisfaction Index results:

Five Strategic Focus Areas for ERS Online For FY 2003 and Beyond

1. Provide high value service to ERS' core audiences

Expanded services for ERS' core customers will help it have a more substantial impact in its mission.

2. Enhance the user experience

ERS can improve customer satisfaction and success for all audiences by improving the quality of its services and their usefulness.

3. Leverage and extend core ERS products

ERS should invest in building on the strength of its core data products – products that are unique and central to ERS' work and reputation.

4. Improve operations and management

To manage its online services as a key strategic asset, ERS needs improved administrative tools, systems to track service performance, and procedures to use such information in planning and prioritizing.

5. Enhance technical infrastructure

ERS' technical infrastructure needs to support the increasing needs of ERS staff for new services, for more efficient processes, and for improved customer service.

We present each of these needs below, including the vision for how ERS should satisfy the needs, and what the highest priority initiatives are to make that progress.

Focus on core audiences

To succeed in reaching its broad strategic goals, it is critical (and likely very cost-effective) for ERS to reach and serve these key audiences:

- **Policy "gatekeepers"**, who use ERS information and analysis to formulate policy and advice for their bosses – the policy makers;
- **USDA management**, who also rely on ERS for policy analysis and advice;
- The **media**, who depend on ERS leadership on assessing key issues;
- **Agribusiness professionals**, who need ERS data and analysis to understand their sectors;
- **Researchers**, who rely on ERS for timely and authoritative data.

In serving these audiences ERS has already made substantial progress in the past two years. Some examples include:

- E-mail alerts: ERS provides weekly e-mail alerts of newly released products and events to more than 20,000 subscribers.
- Rural Indicators Map Machine, which allows geographic browsing of key data.
- Farm bill comparison (see Figure 1 ERS Farm Bill “Side-by-Side”).
- Newsroom services for the media.
- Extranets to support collaboration among some ERS/USDA/Interagency policy groups.

The screenshot shows a web browser window titled "ERS/USDA Features - The 2002 Farm Bill: TITLE I - Commodity Programs". The address bar shows the URL: http://www.ers.usda.gov/features/farmbill/02/t1/commodities.html#fa. The main content area is divided into three columns: "Provisions", "1996-2001 farm legislation", and "2002 Farm Bill".

Provisions	1996-2001 farm legislation	2002 Farm Bill																		
<p>Counter-cyclical payments for wheat, feed grains, upland cotton, rice, and oilseeds</p> <p>Details Analysis</p>	<p>Supplemental legislation authorized Market Loss Assistance (MLA) payments for wheat, feed grains, rice and upland cotton for crop year (CY) 1998 through CY 2001. Payments were proportional to Production Flexibility Contract (PFC) payments. Payment levels were \$3.857 billion in CY 1998, \$5.5 billion in CY 1999, \$5.465 billion in CY 2000, and \$4.6 billion in CY 2001.</p> <p>Oilseed payments provided in FY 1999 through FY 2001 were based on plantings in 1997, 1998, or 1999. Payment levels were \$475 million in 1999, \$500 million in 2000, and \$424 million in 2001.</p>	<p>Counter-cyclical payments are available to covered commodities whenever the effective price is less than the <u>target price</u>. The effective price is equal to the sum of 1) the higher of the national average farm price for the marketing year, or the national loan rate for the commodity and 2) the direct payment rate for the commodity. The payment amount for a farmer equals the product of the payment rate, the payment acres, and the payment yield.</p> <p>Target prices for counter-cyclical payments:</p> <table border="1"> <thead> <tr> <th></th> <th>2002-03</th> <th>2004-07</th> </tr> </thead> <tbody> <tr> <td>Wheat</td> <td>\$3.86/bu</td> <td>\$3.92/bu</td> </tr> <tr> <td>Corn</td> <td>\$2.60/bu</td> <td>\$2.63/bu</td> </tr> <tr> <td>Grain sorghum</td> <td>\$2.54/bu</td> <td>\$2.57/bu</td> </tr> <tr> <td>Barley</td> <td>\$2.21/bu</td> <td>\$2.24/bu</td> </tr> <tr> <td>Oats</td> <td>\$1.40/bu</td> <td>\$1.44/bu</td> </tr> </tbody> </table>		2002-03	2004-07	Wheat	\$3.86/bu	\$3.92/bu	Corn	\$2.60/bu	\$2.63/bu	Grain sorghum	\$2.54/bu	\$2.57/bu	Barley	\$2.21/bu	\$2.24/bu	Oats	\$1.40/bu	\$1.44/bu
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Figure 1 ERS Farm Bill “Side-by-Side”

Vision:

To have a strong impact in reaching and serving those audiences, the vision for ERS Online services should be:

ERS Online provides its core audiences with very personalized and specialized services that are tailored to their interests. ERS Online is like an excellent valet service or a first class airport lounge for these ERS’ core audiences, with proactive information delivery and ERS staff available online to assist. ERS also uses online services to support consultation and sharing with these key audiences about key issues.

To continue to expand its impact in serving these core audiences, ERS should:

Better understand the needs of the audiences, through research, online surveys, focus groups, defining audience “personas” that identify their key characteristics, and actively seeking audience input on ERS services, among others.

Identify and highlight existing resources well suited to those audiences, through special audience (or topic) “portals”, and pro-active use of e-mail to bring to their attention key ERS resources – such as a “media alert” e-mail service.

Provide special resources to meet the needs of core audiences and help them do their work. This could include, for example, an ERS staff experts’ biographies section, the e-Zine publication, new tools for FANRP grant application, and tailored e-mail services. Ideally, these new services will also help ERS do its work more efficiently.

Encourage collaboration, with online tools and incentives to make it easier for core audiences to find and communicate with ERS staff. These services could include, for example, a staff expert finder, online Q&A with ERS experts, periodic online events with ERS experts, collaborative data collection, and selected topic extranets for collaboration and sharing.

Better reach its audiences, both through marketing ERS Online properties, and making ERS resources widely available across the Internet - beyond just the main ERS Web site. This could include ERS services that are syndicated or otherwise made available for other Web sites, such as “latest data on x”, “latest ERS publications on y”, data trends, etc.

Recommended implementation to better focus on key audiences:

Recommended Priorities		
ERS Need: (1) Focus on core clients		
Near term (0-6 mo.)	Medium (6-18 mo.)	Long (18 + mo.)
<ul style="list-style-type: none"> ○ User personas ○ Audience portal pages ○ Staff bios ○ E-Zine 	<ul style="list-style-type: none"> ○ Tailored e-mail notification services ○ Launch improved data products interfaces 	<ul style="list-style-type: none"> ○ Interact with core audiences online ○ Reassess audience needs ○ Explore cooperative data collection

These services are explored in more detail in **Section VII Prioritizing Initiatives**.

Enhance User Experience

Even as it sharpens its focus on its core audiences, ERS will gain huge value from improving the quality of the user experience for all users of its online services.

As a Web site like ERS’ grows, it requires constant attention to assure, maintain, and improve the quality of its design, navigation, content layout, and functionality to meet increasing user demands.

In the past two years, ERS has made significant progress in enhancing the user experience, for example:

- E-mail alerts about new products and information.

- Regularly rotating new features on the home page.
- Generally good consistency in following design standards across new site sections.
- Encouraging innovation and new services.

Vision:

ERS' online services are tightly focused on assuring successful user experiences, in much the same way, for example, as a retail store is on serving its customers. A store must continually improve how it reaches customers to get them in the door, and once they are in, it needs to have a range of services to offer the customers that will appeal to them. The store must also provide helpful guidance and assistance to customers, continually learn from customers about their needs and interest, and evolve its stock to meet changing interest. And finally, the store needs to find some way to build a long-term relationship with the customer, perhaps by keeping in touch with them about specific new services and developments that they will be interested in.

In moving ahead, we recommend for ERS:

Set and enforce standards for design, layout, information architecture, so that all developers are working from standard design, architectural information, and navigational templates. Further, ERS must hold itself to these standards through routine training and usability/design reviews.

Customer-friendly services should be implemented that will help users find what they need more readily, for example:

- Consistent use of prioritizing and showing what is timely (and archiving what is less timely and less valuable).
- "Customer service" functions like a searchable and interactive "People Are Asking" section could detail how to use the Web site and ERS and allow users to send in questions for ERS. This would provide a source of valuable feedback for ERS to gauge how well it is doing (these inquiries and how they are resolved should be tracked in a database).
- A new home page design should showcase what is new, high value, and of most frequent usage.
- E-mail alert services that users can opt-in to, allowing them to say, "please let me know whenever there are new data on topic 'g'".

Interact with users, allowing them to submit questions, make suggestions, and participate with ERS and other users in discussing key issues. ERS may learn a lot from the input, and, if done well, the content can also provide valuable information for other users.

Enrich the site content to include resources that complement ERS core products, such as photos, audio, video, presentations and other formats. These additional media can help make ERS' issues more tangible, and give additional relevance to traditional text and data materials.

Recommended Priorities		
ERS Need: (2) Enhance User Experience		
Near term (0-6 mo.)	Medium (6-18 mo.)	Long (18 + mo.)
<ul style="list-style-type: none"> ○ Incremental design clean-ups; improved search services ○ Archive old content and improve site search ○ Customer assistance – simple FAQ or “People are Asking” ○ Home page revamp 	<ul style="list-style-type: none"> ○ Multi-media services ○ Customer assistance – advanced FAQ (response management tool) 	<ul style="list-style-type: none"> ○ Standard IA and design approach and review process

Leverage and Extend Core ERS Data Products

ERS' core data products are central to the impact that ERS has in its work – unique and valuable resources that no other organization matches. These core services are what ERS' core customers use, need, and value, and should serve as the solid foundation for many ERS Online services.

The Internet offers opportunities and challenges for ERS and its core data products. There are challenges because data and databases are often difficult to access and use online due to poor design, technology or structure. Yet the opportunities are strong to expand access to and usage of data online, and make it usable to multiple layers of needs and audiences.

ERS has made good progress in extending its existing data products in the past two years, for example:

- ERS' Food consumption data comparison systems, allowing online queries to compare data for different time periods (see Figure 2).
- Rural indicators “Map Machine”, allowing geographic-based viewing of core rural data.
- ERS State Fact Sheets, with complete data set available for download as an Access file.

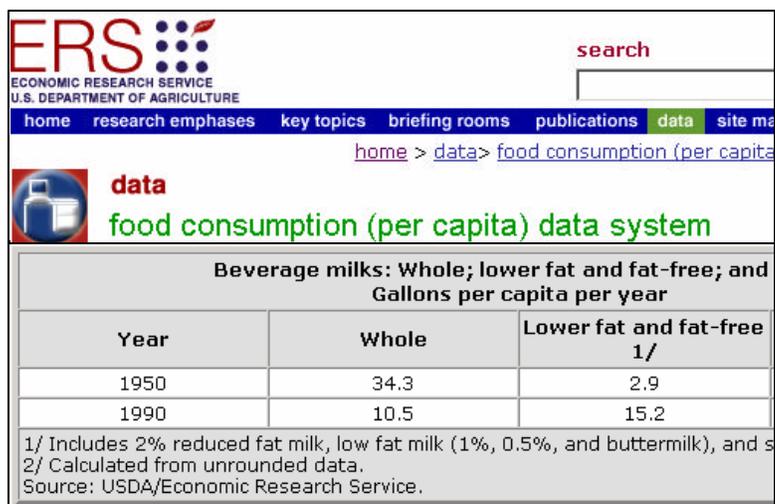


Figure 2 ERS DATA Products Example

Vision:

ERS' online data products are valuable to a wide range of audiences, essential to the work of ERS core audiences, and a core focus for ERS online investments. The Internet has opened up new ways for ERS to compile, manage and use its core data products, benefiting not only ERS' external audiences but ERS staff in their work as well.

ERS data products are consistently of high quality structure and presentation, with online tools that allow helpful initial queries. Because ERS data products are deeply interconnected, they provide users with new ways to explore and compare related information. Further, ERS staff is able to collect and manage their data in new ways. And ERS data products are actively tapped by other organizations to bolster the content on their own Web sites.

By migrating ERS data products to a more consistent and Web-based architecture, ERS is reaping the benefits of new product spin-offs, enabling other organizations to leverage its data, and having a greater impact in its work.

In moving ahead, we recommend for ERS:

Improve the overall usability and functionality of existing data products, with standard and higher quality interface design, use of standard file formats, “how to” guidance, etc. Also, ERS should implement widely a standard approach to provide pre-set queries that facilitate initial online (Web browser-based) exploration of all data products.

Standardize the meta-data schema for data products, supporting the development of new data products that are more capable of being integrated and allowing existing data products to be selectively revised to enable integration. This schema should provide a flexible structure to use and manipulate the data.

Integrate ERS’ existing core data products. Several of ERS’ most important current data products should be revised to be make possible tighter integration, as has been done with several data sets and the “Map Machine”. This may require working to assure the underlying data sets are consistent, and/or improving the services that run off the data sets.

Invest in innovative pilot projects, providing ERS opportunities to experiment with new and innovative ways of collecting and using data online. These experiences should be folded back into ERS’ approach with other data products. In particular, we’d suggest: initial **data collection** using online systems, and “**interoperability**”, or enabling ERS online data sets to be accessible via Web services for organizations and their own online services.

Recommended Priorities		
ERS Need: (3) Leverage and Extend Core ERS Data Products		
Near term (0-6 mo.)	Medium (6-18 mo.)	Long (18 + mo.)
<ul style="list-style-type: none">○ Enhance data products usability	<ul style="list-style-type: none">○ Meta-data schema○ Improve existing data products functionality	<ul style="list-style-type: none">○ Integrate core data products○ Pilot projects and expanded inter – operability

Improve Operations and Management

ERS’ online services can be key assets in supporting progress towards ERS goals, but these assets must be actively managed for these benefits to be realized. To manage its online assets actively means that ERS should know what it wants to accomplish with its online services, it should have a way to track how the online services are performing, and then it should feed the information of what has worked and what has not back into its planning (strategic, technical, staffing).

Vision:

ERS actively manages its Internet operations to yield the most benefit for its core business processes. ERS plans and implements Internet services to support most of its core business operations, defines “metrics of success” for those operations, monitors how its Internet services perform in support of those metrics of success, and regularly refines its services to increase their impact.

ERS plans Internet services as an integral part of most new projects and programs, and always seeks to use the Internet services to **learn** about users and what they want. Finally, ERS’ Internet monitoring data is actively used to inform decisions about where program investments should be made.

In moving ahead, we recommend for ERS:

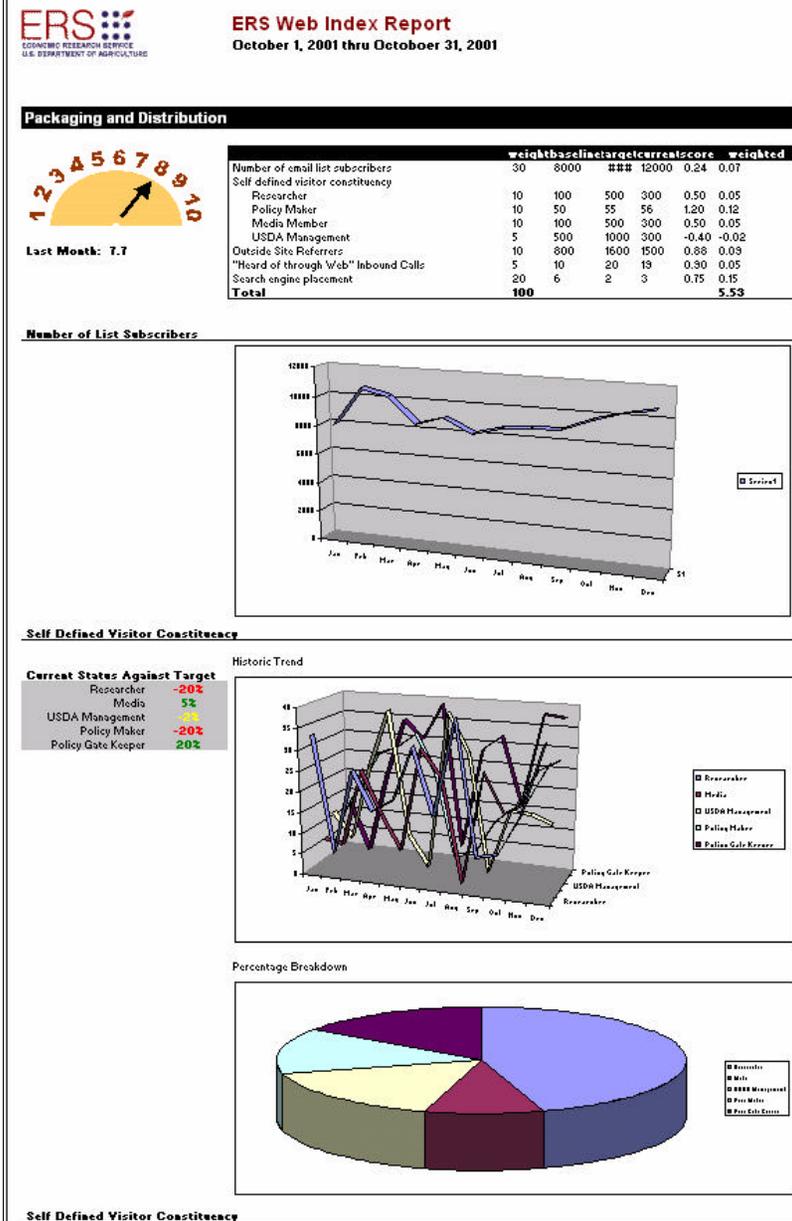
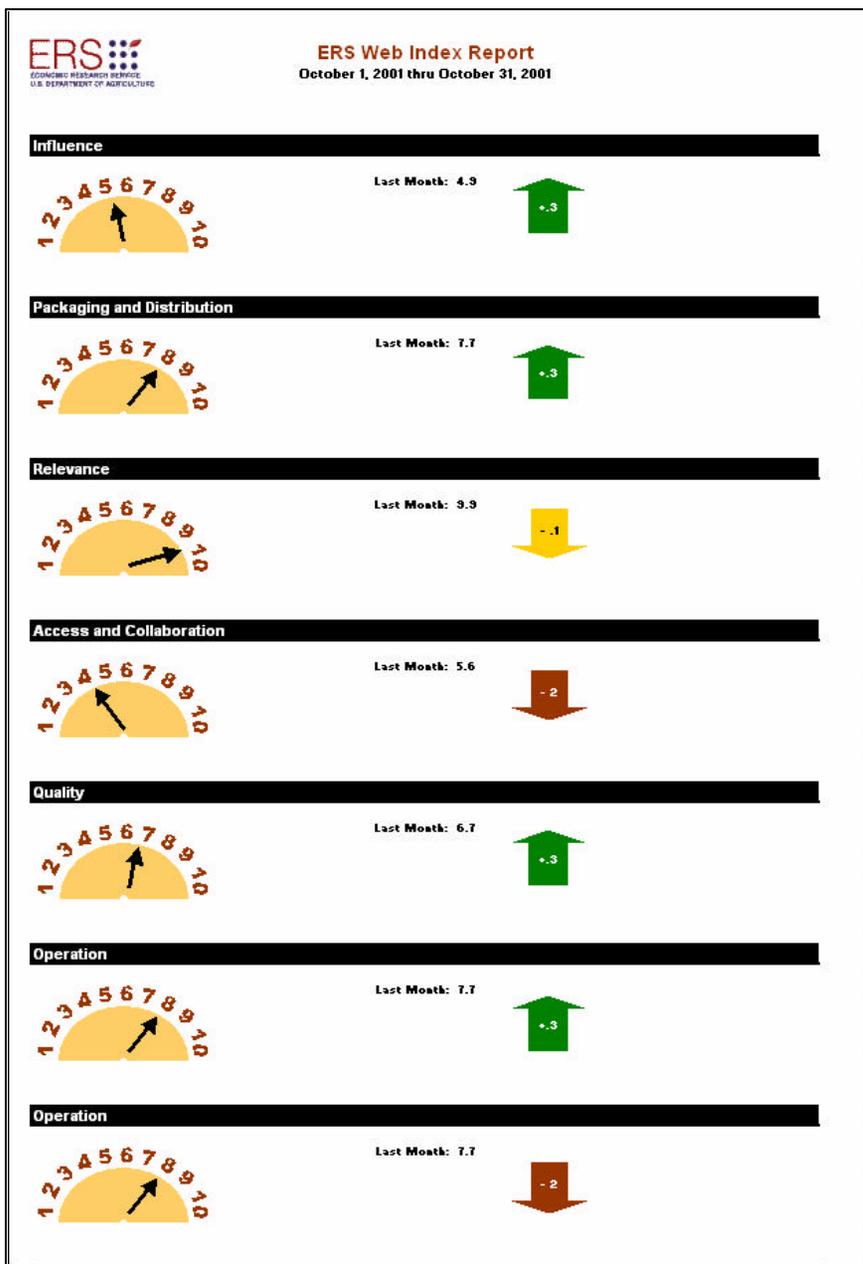
Establish Definite “Metrics of Success”: ERS should develop metrics of success for its Internet services that directly relate to ERS organizational objectives. ERS should then set up systems to track these metrics and routinely compile and share the information across ERS (perhaps quarterly). This information should be used in decisions about budget allocation, staffing, and organizational priorities. (The example in Figure 3 below shows a sample tracking “screen” for a Web Performance Metrics Tracking System for ERS).

Learn from Site Users: ERS should have regular systems to collect information and learn from user experiences. ERS should identify all the possible points of user feedback – some of which may be informal feedback or empirical data on user behavior, while other information may come from formal user surveys.

The less formal information can come from newsletter signup forms, search engine logs, FAQ submissions, and formal questions to the site managers, feedback to topical experts, etc. There is a wide range of these less overt sources of information, and options to collect information should be considered in the initial design of new services. More formal information collection from users can include customer surveys, such as regular customer satisfaction surveys, and focus group research. Finally, ERS needs a more standard process to assess and share this information as a routine part of reporting on Internet performance.

Routine Site Testing: ERS should regularly test its online services for performance, quality, usability and value to users, and use that information to guide the development of new Web products, online investments and staff efforts. ERS should implement a standard usability and user experience testing protocol and a schedule for regular testing (e.g. quarterly).

Figure 3 Example of Web Performance Metrics Tracking
 Source: Web Performance Metrics Report for ERS, 10/2002, Mind and Media / Forum One



Web organization and capacity: A vital and vibrant core Web organization is essential to the success of ERS online operations. ERS has “Web content” responsibilities distributed across the organization (a good thing!), but needs to continue to sustain a strong core Web organization to support the efforts. ERS should assess the needed skills and staffing to develop and support successful online services – including determining which roles are best de-centralized (e.g. content creation, content management) and which are best centralized (e.g. strategy, training, design, usability testing, information architecture, programming, technical infrastructure, and support).

Web organization support: Close coordination is essential across the distributed ERS Web organization – including technical consultants, product and data coordinators, economics editors, the WCE and others. This organization needs to be working toward the same goals, following the same standards and guidelines, and sharing experiences and best practices. ERS should develop an online “professional network” for its Web organization, to support sharing and collaboration among the various individuals across divisions and the WCE. This “network” should include sharing core resources, schedules, roles and responsibilities, standards and guidelines, and common questions.

Recommended Priorities		
ERS Need: (4) Improve operations and management		
Near term (0-6 mo.)	Medium (6-18 mo.)	Long (18 + mo.)
<ul style="list-style-type: none"> ○ Metrics of success ○ Introduce routine site testing 	<ul style="list-style-type: none"> ○ Learn from site users ○ Routine site testing ○ Web team support ○ Web team organization review 	<ul style="list-style-type: none"> ○ Ongoing assessment and internal dissemination of metrics of success

Enhance Technical Infrastructure

ERS’ technical infrastructure needs to make possible more efficient management of its online services and support widely expanded ways of reaching ERS’ key audiences. ERS could continue to add new services through a more ad hoc (or manual) approach, but that would be inefficient and hamper efforts to introduce many new services. ERS’ technology infrastructure needs to support extensive content management, workflow management, layered access to content (e.g. extranets), e-mail communication and personalization, and syndication and sharing of information services.

Vision:

ERS’ technical infrastructure supports and makes possible its world-class Internet operations. ERS’ network and infrastructure support services for CMS, e-mail management, improved data management, Web services and

others. As a result of its technical infrastructure, ERS depends on its Internet services to manage how it does its internal work and how it shares its work with a wide range of audiences and other organizations.

In moving ahead, we recommend for ERS:

Improve current WebAdmin tool: Even as it explores and invests in new infrastructure technologies, ERS should make some valuable upgrades to its current WebAdmin tool to make it more reliable, able to support QA/QC, able to catalog e-Zine content, and enable some basic audience-targeted content management. This also needs to include providing a “faceted” classification system to support a new data schema.

Technology Platform: ERS should review the needs for the Internet technical platform and network infrastructure that will be required to support its CMS, e-mail, Web services, and other new technologies. ERS should assess what the hardware, software and staffing needs for the technology platform will be. A key part of this will be to support the implementation of .net technology to provide for faster performance, Web services, more features, and reduced development time for Web applications.

Content Management System: An expanded content management and document management system (CMS) is essential to support many of the high priority external services and the internal workflow needs of ERS. ERS is working with USDA’s e-Gov initiative in defining the USDA-wide CMS solutions that ERS will use. Toward that, ERS should continue its recent CMS needs assessment and define the necessary functional requirements for ERS.

Other important technical needs: Other technical needs or questions that need to be evaluated and satisfied for ERS to move ahead include:

- Web asset management: if the selected CMS does not provide it, ERS may need to implement a system to manage access to ERS internal resources across ERS staff and external partners and others.
- Security: A number of online initiatives, such as fostering collaboration with outside-USDA entities and individuals, may raise security concerns for ERS and will need to be carefully assessed and a plan to address them developed.

Recommended Priorities		
ERS Need: (5) Enhance technical infrastructure		
Near term (0-6 mo.)	Medium (6-18 mo.)	Long (18 + mo.)
<ul style="list-style-type: none">○ Improve WebAdmin tool○ Technical platform and CMS needs identification	<ul style="list-style-type: none">○ Technology platform upgrades○ CMS implementation	<ul style="list-style-type: none">○ Ongoing technical support and system improvements.

VII PRIORITIZING INITIATIVES

ERS should evaluate where and how to invest its resources in new Internet initiatives on the basis of expected cost and expected benefit. We see several key factors for this prioritizing:

- Support ERS Web priorities
- Benefits to key audiences
- Enabling factors
 - Organizational involvement
 - Staff capacity
 - Tech capacity
- Cost
- Timing
- And other factors

One simple model for how these factors play out is to use a 2x2 matrix that shows expected effort versus benefit, and which combinations deserve high, medium, and low priority.

Table 1 Prioritization Matrix

High Benefit	Highest priority	Medium priority: worth beginning
Low Benefit	Medium/low Priority: selectively try and explore	Lowest priority
	Low Effort	High Effort

In assessing the priority for a new investment, we consider a number of key factors below. These factors do not capture every possible criterion that ERS may need to take into account, but should be a useful starting point.

Support ERS Web priorities: ERS should favor new investments that directly support its current Internet priorities, namely:

1. Serve ERS' core clients/audiences.
2. Enhance the user experience for all users, making ERS services easier and more valuable to use.
3. Leverage and extend core ERS products, namely data and analytic tools.
4. Improve operations and management, so that ERS can better operate and benefit from its Web services.

5. Enhance technical infrastructure, to support expanding services and value for ERS customers.

Enabling factors: An important consideration is the ease with which ERS is able to successfully implement new services, which will be determined by these enabling factors:

- **Organizational involvement**, meaning whether the new services can be implemented by the Web Center of Excellence team alone (easier), require broader ERS staff involvement, or require wider USDA involvement (more difficult).
- **Staff capacity**, whether ERS has the capacity itself to implement the new service (easier), can readily get support from others in USDA or vendors, or requires expertise that it does not readily have access to (more difficult).
- **Technical capacity**, whether ERS has the ability to implement the needed technology (easier), has some of the needed technology capacity, or does not have any of the needed capacity (more difficult).

Cost: Other things being equal, ERS should favor investments that have a lower cost.

Timing: While ERS will always need to have a mix of investments that range from short to longer term, it should place an emphasis on investments that can be completed and yield benefits in the shorter run. Reasons to do this include the ability, with Internet investments, to make incremental progress and to benefit from learning while doing (“get it right – gradually”).

Other factors? In addition, some attributes that ERS should seek to encourage in new investments include:

- **Infrastructure:** while infrastructure investments may have only indirect and long-term benefits for ERS’ key users, such investments will often be essential to support a wide range of planned and future ERS efforts.
- **“Internet first” initiatives** that change the way ERS typically approaches Internet services.
- **Information leadership**, or services that will help support ERS roles as a proactive provider of leadership on key issues.
- **Extend ERS’ reach**, by integrating ERS online services with online services of USDA or other organizations, through syndication, co-development of shared services, etc.
- **Experiments**, to explore new approaches and technologies.

VIII ASSESSMENT OF SPECIFIC INITIATIVES

Prioritization factors used:

- In progress? No, Yes
- Audience benefits? (1 = little, 2 = some, 3 = high)
- Enabling factors
 - Organizational capacity ((1) requires involvement of USDA and others; (2) just ERS; (3) just WCE)
 - Staff capacity: Does ERS staff have skills and abilities to implement on own? (1 = no, 2 = some, 3 = yes)
 - Technical capacity: Does ERS/WCE have the technical capacity to implement readily? (1 = no, 2 = some, 3 = yes)
- Cost: 1 = high; 2 = moderate, 3 = low
- Score SUM: A high score is good (more valuable for ERS).
- Timing: Long = longer than 18 months; medium = 6-18 months; short = 0-6 months
- Priority: 1 = low; 2 = medium; 3 = high

Project	Rationale / Description <i>And specific Recommendations</i>	In progress? N Y ○ ●	Audience Benefits?			Org capacity	Staff capacity	Tech capacity	Cost	Score SUM	Timing Period	Priority
			Public	Key	ERS / USDA							
			123	123	123	123	123	123	123		S M L	123
1. Focus on core clients												
User personas and use cases scenarios	Assure consistent focus on needs of core audiences by defining archetypal audience characteristics. <i>Recommendation: Use personas to guide design, new services development, and tracking success.</i>	●	3	3	3	2	3	3	3	20	S	3
Audience-specific "guide" pages	Improve service to core audiences with tailored entry pages, e.g. Policymakers, USDA management, Media, Researchers, Educators, General Public. <i>Recommendation: implement and study usage.</i>	○	1	3	2	2	3	3	3	17	S	3

Project	Rationale / Description <i>And specific Recommendations</i>	In progress? NY ○ ●	Audience Benefits?			Org capacity	Staff capacity	Tech capacity	Cost	Score SUM	Timing Period	Priority
			Public	Key	ERS / USDA							
			123	123	123	123	123	123	123		S M L	123
ERS staff profiles and bibliographies	Enable users to better understand and use ERS expertise and collaborate with ERS staff. <i>Recommendation: Begin with Senior management and subject experts; Integrate with "publications" info.</i>	●	1	3	3	2	3	3	3	18	S	3
Private project workspaces (Extranets)	Private online workspaces to enable ERS/USDA collaboration on pre-decisional issues. <i>Recommendation: Expand current extranets (a.k.a. ProjectSpaces); seek solution to work with InsidERS, CMS.</i>	●	1	2	3	2	3	3	2	16	S	3
External marketing and outreach	Reach core audiences better by raising profile of ERS services. <i>Recommendation: "URL everywhere" – promote Web site in online and all offline opportunities.</i>	●	1	2	1	3	3	3	3	16	S	2
ERS content syndication	Reach core audiences better by disseminating ERS content across other Web sites. <i>Recommendation: Syndicate ERS content to other Web sites that serve core audiences</i>	○	1	3	1	1	2	2	2	12	M	2
E-mail notification service	Increase dissemination and notification of ERS products with improved e-mail notification service. <i>Recommendation: Short run: improve management and use of existing services; Long run: "build your own" on topic/frequency of choice.</i>	○	2	3	2	2	2	2	3	16	M	2
E-mail newsletters	Increase value of ERS to users by delivering ERS expertise by e-mail. <i>Recommendation: In the short run, pilot test marquee newsletter(s) -- short, periodic, known author.</i>	●	2	3	2	2	2	2	3	16	M	2
"E-Zine" to showcase high value periodicals	Showcase (and consolidate) key ERS publications with a single online destination publication. <i>Recommendations: Use to test timely and user focused presentation; avoid creating stand-alone property.</i>	●	2	3	3	2	2	3	2	17	S	3
E-filing for FANRP grants	ERS will implement through USDA e-grants initiative.	○	1	3	1	1	2	2	2	12	L	2
2. Enhance user experience												

Project	Rationale / Description <i>And specific Recommendations</i>	In progress? NY ○ ●	Audience Benefits?			Org capacity	Staff capacity	Tech capacity	Cost	Score SUM	Timing Period	Priority
			Public	Key	ERS / USDA							
			123	123	123	123	123	123	123		S M L	123
"Enriched" ERS Home page	Improve value of homepage with timely and high value services, e.g. latest news, "People are Asking", latest data, etc. Considering 3 successive releases: Feb 2003, June 2003, Dec 2003. <i>Recommendation: implement and track user interests.</i>	●	3	3	3	2	3	3	3	20	M	3
Incremental improvements to design, information architecture, and usability	Improve user experience with upgraded and more consistent approach to design and site architecture. <i>Recommendation: Institute routine cycle for incremental changes. Include: re-assessment of Briefing Room / Topic organization, larger screen resolution, improved search interfaces.</i>	●	3	3	3	2	3	3	3	20	M	3
Questions and answers for users	A "People Are Asking" feature will enable users to quickly find what they need, and also allow ERS to learn about user interests. <i>Recommendation: Allow users to submit questions. Provide for filtering and sorting by topic. Start with static HTML version.</i>	○	2	3	2	2	3	3	3	18	S	3
Customer relationship services	Develop tools and approaches to support users accomplishing what they need with ERS products. <i>Recommendation: Online Q&A service, and web-based answer management; track usage of system to gauge success.</i>	○	3	3	1	2	3	2	2	16	M	2
Search engine enhancements	Assure ERS online search services provide usable and accurate information. <i>Recommendation: prioritize results to show top-level pages first, date of results, "most common results".</i>	●	2	2	2	2	3	3	3	17	S	2
Archive ERS content and data	An archive for publications and data products will make non-archived materials more valuable. <i>Recommendation: integrate archive tightly with Web site, search engine and publications.</i>	●	1	3	3	2	3	2	2	16	S	2
Multimedia content & services	Provide expanded range of ways for users to experience ERS products and expertise. <i>Recommendation: short audio and video clips to showcase ERS expertise, e.g. "Radio ERS" interviews.</i>	●	2	2	2	2	3	3	3	17	M	2
3. Improve Data Access and Management												

Project	Rationale / Description <i>And specific Recommendations</i>	In progress? NY ○●	Audience Benefits?			Org capacity	Staff capacity	Tech capacity	Cost	Score SUM	Timing Period	Priority
			Public	Key	ERS / USDA							
			123	123	123	123	123	123	123		S M L	123
Data product usability and functionality	ERS data products should embody consistent, high quality, and easy-to-use presentation. Should also implement standard pre-defined queries (covering the most common types of data searches) for most data sets. <i>Recommendation: implement simplified and standard template and pre-set search queries.</i>	○	1	3	3	2	2	3	3	17	M	3
Metadata schema	ERS data products need a foundation to support valuable cross-referencing and interlinking. <i>Recommendation: Develop standard schema for common data types based on "faceted" approach. (See 2002 Data Products Report for more detail on faceted design and navigation.)</i>	○	1	3	3	2	2	3	2	16	M	3
Pilot data project innovation	ERS should continually test new approaches to innovative technologies for data management and end-client utilization. <i>Recommendation: identify new data projects and invest, from the start, in developing them as marquee products – with new tools and approaches for managing and making accessible the data.</i>	○	1	3	3	2	2	2	2	15	L	3
Data management and display technology	ERS needs solid tools to support innovative management and display of its data products.	○	1	3	3	2	2	1	1	13	L	2
Data application accessibility	ERS data products should be available to and used by other Web services. <i>Recommendation: For "Food CPI" and others, make available as "Web services" using .NET, XML, etc.</i>	○	1	3	2	2	2	1	2	13	L	2
4. Improve operations and management												
Define and Track "Metrics of Success"	ERS Web operations should be guided by a concise set of performance targets that support its strategic goals, and system to collect the metrics data. <i>Recommendation: Build on 2001 "Metrics" report to define measures that support ERS goals.</i>	○	2	2	2	2	1	3	3	15	M	3
Manage to Metrics	Performance Metrics information should be actively used as a management tool by ERS. <i>Recommendation: ERS senior management should routinely disseminate Metrics information.</i>	○	2	2	2	2	2	3	3	16	M	3

Project	Rationale / Description <i>And specific Recommendations</i>	In progress? N Y ○ ●	Audience Benefits?			Org capacity	Staff capacity	Tech capacity	Cost	Score SUM	Timing Period	Priority
			Public	Key	ERS / USDA							
			123	123	123	123	123	123	123		S M L	123
Learn from site users	ERS should actively collect info to learn from user experiences. <i>Recommendation: Identify all the possible points of user feedback and system to track and assess info.</i>	○	2	2	2	2	2	3	2	15	M	3
Survey site users	ERS should actively seek feedback from users and fold that information back into planning, design, technology and staffing. <i>Recommendation: Implement customer satisfaction survey on site and regularly review and act on results.</i>	●	2	2	2	2	2	3	2	15	M	3
Routine Site Testing	ERS should regularly test its online services for usability / value, to guide investments and efforts. <i>Recommendation: implement standards and schedule for routine user experience and usability testing.</i>	●	2	2	2	2	2	3	3	16	M	3
Web organization capacity	A vital and vibrant core Web organization is essential to the success of ERS online operations. <i>Recommendation: Assess needed skills and staffing to develop and support successful online services; determine which are best decentralized and centralized, and provide training and support.</i>	○	2	2	2	2	1	3	2	14	L	3
Web organization support	Close coordination among the distributed ERS Web organization is essential to successful operations. <i>Recommendation: Develop an online community to support sharing and collaboration across the many ERS staff involved in managing Web content and operations.</i>	●	2	2	2	2	1	3	2	14	M	3
5. Enhance technical infrastructure												
WebAdmin Tool improvement	<i>Recommendation: ERS should make some valuable upgrades to its current WebAdmin tool, to be more reliable, to make it available to a wider admin team, to support QA/QC, to support a faceted data schema, and to enable some basic audience-targeted content management.</i>	●	2	2	2	3	3	3	2	17	S	3
Technical platform	<i>Recommendation: ERS should implement .net technology to provide for faster performance, more features, and reduced development time for Web applications.</i>	●	1	1	1	3	3	2	2	13	M	2

Project	Rationale / Description <i>And specific Recommendations</i>	In progress? N Y ○ ●	Audience Benefits?			Org capacity	Staff capacity	Tech capacity	Cost	Score SUM	Timing Period	Priority
			Public	Key	ERS / USDA							
			123	123	123	123	123	123	123		S M L	123
Content Management	A content management system (CMS) is essential to support many of the high priority external services and the internal workflow needs of ERS. <i>Recommendation: ERS should continue its recent CMS needs assessment, define the necessary functional requirements for ERS, and begin CMS implementation.</i>	●	2	2	2	1	2	2	1	12	L	3