ADOA-ASET
Arizona Strategic Enterprise Technology

Project Investment Justification

Version 01.01

A Statewide Standard Document for Information Technology Projects

Project Title:

AZASRS Public Website Redesign

Agency Name:	**Arizona State Retirement System**
Date:	**10/31/2013**
Agency Contact Name:	**Dave King**
Agency Contact Phone:	
Agency Contact Email:	

Hover for Instructions

I. Management Summary*

The scope of this project is to modernize the public (non-secure) website only. The secure website would be a separate site, hosted, secured and maintained by ASRS.

Over the past 3 years, the ASRS has modernized the secure portion of its member website, adding features that allow ASRS members to:

- View their account statements online
- View customized estimates of their retirement, refund, survivor benefit, and disability benefits
- View account balance information
- Update and maintain address, beneficiary, and contact information
- Update and maintain direct deposit and tax withholding elections
- View payment summaries
- Initiate retirement and refund transactions
- Track the status of applications for benefits

As a result of these initiatives, the ASRS has experienced a significant increase in the use of the ASRS website.

The ASRS public (non-secure) website is by far the most common medium of communication with our membership and other interested parties. In calendar year 2013, the www.azasrs.gov website was visited more than ten times as often as all other contact points combined (email, phone, appointments, walk-ins). Traffic to the website has more than tripled in the past two years alone (up to 200,000 home page views per month in 2013), and is expected to continue on this upward trend because even now less than one quarter of ASRS members regularly log in to the website (and less than one-half are registered at all). The non-secure, or public, website for the ASRS (www.azasrs.gov), has not had a significant update in over 5 years, due to the amount of technology resources that would be required.

The current 5-year strategic plan of the ASRS contains two priorities related to members:

1. Ensure outstanding customer service directed towards members, employers, and other stakeholders; and
2. Maximize productivity by
    a. Effective development and deployment of technology
    b. Reducing member reliance on physical and member contacts for service and transaction processing
    c. Developing alternate ways for members and employers to receive eduation and counseling services without having to rely upon in-person counseling
    d. Mitigating the need for additional staff due to increases in service demand

The ASRS intends to upgrade the information available on its public website to assist with the successful achievement of these strategic priorities.

Staff at the ASRS has identified the following issues with the public site that they would like addressed:

1. Technology staff must be engaged whenever web content needs to be updated

2. Technology developers or new pages need to be added. As a result, the website is not updated as frequently as staff would prefer
3. The current website is not easily viewable on mobile devices

Implementing the changes included in this PIJ will help the ASRS address each of the three issues identified above.

With an active legislature, the consideration of major Plan design changes (Defined Benefit vs. Defined Contribution) and regular events that impact membership and public opinion (fiscal year reporting, calendar year reporting, open enrollment for health insurance, new members joining ASRS, refunds, retirements, transfers, etc.), it is more important than ever before that the public (non-secure) website is timely, fresh and easy to navigate.

We know that every visit to the ASRS home page lasts about ten minutes, covers more than ten pages and most often results in members logging in to their secure account. Log-ins to secure accounts has shown to significantly lower ASRS costs in the areas of imaging, sorting and data-capturing efforts. The ASRS also knows that members who call the ASRS for help often used the website first but found it difficult to navigate and find answers.

ASRS has been following the current industry standard of "digital by default" as evidenced by our recent move to stop mailing paper member statements in favor of offering an even better statement online anytime, and to stop mailing refund applications in favor of requiring online refund requests. Member Services (MSD) and External Affairs (EA) have many plans in store for our public (non-secure) website which will require a complete website overhaul or the integration of a Content Management System (CMS).

The scope of this project is to overhaul the public (non-secure) website only. The Secure website will remain as-is and under the control of TSD. Five options were considered for modernizing our public (non-secure) website:

Option 1 ASRS/TSD Develop Custom Solution
Option 2 Drupal CMS, ASRS/TSD Host
Option 3 Drupal CMS, ADOA Host
Option 4 Drupal CMS, Other 3rd Party Host
Option 5 No Change

The chosen option is #4 – to implement a site with CMS, hosted by a third party vendor.

II. Project Investment Justification (PIJ) Type*

☐ **Yes** ☒ **No** Is this document being provided for a Pre-PIJ / Assessment phase?

If Yes,

Identify any cost to be incurred during the Assessment phase.	$0

Based on research done to date, provide a high-level estimate or range of development costs anticipated for the full PIJ.	$0

Explain:

[X] **Yes** [ ] **No** Will a Request for Proposal (RFP) be issued as part of the Pre-PIJ or PIJ?

III. Business Case

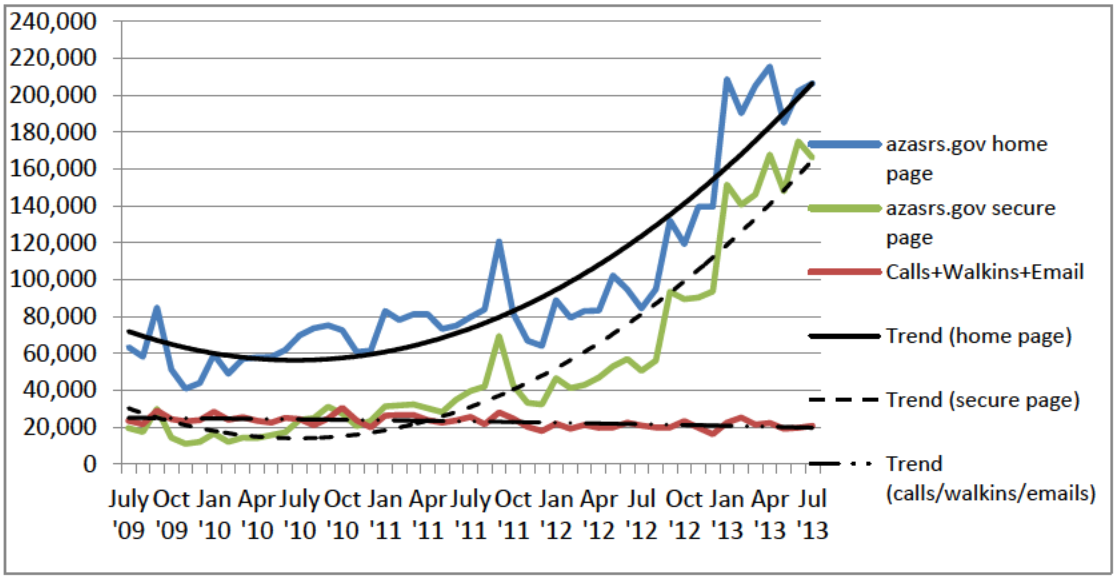
*A. Business Problem**

The ASRS website is currently managed by the Technology Services Division (TSD). The website is currently using a template and navigation structure that was released by ASET in 2006. All content on the website is approved by the business area and by the ASRS Copyright Agent David Cannella. When a new page or function is added to the website the business is involved throughout the project and the new pages are added as part of a TSD Production Release. Any change more involved than updating content on an existing page is included in a major production release. There are typically 4-7 scheduled production release deployments per year and they are planned months in advance. The changes go through the TSD Unified Process, Quality Assurance, and User Acceptance Testing and then they are released to the public.

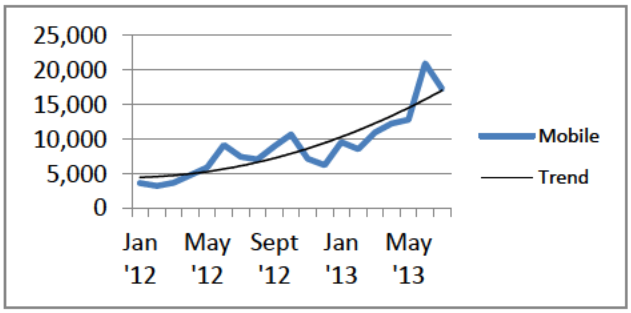
After a page has been released the business may have a need to change something basic about that page, perhaps the wording or text placement. These changes are done as a "content change." All content changes are submitted to TSD by David Cannella or Pam Vozza through the JIRA issue tracking tool. These changes are reviewed by a TSD Project Manager and assigned to a junior java developer for implementation into a nightly release. These nightly releases can occur on almost any day and they do not need to coincide with the TSD Production release schedule. Most content changes that occur on a page that is part of an ASRS application, like a smart form, must be done by a more experienced developer. TSD also performs content changes as part of production support work. These items are completed as part of the regular project process described above (Project Manager, Business Analyst, Quality Assurance, User Acceptance Testing, Production). Posting meeting minutes, council updates, and updating .pdf files are all considered content changes. Anything more complicated than what has been listed is NOT a content change.

Delays and impediments caused by the current process serve to reduce the value of the website to members when visiting the site. In a recent survey (early 2013), members stated that they visit the website often but still need to call, email or visit the ASRS for better answers to their questions after not finding the answer on the website. In most cases, those answers did exist on the website but the member was unable to find it or did not have the patience to look. As indicated in the chart below, despite website traffic now ten times higher than other contact

points (and three times higher than in early 2011 overall), the frequency of "live" contacts has only dropped by 15% over the same time period. ASRS hopes to reduce the need for live contacts by members who just couldn't find their answer on the public website.

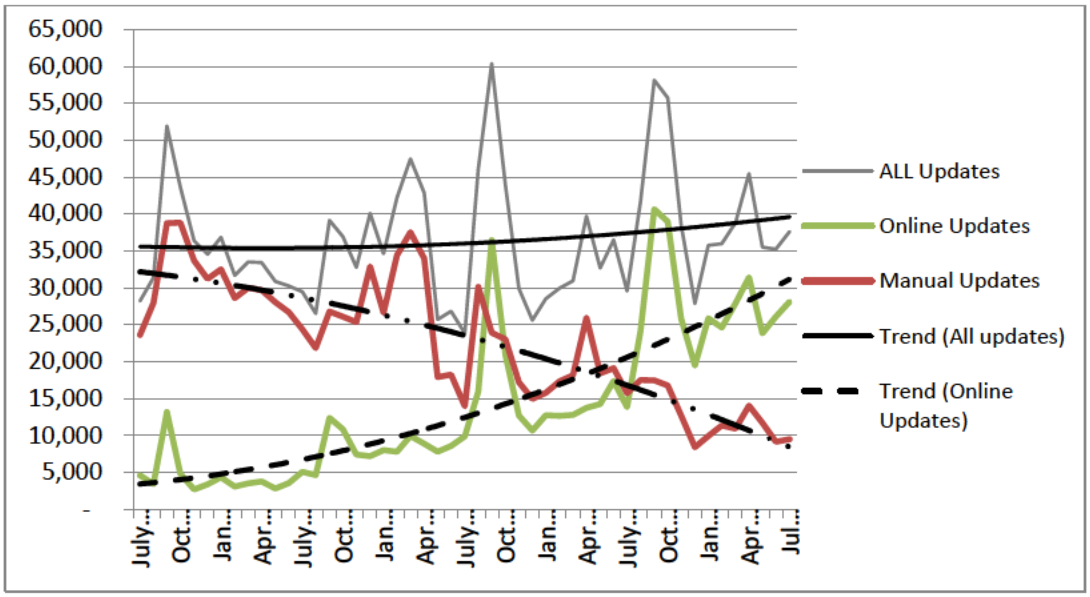


In addition, the current website is only compatible with a desktop or laptop screen size. The technology is not responsive to a smaller device size, such as a tablet or cell phone. As shown below, the traffic coming to the azasrs.gov site from mobile devices is growing (in terms of visits per month).



Tablets will soon outsell PCs, and research on many websites show that nearly a majority of their traffic is from mobile devices.

A quality, responsive website would further engage members in the ASRS experience and encourage them to log in to their secure account. Once in their secure account, members can self-service nearly every function or application. As shown below, members are now doing their own updates more often than ever before.



The more members we can drive to the website, and keep on the website to perform self-service transactions, the less it costs to maintain member accounts. Overall membership continues to rise while budgets and resources remain flat.

Project Minimum Business Requirements (provided by Business)

1. SECURITY: Any website must be highly secure. If hosted by a third party outside the ASRS network, the site must be certified to host government websites, generally having FedRAMP and NIST-level certifications.
2. WORKFLOW: Review/approve changes to any webpage on the fly. One person designs the changes then an assigned approver simply approves those changes for publication to production, for members to view.
3. PREVIEW CHANGES BEFORE PUBLICATION: Provide html mockup of proposed changes before making changes "live", for validation of look-and-feel and modifications as desired
4. BETA TESTING: Ability to deploy two sites at the same time, or alternating, to test user interaction and satisfaction
5. REVISION HISTORY: Ability to revert back to old version of page/site at any time
6. END USER CONTROL: filters, font sizes
7. MICROSITES: Create microsites that are clickable from e-communications, as landing page from small articles on email to the longer article on the website, that then click through to full site
8. DEVICE COMPATIBILITY: Create site that auto-resizes for different devices (PC, tablet, mini-tablet, smart phone, etc.)
9. BROWSER COMPATIBILITY: Create site that works in various browsers (Internet Explorer - all versions, Safari, Chrome, etc.)
10. CUSTOM TEMPLATES: Customizable page templates; including add/modify rotating banner of pictures, click-through to articles

11. EMBEDDED APPLETS: Stream our social media & blog feeds to site home page (embed streams onto the website page)
12. EMBEDDED APPLETS: Add a non-secure chat function
13. EMBEDDED APPLETS: Add calculators and other pre-developed "drop-ins" that save design/development time
14. ANALYTICS: built-in analytics on all pages, PDFs and videos
15. DESIGN: Modify color scheme, design, create engaging page layout on home page and all interior pages, using editor that previews the look-and-feel while changes are being made. (Unlike now where all the graphics are on the home page only & interior pages are just static text).
16. NAVIGATION: Modify flow of navigation on existing pages (add/remove links)
17. SEARCH: More robust search function, perhaps with smart options (like anticipating most searched topics, suggesting topics based on initial word entered, smart "no results" page).
18. ADDING: Add new web pages (as articles)
19. EDITING: Change links to buttons, buttons to links
20. EDITING: Change existing graphics to different graphics
21. DESIGN: Add social media links; embed YouTube videos and playlists
22. EDITING: Remove web pages/links
23. DESIGN: Add formatted video library, with embedded videos
24. Quick Survey/Poll on any webpage.
25. Create webpage versions for most of the pdf's on the site and use webpages for future instead of adding more pdf's.

*B. Proposed Business Solution**

Implement Drupal (CMS) with 3rd party host

The ASRS reviewed five options to accomplish its goals, and found that the best combination of low cost and high service is to implement a CMS that is hosted by a third-party vendor. The ASRS conducted an RFQ process in the spring of 2013, to which only one qualified vendor responded. The qualified vendor offers the proper combination of service, security and cost to deliver the benefits desired.

The vendor would charge less annually than hosting the site internally. Benefits of managing the website with a CMS are detailed in the “to be” section of this document.

The expectation is that the ASRS will use a third-party vendor for at least five years at the same cost as the initial year.

*C. Quantified Benefits**

X	Service enhancement
	Increased revenue
X	Cost reduction
X	Problem avoidance
X	Risk avoidance

Explain:

The cost savings are two-fold. To achieve the requirements for a new site, a third-party-hosted CMS would cost less than ASRS hosting the site internally. Also, the more members use the ASRS website, the less it costs the ASRS to maintain their accounts.

The ASRS knows that members who self-serve their own accounts cost less to manage than those who file paperwork. Additionally, the ASRS knows that members who call, email or visit the ASRS cost more than those who get their own answers on the ASRS website.

To date, the frequency of live contacts has dropped nearly 20% over the past two years while the frequency of website users has risen dramatically and members now self-serve more often than not by nearly a 2:1 margin.

The ASRS believes an easier, more-responsive website will further reduce the live contacts and increase self-service rates to a greater degree.

Problems and risks are reduced via self-service because the Online Smart Forms and the verbiage on the website are guaranteed to be consistent, complete and concise, while the quality of human intervention can be compromised by both the speaker and the listener.

IV. Technology Approach

*A. Proposed Technology Solution**

Implement Drupal (CMS) and host with 3rd party

The ASRS developed a “Cloud Security Policy” (attached) to govern the security requirements of any third party vendor doing business and hosting data for the ASRS.

The third-party hosted site would only contain the public interface and would not contain any personally identifiable information. The public site would consist of 50-100 web pages and up to 100 PDFs, detailing ASRS benefits, news and legislation as well as the history and makeup of the ASRS.

A secure login link will exist on the public website, which would redirect the members and employers to their secure website, which would still be hosted, managed and secured by ASRS servers.

Given the risk that the public website could potentially be defaced and/or the link to the secure site could be compromised to redirect members and employers, the ASRS still requires FedRAMP low security level protocols and/or NIST compliance. The preferred vendor would ideally have those certifications and/or authorizations to operate. Any lesser security controls would have to be approved by the agency Director or his/her designee.

The public site would still have a generic benefit estimator, but the data entered by the public (service credit, salary, multiplier) would not be stored on the third-party servers for any future use.

B. Technology Environment

The preferred vendor runs on a Drupal-optimized platform hosted in the Amazon Web Services (AWS) cloud environment. The core of the platform is an open-source LAMP server stack, combining the Linux (Ubuntu) operating system, Apache web server, MySQL (Percona) database, and PHP programming language with Drupal.

The preferred vendor's Cloud servers are built on the AWS Elastic Compute Cloud (EC2), Elastic Block Storage (EBS), and Elastic IPs (EIP).

C. Selection Process

OPTION 1: ASRS/TSD Develop In-house Solution to meet requirements

A rough estimate assumes 7,000 hours of development, multiplied by the TSD rate of $75 per hour, costing a total of $525,000.

This option was not selected because developing a CMS solution in-house would not be the best use of resources, considering the wide range of CMS's available at no cost.

Option 1 Drupal CMS, ASRS/TSD Host, Costs Overview

Total For year 1	**Project to develop new, integrated site with custom CMS solution**	**$525,000**
Total Ongoing cost	**Annual enhancements and maintenance costs**	**$86,544**

OPTION 2: Implement and Host the Drupal CMS on ASRS Servers

While this option would not require that ASRS hire a php/java developer, it would require the agency to have a resource with knowledge of Drupal to provide support for the agency and to ensure that the latest patches and upgrades are in place.

The ASRS decided against this option because its best estimate of internal support costs to manage and properly secure and maintain the site would cost more money, annually, than the third party vendor

Option 2 Drupal CMS, ASRS/TSD Host, Costs Overview

Total For year 1	**Project to develop new, integrated site**	**$211,544**
Total Ongoing cost	**Annual enhancements and maintenance costs**	**$86,544**

OPTION 3: Implement Drupal CMS and host with ADOA

ADOA has reviewed the security requirements and service level agreements needed to host the Drupal CMS for ASRS use, and has declined to engage at this time.

OPTION 4: Implement Drupal CMS, hosted by third party vendor

Details of this option were provided above. Estimated costs are included here for comparison to the other four options.

Total For year 1	**Project to strip down existing site to secure-only, and implement new public website (year 1 only)**	**$70,536**
Total Ongoing cost	**Annual third-party vendor cost**	**$43,536**

OPTION 5: Do Nothing

The final option considered is to “do nothing” and stay with the current website as it is, with the process currently in place. The downside of this option is clear and described in prior sections, but the costs are listed here for comparison sake. The annual cost to “do nothing” is higher than a third party CMS-based product, and does not include the inevitable costs related to complex changes outside the normal daily content updates.

In addition to the cost, keeping the status quo would prevent the agency from moving forward to address the issues that have been identified, which would make it more difficult for the agency to implement new strategies to address the strategic priorities that have been identified by the Board.

Option 5 Other CMS, TSD Host, Cost Overview

Total For year 1	**Annual enhancement and maintenance costs**	**$86,544**
Ongoing Yearly total	**Annual enhancement and maintenance costs**	**$86,544 + additional service requests and projects**

In addition to cost, the table below reflects a side by side comparison of functionality provided by each option:

	Option 1 ASRS/TSD Develop	**Option 2 Drupal, ASRS/TSD Host**	**Option 3 Drupal ADOA Host**	**Option 4, Drupal 3rd Party Host**	**Do Nothing**
Uses Java friendly Technology	Yes	No	No	**No**	Yes
High Availability of Skilled Resources	Yes	Not Currently	Yes	**Yes**	Yes
Fast Customer Support	Yes	Yes	No	**Yes**	No
Brings CMS Knowledge in house	Yes	Yes	No	**No**	No
Can be implemented within FY2014	No	Yes	No	**Yes**	Yes
Reduces Ongoing TSD Costs	No	No	Yes	**Yes**	No

Low Risk of Issues	No	Yes	Yes	**Yes**	No
Benefits Business	Yes	Yes	Yes	**Yes +**	No
Benefits TSD	Yes	Yes	Yes +	**Yes +**	No

V. Project Approach

*A. Project Schedule**

Project Start Date: 1/1/2014 **Project End Date**: 3/1/2014

B. Project Milestones

Major Milestones	Start Date	Finish Date
Select and contract with vendor	1/1/2014	1/15/2014
Set up new environment, workflows, site with vendor	1/15/2014	3/1/2014
Train business users for day-to-day content management	2/1/2014	3/1/2014
Strip down and Implement secure-only site	1/15/2013	3/1/2014

VI. Roles and Responsibilities

A. Project Roles and Responsibilities

Name	Title	Role
Anthony Guarino	Deputy Director	Director of Operations, Project Sponsor
Kent Smith	CIO, Asst Director of TSD	Oversee the areas of TSD involvement, act as primary sponsor of PIJ
Dave King	Web Administrator, Project Manager	Manage the implementation of the new public website on CMS, work with vendor
Trent Kendall	TSD Project Manager	Manage the TSD project to strip down current site to secure pages only
Molly Mahai	Program Manager, Network Services IT Security Officer	Oversee the adherence to Security Policies with third party vendors

Jeff Hickman	TSD Architect	Assist with design of new secure site
David Cannella	Public Information Officer Copyright Manager Communications Manager	Assist with the design of new public site, Review/approve all content
Pam Vozza	Communications Specialist	Design new public website, maintain the look and feel of new site
Sara Orozco	Strategic Planning Manager	Help design new website, ensure adherence to Strategic Plan
Kevin Basso	Web Consultant	Provide services to design website, manage analytics, interact with vendor on regular basis

B. Project Manager Certification

- [X] Project Management Professional (PMP) Certified
- [X] State of Arizona Certified
- [ ] Project Management Certification not required

C. Full-Time Employee (FTE) Project Hours

Total Full-Time Employee Hours	2,185
Total Full-Time Employee Cost	$116,664

VII. Risk Matrix, Areas of Impact, Itemized List, PIJ Financials

VIII. Project Approvals

A. *Agency CIO Review**

Key Management Information	Yes	No
1. Is this project for a mission-critical application system?	X	
2. Is this project referenced in your agency's Strategic IT Plan?	X	
3. Is this project in compliance with all agency and State standards and policies for network, security, platform, software/application, and/or data/information as defined in http://aset.azdoa.gov/security/policies-standards-and-procedures, and applicable to this project? If **NO**, explain in detail in the "XI. Additional Information" section below.	X	
4. Will this project transmit, store, or process sensitive, confidential or Personally Identifiable Information (PII) data? If **YES,** in the "XI. Additional Information" section below, describe what security controls are being put in place to protect the data.		X
5. Is this project in compliance with the Arizona Revised Statutes (A.R.S.) and GRRC rules?	X	
6. Is this project in compliance with the statewide policy regarding the accessibility to equipment and information technology for citizens with disabilities?	X	

B. *Project Values**

The following table should be populated with summary information from other sections of the PIJ.

Description	Section	Number or Cost
Assessment Cost (if applicable for Pre-PIJ)	II. PIJ Type - Pre-PIJ Assessment Cost	**$0**
Total Development Cost	VII. PIJ Financials tab	**$70,536**
Total Project Cost	VII. PIJ Financials tab	**$244,680**
FTE Hours	VI. Roles and Responsibilities	**2,185**

C. *Agency Approvals**

Contact	Printed Name	Signature	Email and Phone
Project Manager:	Dave King		
Agency Information Security Officer:	Molly Mahai		
Agency CIO:	Kent Smith		
Project Sponsor:	Anthony Guarino		
Agency Director:	Paul Matson		

IX. Optional Attachments

A. ASRS Cloud Security Policy

X. Glossary

XI. Additional Information

Links:

ADOA-ASET Website

ADOA-ASET Project Investment Justification Information Templates and Contacts

Email Addresses:

Strategic Oversight

ADOA-ASET_Webmaster@azdoa.gov