



NASCIO 2017 State IT Recognition Awards Nomination

Enterprise Self-Service Authorization (ESSA)

State of Florida
Agency for State Technology
&
Department of Environmental Protection

Category: Government to Citizen

Project Initiation Date: March 2010

Project Completion Date: December 2016

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Executive Summary

Initiated in 2010, the Florida Department of Environmental Protection's (DEP) Enterprise Self-Service Authorization (ESSA) system has streamlined the process for citizens and businesses to submit documentation electronically and directly to DEP. Over the last 7 years, the system has improved efficiency in several DEP programs. Designed and implemented on a Java/Oracle platform, the goal of ESSA was to create an enterprise application that would automate the universal program functionality of document receipt and standardize data collection efforts, while allowing customization of data input as determined by the program area.

ESSA accepts a variety of submittals, including permits, authorizations, registrations, renewals, annual reports, exemptions, notices (of intent, of termination, etc.), licenses, and exam applications. Where applicable, ESSA generates the resulting DEP documentation (i.e. permits) and delivers it to the submitter. With ESSA, the submittal process is quicker and easier both for the public and DEP staff.

ESSA is proof of the positive impact of enterprise wide applications to business process efficiency, standardization, and data quality within an organization. The implementation of ESSA has yielded benefits to both the public and DEP while supporting DEP's six strategic goals.

Concept

DEP continually strives to locate efficiencies and service improvements for both the DEP employees and the citizens of the state. ESSA is a user-initiated automated data entry. A user — whether using ESSA for an individual need or serving as the representative of a business — accesses ESSA to perform a function. Depending on the type of submission, ESSA displays the appropriate screens to collect required information for the form being submitted to DEP. The flow of the screens change based on the user's search results, selections, and other choices. Typical ESSA functions include:

- Applying for a permit, an authorization, an exemption, a registration, a renewal, a notice, a license, or to take an exam.
- Paying fees.
- Submitting reports to DEP.

ESSA integrates with existing enterprise applications, including DepPay (electronic payment processing system), MapDirect (enterprise mapping application), DepSec (enterprise-wide security system), and the DEP Business Portal. Upon successful completion of a submission, the collected data is inserted into the applicable legacy system (Figure 1).

Figure 1
ESSA Process Flow



Significance

Scope

ESSA is composed of individual “flows” that automate a process that occurs within DEP. Each year, program areas assess opportunities for automation for the area and submit ESSA Project Request forms for consideration. Working with senior DEP leadership, the ESSA priority list is established. This priority list is used to identify the sub-project (flow) list which encompasses the scope of work for each year. Once priority level is established, the ESSA team completes analysis, design, development, and implementation tasks for the sub-project.

A total of 32 flows supporting 57 distinct business processes have been completed and implemented. Future enhancements will include implementation of additional flows.

Stakeholder Involvement

In general, there are four stakeholder groups for an ESSA sub-project: DEP Executive Sponsor, DEP Program Area(s), DEP Office of Technology and Information Services (OTIS), and the public. Throughout the process, each stakeholder group’s participation is vital.

- DEP Executive Sponsor assists in sub-project prioritization and resource allocation for the sub-project.
- DEP Program Area involvement is crucial to the successful execution of a flow because the final flow will serve the customers of the program. These subject matter experts provide business background and requirements for the flow. They also approve all analysis documentation and screen design plans. After production implementation, the program area provides the first-tier support for the flow.
- The DEP OTIS stakeholders are involved in two ways. The OTIS-ESSA team facilitates and completes the analysis, design, development, implementation and ongoing support activities for ESSA in conjunction with other OTIS staff.
- During the analysis and development phases, the public is indirectly involved in the design of the flow. With help from the program area, the public customer needs are anticipated. Once a flow has been successfully implemented, the public can directly provide feedback via the ESSA survey. Feedback provided by the public is carefully considered by the program area and OTIS teams for future enhancement of ESSA.

Project Team and Project Management

Led by senior OTIS leadership and resources, the ESSA application is continually enhanced and maintained by a core group of team members. One of the key challenges of this type of effort is the coordination of tasks between the ESSA team and multiple program areas. Using a “mini team” approach, a lead is designated for the analysis and development efforts. The ESSA flow leads are responsible for sub-project coordination and scheduling. Through a weekly meeting, ESSA team members update the group on the progress of each flow. ESSA leadership then assists the team in resolving coordination and technical issues that arise during the execution of each flow. A weekly status report is published by the Project Manager to keep all parties informed of team progress.

Technology Integration

ESSA is a Java application which handles basic workflow and administrative functions. The ESSA application reads XML files which contain instructions about the flow. Each XML calls “components” (reusable Java libraries which handle a specific function – a question, a map, text information, etc.) which provide the screen functionality for user interaction.

The reusability of ESSA components enables a quick turnaround from initial sub-project discussion to production rollout.

Figure 2
ESSA Integration with Enterprise Applications

Enterprise Application	Application Description/Functionality	ESSA Integration
DEP Pay	Electronic payment processing system	Payment Processing
MapDirect	Enterprise geographic location application	GIS tools within the flows
DepSec	Enterprise-wide security system	E-mail templates and DEP letterhead
DepDac	Enterprise-wide data assembly component	Electronic storage of screen and DEP form sub-sections for on-fly assembly
OCULUS	Enterprise document management system	Electronic document storage
DEP Business Portal	Enterprise online services for the public	Use registration and navigation to flows
Legacy Application	Program area databases and applications	Data retrieval and data update

Impact

The ESSA concept has realized a variety of benefits, including:

- Improved process efficiency: The submittal process is quicker and easier both for individuals and for businesses.
- Improved data quality:
 - Integration with MapDirect provides a more accurate way of identifying site locations.
 - Integration with legacy applications reduces instances of duplicate data and improves data accuracy.
 - The use of constraints and data entry standardization ensures that required fields are always collected and that common fields follow the same standard formats.
- Improved document storage and retention: ESSA integrates with OCULUS, the DEP-standard document imaging and repository system.
 - Incoming and outgoing documents (signed and/or notarized documentation, email messages, receipts, etc.) can be stored appropriately and automatically and are easily retrievable.
- Reduction in DEP staff workload: ESSA reduces DEP staff workload, allowing for resources to be reassigned to understaffed areas. This is accomplished in several ways:
 - Users enter and submit much of the information that previously was manually handled by DEP.
 - The use of required fields greatly reduces (and in most cases, eliminates) the likelihood of receiving a submission that does not include all needed information.
 - The integration of ESSA with DepPay saves additional staff time that would have otherwise been spent manually processing payments. Of course, this also reduces the likelihood of errors.
- Cost Savings to the DEP: ESSA has saved DEP over 1 million dollars in DEP staff time and resources.

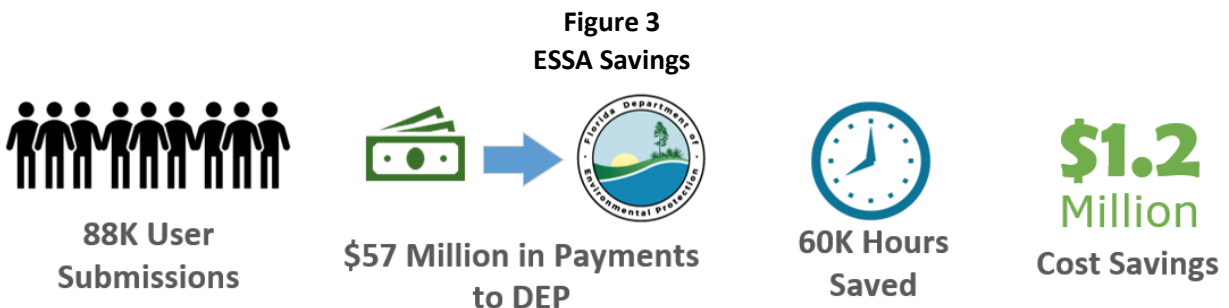


Figure 4
Number of Employee Hours Saved
by the ESSA Submission Process

Summary by Division		Jan-15 to Dec-16		Total	
		Hours	FTE Saved	Hours	FTE Saved
1	AIR Resource Management	2,039	1.08	3,255	1.73
2	Enterprise	3,251	1.73	4,255	2.26
3	Environmental Resource Permitting	13,032	6.93	24,801	13.19
4	Office of General Counsel	94	0.05	115	0.06
5	Division of State Lands	673	0.36	1,430	0.76
6	Division of Waste Management	11,882	6.32	15,904	8.46
7	Division of Water Resource Management	5,376	2.86	10,895	5.80
8	Division of Water Restoration Assistance	58	0.03	75	0.04
Totals		36,403	19.36	60,729	32.30

Figure 5
Cost Savings by Division
by Implementing the ESSA

Summary by Division		Jan-15 to Dec-16	Total
1	AIR Resource Management	\$ 42,293.22	\$ 67,513.56
2	Enterprise	\$ 67,430.59	\$ 88,268.62
3	Environmental Resource Permitting	\$ 270,344.68	\$ 514,478.46
4	Office of General Counsel	\$ 1,939.63	\$ 2,385.64
5	Division of State Lands	\$ 13,961.17	\$ 29,654.52
6	Division of Waste Management	\$ 246,477.93	\$ 329,928.59
7	Division of Water Resource Management	\$ 111,540.00	\$ 225,810.00
8	Division of Water Restoration Assistance	\$ 1,170.00	\$ 1,560.00
Totals		\$ 755,157.22	\$ 1,259,599.39