







**PROJECT MANAGER** 

# PHIL CASE

**DPS BUDGET OFFICER** 

#### RANDY WILLIAMS

**DPS PROCUREMENT OFFICER** 

#### **KERILEE BAEHRE**

IT APPLICATIONS MANAGER

**LARRY HEINZ** 

**DPS ISO** 



#### **CHALLENGE**

The Arizona Department of Public Safety is legislatively mandated to provide licensing and regulatory services. Because regulation varies, so do the business processes - which make it difficult and inconsistent for citizens to do business with DPS.

Customers currently do not have the ability to conduct business with DPS via a one stop all-inclusive online portal. The current DPS public website is not intuitive and customers often contact the wrong business unit.

Most transactions are done by US Mail, or at the only in-person DPS Public Service Center in Phoenix, which is not convenient for those who don't live nearby.

The highly manual process results in significant delays, errors, and inefficiency which cost DPS, the State of Arizona and the tax payers time, resources and money, which will be saved by automating and digitizing many of the processes at DPS

## **PROPOSAL**



Our main purpose is to provide world class customer service.

DPS will contract with Accenture to create a new, secure, cloud based, online Public Services Portal (PSP) which will connect customers directly to DPS business units. The PSP will:

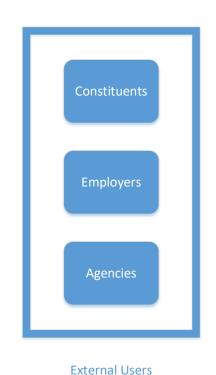
- Be created using a simple, easy to follow, customer oriented, human centered design.
- Connect to the DPS legacy back-end systems via Application Program Interfaces (APIs) using standard non-proprietary programming language.
- Use a step by step guided process to ensure the costumers interact with the proper business unit.
- Allow customers to create personal accounts.
- Provide customers the ability to update information and track their process in real time.
- Provide a mechanism for secure document transfers into and out of DPS.
- Increase efficiency by providing a method to validate submissions and make corrections immediately.
- Other agencies will be able to interact with the PSP via APIs, or via accounts to securely receive document and information.

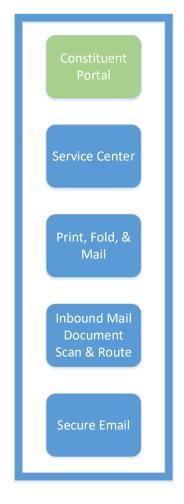
#### **ADDITIONAL INFORMATION**

- Our current back-end legacy systems will remain in place.
  - PSP will connect to them via APIs using nonproprietary standard language
  - The legacy systems will be moved into a cloud environment as part of the state's cloud initiative.
- There will be increased costs for the agency to implement the PSP.
  - Development, implementation and ongoing operations
  - New system, not replacing an existing system.
  - Public help desk.
  - Reviewing some applications, criminal history results, gathering information, investigating files will still need to be done.
- As PSP engagement increases, some data entry resources may be shifted.
  - Applicant Clearance Card Team currently has 55% of applications and fingerprints submitted electronically.
  - Research shows 70% of mail and in person costumers can be served using the PSP.
- Efficiency Gains:
  - Significantly reduce the need for U.S. Mail service.
  - Errors or mistakes fixed in real time.
  - One account to interact with multiple work groups
  - Other agency engagement.

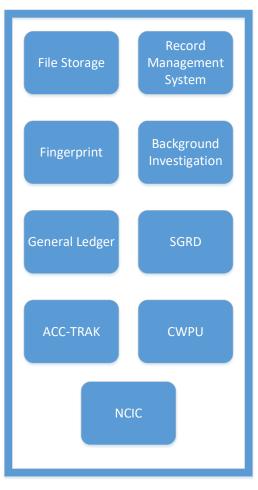
#### **DPS LICENSE SYSTEMS CONTEXT**









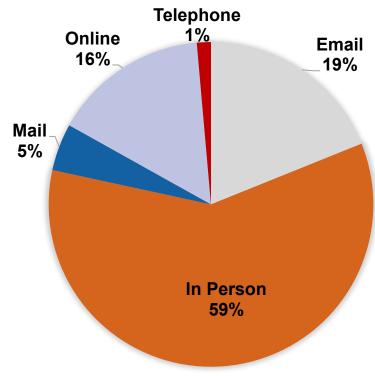


**External Interfaces** 

**New Applications** 

Legacy/External Applications

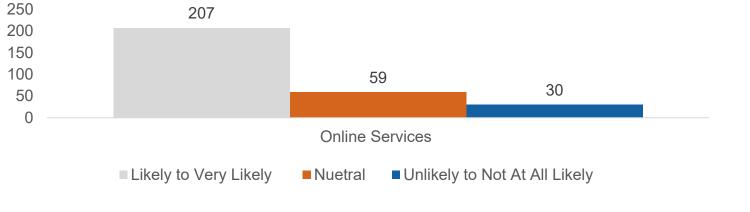
### SURVEY RESULTS



84% could be served by PSP

Of the 296 total respondents, **207** indicated they **would use online services** for future transactions with AZ DPS. According to the data, **70%** of respondents would be willing to use online services for future transactions.





AZDPS' plan to create a constituent portal is trending with the feedback

#### **WRITE IN SURVEY COMMENTS:**

You need a link to change addresses when needed

Tried to find info on impounded vehicle no one answers the phone

Website needs a little easier to find things

I wish we could download collision reports instead of have to wait or pick up in person

Website not helpful and I had to bring my application into the office

#### LICENSING AND REGULATORY SERVICES



PHASE ONE	FY19 VOLUME
Applicant Clearance Card Team	166,122
Licensing Unit	14,740
Department Records Unit	27,879
Public Records Unit	5,262
Total	214,003

PHASE TWO	FY19 VOLUME
Concealed Weapons Permit Unit	94,405
Applicant Processing Team	132,722
Student Transportation Unit	875
	Total 228,002

ADDITIONAL SYSTEM VOLUME IS CREATED FOR SERVICE AND MAINTENANCE, UPDATES, CHANGES, REPRINTS AND FOLLOW UP REQUESTS.



#### **BENEFITS**



- Automating and digitizing the licensing and regulatory processes at DPS, will
  - Reduce processing times
  - Increase efficiency
  - Reduce errors which lead to waste, excess and variance
- Very simple, guided and standardized process for customers and agencies
- Direct access for State agencies
- Customers have control over their personal information and can make changes instantly
- Customers can track the progress and status of their requests
- Aligns to Cloud First policy
- √ Vendor supported platform reduces burden on IT department
- Automated responses (via web and email) will reduce burden on support staff



#### **BENEFITS**



- Reduce wait times in Phoenix Center
- ✓ Reduce call wait times on phone
- Reduce wait time for constituents
- ✓ Reduce paper use
- Reduce postage spend
- ✓ Better reporting
- Constituent satisfaction



#### **BENEFITS**



- ✓ At the conclusion of the entire project DPS will own the solution.

  Accenture will transfer all the source code and the executable/modified code to a DPS repository. Accenture will grant DPS a non-exclusive, limited perpetual license to modify and use the source code for DPS's purposes. Accenture and DPS will work together to create process documentation for the proposed solution.
- ✓ Reach is built using non-proprietary language and runtime technologies common to all major cloud platforms. This makes Reach portable, upgradable and avoids vendor lock-in. If necessary, Reach services can even be deployed to multiple cloud providers to achieve optimum operating cost efficiency

#### **SECURITY**

OF PRINCES

- Meets all Arizona Baseline Security Controls
- Maintain security patches on underlying Reach platform systems
- Monitor for Reach platform system vulnerabilities and re-mediate as necessary
- Monitor for threats and respond accordingly on the Reach platform
- Monitor for security incidents on the Reach platform. Communicate and remediate incidents
- Maintain security compliance for sensitive data for the Reach platform
- Conduct security testing that is comprised of Static Analysis, Penetration Testing, Vulnerability assessment and compliance to OWASP. Scope of security testing includes application security testing only covering the integration adapters and does not include DPS owned network/data center/infrastructure/firewall security
- Accenture will conduct NIST 800-53 assessment every 12 months, address any gaps with security, application and infrastructure leads.
- All data that is retained in the REACH System, transmittal to DPS, will be secured in the same manner.
- Vendor hosted solution in AWS

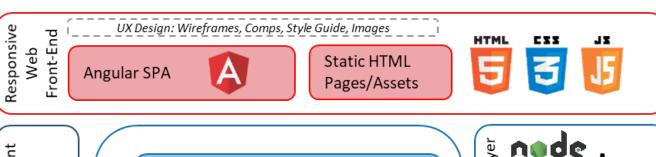


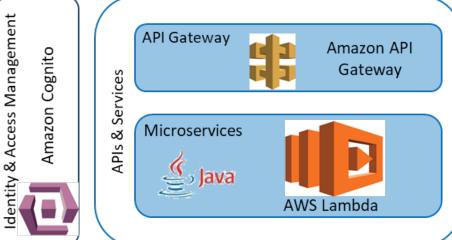
#### SOLUTION

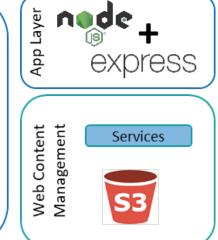




- Human Centered Design
- Flexible Framework
- Cloud Based
- Microservice architecture makes the platform modular. This allows re-use of common nonfunctional services and business logic capabilities, which can be easily extended and upgraded to fit DPS' needs.
- Microservices are loosely coupled, which means they can be easily modified without requiring updates to other areas of the application.
- · Chat Bot:
  - Web Based
  - Email Based







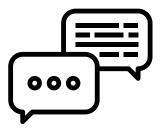






laaS/PaaS Infrastructure & Execution



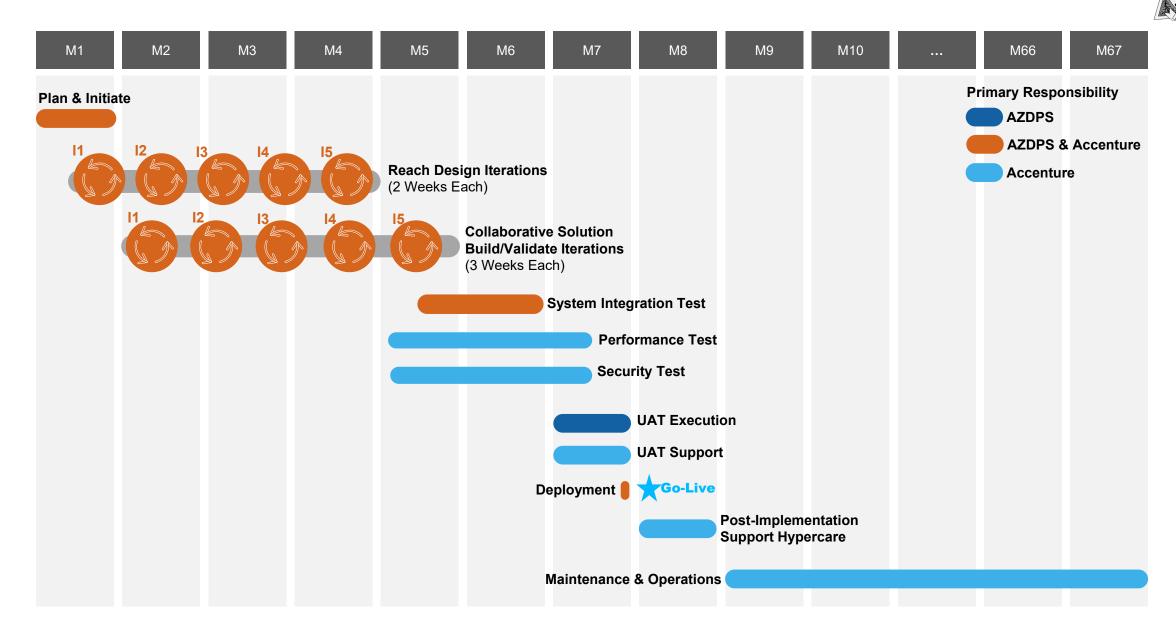


# VIRTUAL AGENT CONVERSATIONAL AI

The customer service Virtual Assistant will be trained to interpret customer questions and provide answers to offload a portion of customer service from AZDPS staff via self-service webchat and automated email response.

- Enhance customer service and provide support for common questions outside of business hours
- Topics for questions could range from account creation to license replacement, hearings and more.
- Set of up to 100 pre-determined FAQs or 'Intents'.
- ✓ Support English, but can be expanded to other languages.
- Includes a survey feature to gather feedback from customers on the usefulness of the response.
  - Includes analytics reporting
- All components of the Platform are deployed in the cloud with appropriate security provisions.
- All data is encrypted both in transmission and at rest to allow protection of Personal Information.
- All components are load balanced to provide for optimal performance and ease of scalability during periods of high demand.

#### TIMELINE - MONTH



# **TIMELINE - WEEKS**



PROJECT ACTIVITY	PROPOSED START	PROPOSED FINISH	DURATION
Project Initiation and Detailed Planning	Week 1	Week 2	2 Weeks
Kick-off Meeting	Week 3	Week 3	1 Day
Sprint 0 planning and Design Sprinting/Iterations 1 - 5	Week 3	Week 14	12 Weeks
Development Sprinting/Iterations Sprint 1 - Sprint 5 (Release 1)	Week 5	Week 19	15 Weeks
Integration Testing	Week 18	Week 21	4 Weeks
User Acceptance Testing	Week 22	Week 25	4 Weeks
Production Deployment Release	Week 26	Week 26	1 Day
Post Implementation Hypercare	Week 27	Week 30	4 Weeks
Application Maintenance and Operations* With four, one-year extension options	Week 31	End of Month 19	12 Months

# PHASE ONE SCOPE

NAME	DESCRIPTION
USER PORTAL	<ul> <li>Public Service Portal</li> <li>Reach platform install</li> <li>User Management configurations</li> <li>Payment Services Integration</li> <li>Support of FAQs</li> </ul>
11 SECURITY GUARD LICENSES - APPLICATIONS - RENEWALS - DUPLICATES	<ul> <li>Security Guard Agency Application</li> <li>Security Guard Resident Manager Application</li> <li>Security Guard Associate Application</li> <li>Unarmed Security Guard Application</li> <li>Armed Security Guard Application</li> <li>Private Investigation Agency Application</li> <li>Private Investigation Associate Application</li> <li>Private Investigator Employee Application</li> <li>Security Guard General Instructor Application</li> <li>Security Guard Firearms Instructor Application</li> </ul>
PUBLIC RECORDS UNIT RECORD REQUESTS	<ul> <li>Offense/Incident/Arrest police reports</li> <li>Radio/911 tapes and logs</li> <li>Certified records</li> <li>Civil Subpoena Duces Tecum</li> <li>All other record types with the exception of accident reports/photos</li> </ul>

NAME	DESCRIPTION
DEPARTMENT RECORDS UNIT RECORD REQUESTS	<ul> <li>Accident reports</li> <li>Citation, warnings, repair orders</li> <li>Offense reports</li> <li>Photograph requests</li> </ul>
APPLICANT CLEARANCE CARD TEAM	<ul> <li>Online request form</li> <li>Online status check of clearance card</li> <li>Future visioning for digital/virtual clearance card</li> </ul>
СНАТВОТ	<ul> <li>Users can ask questions to the virtual assistant and receive answers for 100 intents</li> <li>Via Web Chat</li> <li>Via Email</li> <li>Modify answers to topics via the administration panel</li> <li>Monitor usage of the virtual assistant via dashboards</li> </ul>

# **COSTS**



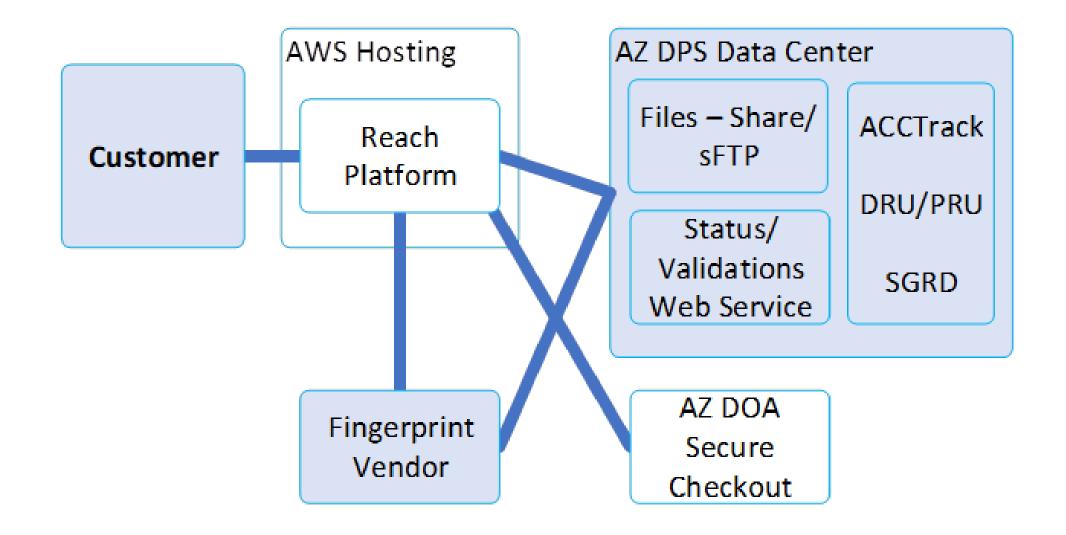
#### **PHASE ONE**

Design, Development, and Implementation	
Platform	\$3,759,706.09
Virtual Agent (Both Web and Email Channel)	
Monthly Maintenance (includes full support)	
Platform	\$94,288
Virtual Agent (Both Web and Email Channel)	

#### INTEGRATIONS COMPONENTS

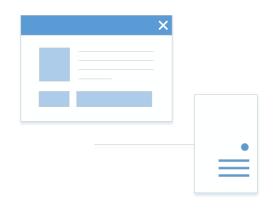


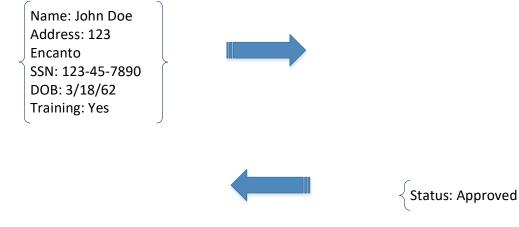
AZ DPS System Integration Map

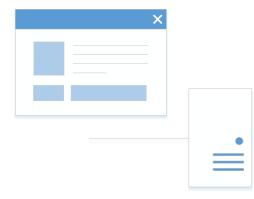


#### MICROSERVICE ARCHITECTURE









#### **Application Processing System**

**Background Check System** 

- 1. The application processing system formats a request payload
- 2. Each type of application has a defined payload that provides the details required by the service
- 3. Each type of application is sent to the appropriate microservice service interface endpoint
- 4. The microservice performs the appropriate queries based on the type of application
- 5. The microservice responds with a brief "Approved" or "Denied" response
- 6. The application processing does not receive or store any other data

