

# ***LEADER REPLACEMENT SYSTEM AGREEMENT***

## ***Exhibit T (Scope of Work for CalACES Cloud Enablement Project - Proof of Concept)***

**California Automated CONSORTIUM Eligibility System,  
a California Joint Powers Authority**

## 1. CLOUD ENABLEMENT PROJECT OVERVIEW

As the Consortium prepares to migrate the thirty-nine Consortium Counties operating on the C-IV System, and the possibility of migrating the Welfare Client Data System ("WCDS") Counties that operate on the CalWORKS Information Network and related systems, to the LRS Application Software, the Consortium seeks to re-platform the LRS from its current "on premise" datacenter architecture to an Amazon Web Services (AWS) cloud-hosted architecture. To determine the feasibility of this solution, the Consortium requested CONTRACTOR to perform a proof of concept to test the performance of a non-production, unmodified, version of the LRS Application Software in the AWS cloud procured by the Consortium through the California Department of Technology Services ("CDTS"). The CDTS-provisioned AWS cloud services are referred to as the "AWS Cloud" throughout this Scope of Work. Since the LRS Application Software was optimized for its primary database using the Oracle Exadata with Oracle Real Application Cluster ("RAC"), the Consortium requested CONTRACTOR test transaction performance, batch performance, and the fault tolerance of a non-production, unmodified version of the LRS Application Software in the AWS Cloud. Contractor's activities in connection with the foregoing are specifically set forth in this Scope of Work. CONTRACTOR has proposed a 5 phase Proof of Concept (each a "Project Phase", collectively, "Project Phases") with a Gate Review process after each Project Phase, to contain the work effort. The 5 Project Phase Proof of Concept approach supports the goal of determining LRS re-platform feasibility and development of the Application Roadmap containing information for the Consortium to plan for future Project Phases of the CalACES project. All Project Phases of the Proof of Concept need not be completed to develop the Application Roadmap. Successful completion of the Proof Of Concept can be accomplished with the execution of only those Project Phases required to support the determination of LRS re-platform feasibility and Application Roadmap development.

Terms not otherwise defined herein are given the meaning provided for them in the AGREEMENT.

## 2. SCOPE OF WORK:

This Scope of Work for the Cloud Enablement Project is a Proof of Concept to determine the viability of running a non-production, unmodified replica of the current LRS Application Software (the "LRS Replica") in the AWS Cloud (the "POC"). The "Commencement Date" of the POC is July 2, 2018, unless postponed per the terms of this POC.

The LRS Replica will consist of the core LRS Components determined necessary to run the LRS Application Software Online Transaction Processing ("OLTP") and batch that will be installed in the AWS Cloud. The LRS Replica will use an un-masked copy of production data from the PPRDLRS1 database as well as other databases used to run the LRS Application Software as directed by the Consortium (the "POC LRS Data"). The POC LRS Data will be transferred into the AWS Cloud by the CONTRACTOR for purposes of performing the tests under the POC. CONTRACTOR will test the LRS Replica for online transaction response time, batch window length, and fault tolerance.

CONTRACTOR will provide Consortium with documentation at the end of each Project Phase (for each Project Phase respectively, the "Completion Documents"), actuals versus estimated budget, and identify and document any lessons learned, specifically those driving additional costs and/or schedule impacts. The Parties will meet within three (3) business days after the Completion Documents are provided to Consortium and the parties will jointly review the Completion Documents (this process is hereinafter referred to as a "Gate Review"). After a Gate Review, and before starting work on the next Project Phase in the POC Project Plan, the Consortium will provide a notice to CONTRACTOR of its decision to continue to the next Project Phase of the POC. To expedite timely completion of the POC, the Consortium review period for authorization to proceed with each subsequent Project Phase of the POC will be no more than five (5) business days from conclusion of respective Gate Review. If the Consortium decides to continue, the parties will work together to update the POC Project Plan, revise any future Project Phase timelines and highlight any anticipated changes to the projected cost estimates for each of the respective Project Phases, to the extent applicable.

Sections 2.1-2.5 below detail the specific services to be performed by CONTRACTOR during each of the five (5) Project Phases of the POC (the "Services"):

## 2.1 Initial Setup Phase (Project Phase 1)

The objective of the Initial Setup Phase (Project Phase 1) is for CONTRACTOR to install and configure the LRS Replica in the AWS Cloud. Additionally, the POC LRS Data will be transferred by CONTRACTOR via the Amazon Snowball service (procured by the Consortium through CDTs) to the AWS Cloud. After the Gate Review, the Consortium will provide direction to proceed with Test Phase One (Project Phase 2 to test with LRS volume and transaction load) or conclude this POC in accordance with Section 3. Project Wind Down.

The Services to be performed by CONTRACTOR during the Initial Setup Phase are:

2.1.1 Project Management: CONTRACTOR will conduct a weekly touchpoint meeting with key personnel identified by Consortium to review progress, discuss next steps, and escalate issues as necessary. The processes documented in the last approved LRS Deliverable – 1.1.1 Project Control Document (PCD) will govern the project management processes of the POC, including status reporting, issue and risk management. Specifically, the POC will adhere to the processes defined in PCD Section 1.0 Project Management Plan related to governance, contract and fiscal scope management, as well as the work management processes. In addition, the POC status reporting will follow the processes defined in PCD Section 6.0 Project Reporting, as appropriate to the POC. While the specific metrics to be reported may change with the Project Phase of the POC, planned hours to be burned for the period and to date, as well as actual hours burned for the period and to date, will be reported to the Consortium Executive Director every week. As noted below in Section 2.2.2.2.1, the LRS Monthly Performance Report metrics will be used to document the results of the POC performance tests. The POC will be included during the monthly Risk Management meeting, as documented in PCD Section 8.0 Risk Management.

2.1.2 Project Management: CONTRACTOR will deliver a project plan within ten (10) business days of the Commencement Date outlining the Tasks for the POC (the "POC Project Plan").

2.1.3 CONTRACTOR will work with CDTs to establish required network connectivity and bandwidth, escalating issues to Consortium for resolution as necessary.

2.1.4 CONTRACTOR will install and configure the LRS Replica in the AWS Cloud and in accordance with the terms of this POC.

2.1.4.1 Contractor will create the scripts to automate the installation and configuration of the LRS Replica to support the availability test executions in Test Phase One (POC LRS Data)

2.1.5 CONTRACTOR will utilize the Consortium-procured Amazon Snowball services to execute a one-time transfer of the POC LRS Data into the LRS Replica. Following this transfer, CONTRACTOR will keep the necessary databases in the LRS Replica updated with the on-premise production instance using Oracle Dataguard for the duration of the POC.

2.1.6 CONTRACTOR will install and configure in AWS Cloud the tools currently utilized by CONTRACTOR to monitor and measure performance of the LRS. CONTRACTOR will use such tools to monitor and measure performance of the LRS Replica.

2.1.7 CONTRACTOR will install and configure tools and services for firewall and security group configuration, operational audit and logging functions. In addition, threat and vulnerability management capabilities will be enabled. These security configurations will be reviewed with the Consortium prior to moving production data to the AWS Cloud.

2.1.8 At completion of the Initial Setup Phase CONTRACTOR will provide the following Completion Documents for Gate Review:

Technical architecture blueprints of the AWS Cloud configuration and services for the following areas:

- a) Technical Architecture Overview
- b) Infrastructure Technical Architecture
- c) Network Technical Architecture and Topology
- d) Database Technical Architecture

## 2.2 Test Phase One (Project Phase 2)

The objective of Test Phase One (Project Phase 2) is to determine the viability of the LRS Replica in the AWS Cloud to meet LRS response time, batch window time, and availability standards, as defined in Section 3.6 of the LRS Statement of Requirements (Attachment B to the AGREEMENT). After the Gate Review, the Consortium will determine whether to proceed with Test Phase Two (Project Phase 3) or conclude this POC in accordance with Section 3, Project Wind Down, below.

The Services to be performed during Test Phase One are:

2.2.1 Project Management: CONTRACTOR will conduct a weekly touchpoint meeting with key personnel identified by Consortium to review progress, discuss next steps, and escalate issues as necessary. The processes documented in the last approved LRS Project Control Document will

govern the project management processes of the POC, including status reporting, issue and risk management, as described in Section 2.1.1, above.

2.2.2 CONTRACTOR will execute the following test cycles:

2.2.2.1 Regression Testing – CONTRACTOR will execute the existing automated LRS regression test suite in the UFT (Unified Functional Testing) software and provide Consortium the results.

2.2.2.2 Performance Test – CONTRACTOR will execute existing LRS performance test cycles for online and batch load scenarios.

2.2.2.2.1 The LRS Monthly Performance Report format will be used to document the outcomes of these performance test cycles.

2.2.2.3 Availability Test – CONTRACTOR will simulate the failure of the primary database, and the failure of an Amazon Availability Zone.

2.2.2.3.1. CONTRACTOR will document the time required to restore service in both scenarios.

2.2.3 CONTRACTOR will discuss with Consortium the applicable CONTRACTOR and/or AWS infrastructure change recommendations which might help optimizing performance and availability. The parties will mutually determine which, if any, recommendations are determined necessary to address prior to proceeding to Test Phase Two. These changes will not include modifications to the LRS Application Software or Databases, unless otherwise mutually agreed to and documented in writing.

2.2.4 As requested by the Consortium, CONTRACTOR will notify and provide the Consortium with access to the LRS Replica at the C-IV ADF or the LRS PMO (the LRS Replica will not be accessible in the counties) to allow the Consortium to Click Through (as defined in Section 2.2.4.1 below) the LRS Replica. The parties agree that this exercise is not intended to be a separate test or confirmation of functionality.

2.2.4.1 "Click Through" is defined as navigating through the web pages on the LRS Replica.

2.2.4.2 Consortium will have Click Through access for five (5) business days following the Regression Test, as represented in the POC Project Plan.

2.2.4.3 During the above time, CONTRACTOR will not support Batch execution.

2.2.5 CONTRACTOR will scale up the POC LRS Data to the CalACES Data Set for performance test execution of Test Phase Two. The "CalACES Data Set" means the estimated volume and transaction load of the 40 CalACES Counties.

2.2.6 At the completion of Test Phase One, CONTRACTOR will provide the following Completion Documents for Gate Review:

2.2.6.1 Performance Test Results in the LRS Monthly Performance Reporting format.

2.2.6.2 Summary of the recommended infrastructure change actions taken to help optimize performance and availability.

2.2.6.3 Updated Technical Architecture blueprints that demonstrate the AWS Cloud configuration and services for the following areas (as applicable per the actions taken):

- a) Technical Architecture Overview
- b) Infrastructure Technical Architecture
- c) Network Technical Architecture and Topology
- d) Database Technical Architecture

### 2.3 Test Phase Two (Project Phase 3)

The objective of Test Phase Two (Project Phase 3) is the same as Test Phase One, but testing will be performed on the CalACES Data Set and does not require the regression/functional or availability testing to be repeated. After the Gate Review, the Consortium will determine whether to proceed with Test Phase Three (Project Phase 4) or conclude this POC in accordance with Section 3, Project Wind Down.

The Services to be performed during Test Phase Two are:

2.3.1 Project Management: CONTRACTOR will conduct a weekly touchpoint meeting with key personnel identified by Consortium to review progress, discuss next steps, and escalate issues as necessary. The processes documented in the last approved LRS Project Control Document will govern the project management processes of the POC, including status reporting, issue and risk management, as described in Section 2.1.1, above.

2.3.2 CONTRACTOR will update existing LRS performance scripts and batch schedule to support simulating the higher transaction volumes.

2.3.3 CONTRACTOR will install and configure on the LRS Replica, as determined necessary by CONTRACTOR and /or AWS, additional AWS compute services to address the additional transaction load of the CalACES Data Set.

2.3.4 CONTRACTOR will discuss with Consortium the applicable CONTRACTOR and/or AWS infrastructure change recommendations which might help optimizing performance and availability. The parties will mutually determine which, if any, recommendations are determined necessary to address prior to proceeding to Test Phase Three. These changes will not include modifications to the LRS Application Software or Databases, unless otherwise mutually agreed to and documented in writing.

2.3.5 CONTRACTOR will execute performance test cycles against the CalACES Data Set created for online and batch load scenarios.

2.3.4.1 LRS Monthly Performance Report format will be used to document the outcomes of the performance test cycles.

2.3.6 CONTRACTOR will scale up the POC LRS Data to simulate a CalSAWS Data Set for performance test execution of Test Phase Three. The "CalSAWS Data Set" means the estimated volume and transaction load of the 58 California Counties, commonly referred to as the "CALSAWS Counties".

2.3.7 At the completion of Test Phase Two, CONTRACTOR will provide the following Completion Documents for Gate Review:

2.3.7.1 Performance Test Results in the LRS Monthly Performance Reporting format.

2.3.7.2 Summary of the actions taken to help optimize performance and availability.

2.3.7.3 Updated technical architecture blueprints demonstrating the AWS Cloud configuration and services for the following areas (as applicable per the actions taken):

- a) Technical Architecture Overview
- b) Infrastructure Technical Architecture
- c) Network Technical Architecture and Topology
- d) Database Technical Architecture

## 2.4 Test Phase Three (Project Phase 4)

The objective of Test Phase Three (Project Phase 4) is the same as Test Phase Two, but testing will be performed on the CalSAWS Data Set to simulate the projected demands of CalSAWS. After the Gate Review, the Consortium will determine whether to proceed with the Preparation of LRS Application Re-Platform Roadmap Phase or conclude this POC in accordance with Section 3, Project Wind Down.

The Services to be performed during Test Phase Three are:

2.4.1 Project Management: CONTRACTOR will conduct a weekly touchpoint meeting with key personnel identified by Consortium to review progress, discuss next steps, and escalate issues as necessary. The processes documented in the last approved LRS Project Control Document will govern the project management processes of the POC, including status reporting, issue and risk management, as described in Section 2.1.1, above.

2.4.2 CONTRACTOR will update existing LRS performance scripts and batch schedule to support simulating the higher transaction volumes.

2.4.3 CONTRACTOR will install and configure on the LRS Replica, as determined necessary by CONTRACTOR and /or AWS, additional AWS compute services to address the additional transaction load of the CalSAWS Data Set.

2.4.5 CONTRACTOR will discuss with Consortium the applicable CONTRACTOR and/or AWS infrastructure change recommendations which might help optimizing performance and availability. The parties will mutually determine which, if any, recommendations are determined necessary to address prior to proceeding to Preparation of LRS Application Re-Platform Roadmap Phase. These changes will not include modifications to the LRS Application Software or Databases, unless otherwise mutually agreed to and documented in writing

2.4.6 CONTRACTOR will execute performance test cycles against the CalSAWS Data Set created for online and batch load scenarios.

2.4.6.1 LRS Monthly Performance Report format will be used to document the outcomes of the performance test cycles.

2.4.7 At the completion of Test Phase Three, CONTRACTOR will provide the following Completion Documents for Gate Review:

2.4.7.1 Performance Test Results in the LRS Monthly Performance Reporting format.

2.4.7.2 Summary of the actions taken to help optimize performance and availability.

2.4.7.3 Updated technical architecture blueprints that demonstrate the AWS Cloud configuration and services for the following areas (as applicable per the actions taken):

- a) Technical Architecture Overview
- b) Infrastructure Technical Architecture
- c) Network Technical Architecture and Topology
- d) Database Technical Architecture

## 2.5 Preparation of LRS Application Re-Platform Roadmap Phase (Project Phase 5)

CONTRACTOR will prepare the LRS Application Re-Platform Roadmap (Project Phase 5) containing recommendations to optimize the LRS Application Software for the AWS Cloud. The roadmap is a living document as described in Section 6.8.2.

The Services to be performed during this Phase, and the Completion Documentation are:

2.5.1 Documentation of CONTRACTOR's recommended changes, based on results from prior Phases, that may be needed to help optimize performance and availability of the LRS Application Software in the AWS Cloud.

2.5.2 Documentation of a recommended schedule associated with the proposed changes.

2.5.3 Documentation of a non-binding, high-level estimate for the effort associated with the proposed changes.

## **3. PROJECT WIND DOWN**

**3.1** If at any time the Consortium decides to stop work, the Consortium will provide CONTRACTOR written notice of its intent (the "Stop Work Notice"), Consortium and CONTRACTOR will have five (5) business days from CONTRACTOR receipt of the Stop Work Notice to mutually agree on the wind down tasks which includes the tasks described in 2.5 (Preparation of the LRS Application Re-Platform Roadmap) and the schedule for said tasks.

**3.2** In the event the parties do not reach mutual agreement within five (5) business days of CONTRACTOR receipt of Stop Work Notice, the CONTRACTOR will wind down the POC Services within ten (10) business days of receipt of the Stop Work Notice. At the end of such wind down period, the CONTRACTOR will submit an invoice for all work performed, and not yet invoiced, up to and including the wind down period. CONTRACTOR will have no further obligation to perform the Services in this POC.



## 4. MANAGEMENT STAFF

CONTRACTOR will provide the following management staff for the POC, which will be part of CONTRACTOR's project management team. The project management team is composed of current project team members, cloud engineers from Accenture AWS Business Group (AABG) and AWS.

4.1 CalACES Technology Lead – Scot Bailey

4.2 CalACES Cloud Enablement Lead – Luz Esparza

4.3 CalACES Cloud Enablement Lead Engineer (AABG) – David Stanton

4.4 CalACES Cloud AWS Enablement Lead – Malini Saxena

Note: Scot Bailey is not in Table 2: Estimated Staffing Plan, because he is already fulltime on the C-IV Contract between Consortium and CONTRACTOR as the CalACES Technology Lead, but the CalACES Cloud Enablement Lead, Luz Esparza, will report to him for the POC.

## 5. SCHEDULE

The following is a high-level estimate of the projected schedule for the POC:

Figure 1: Timeline

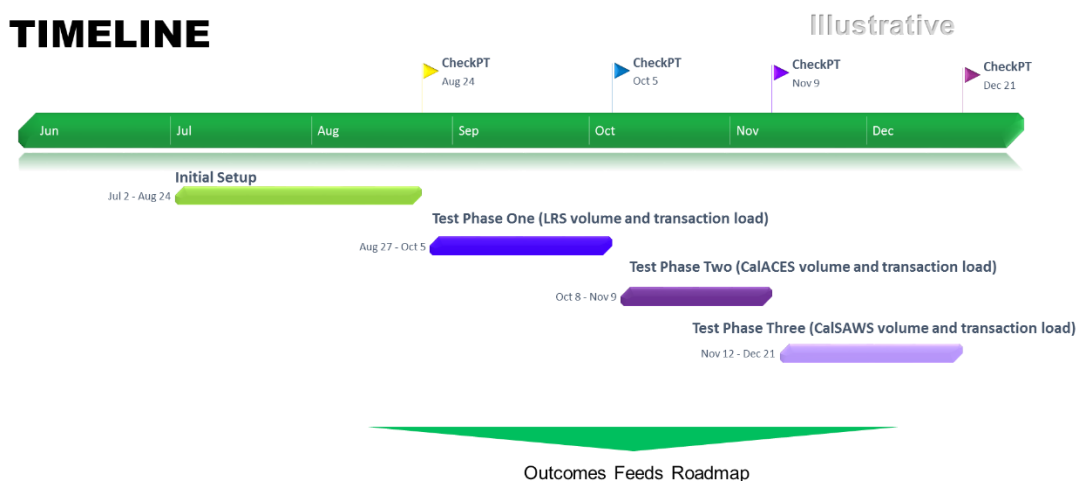


Figure 1: Timeline is illustrative, final schedule will be provided with the POC Project Plan outlined in the Initial Setup Phase section.

The term of Exhibit T (Scope of Work for CalACES Cloud Enablement Project - Proof of Concept) is from the Commencement Date to February 28, 2019.

## 6. COST

For purposes of this POC, the parties hereby agree the terms of this Section 6 supersede all provisions in Article 9 of the AGREEMENT.

**6.1.** CONTRACTOR will bill its activities under this POC on a time-and-materials basis and invoices will be issued on the first of the month after which such Services were actually performed. The rates of CONTRACTOR are set to an hourly rate of Two Hundred US Dollars (\$200.00) (the “**Services Fees**”). This rate only applies only to this POC scope of work. Based on the above assumptions, fees are estimated to be and shall not exceed Two Million Nine Hundred Ninety-Seven Thousand Two Hundred US Dollars (\$2,997,200.00)(the “**Total Services Fee Amount**”). The Total Services Fee Amount is inclusive of taxes and out-of-pocket expenses.

**6.2.** CONTRACTOR will notify Consortium in writing (email is acceptable) when the amount of Services Fees expended to date reach Two Million Two Hundred Forty-Seven Nine Hundred US Dollars (\$2,247,900.00) and provide an estimate for the additional amount of Service Fees at POC completion (the "75% Expended Notice"). Within five (5) business days of receipt of the 75% Expended Notice, Consortium will notify CONTRACTOR whether Consortium wishes to proceed with the POC Services.

**6.3.** If Consortium determines it wishes CONTRACTOR to continue to provide Services under this POC that will incur fees in excess of the Total Services Fee Amount, the Parties will in good faith negotiate the amount of any adjustment to the Total Services Fee Amount and document same in an Amendment to the AGREEMENT. CONTRACTOR has no obligation to continue to perform Services under this POC once the Total Services Fee Amount is expended without a mutually executed Amendment increasing the Total Services Fee Amount.

**6.4.** If Consortium fails to notify CONTRACTOR of its desire to continue (or not continue) work under the POC within the timeframe of Section 6.2 above CONTRACTOR may stop work once the Services Fees utilized reach the Total Services Fee Amount, even if the Services under this POC have not been completed. For the avoidance of doubt, and notwithstanding anything to the contrary in this POC or in the AGREEMENT, once the Total Services Fee Amount is achieved, (i) CONTRACTOR will stop work under this POC, will have no further obligation to perform Services under this POC and will not proceed with performing any Services under this POC, and (ii) the Consortium will have no obligation to pay CONTRACTOR any Services Fees in excess of the Total Services Fee Amount.

**6.5.** In the event an Amendment to increase the Total Services Fee Amount is fully executed, CONTRACTOR will continue to perform Services under this POC, but solely as and to the extent set forth in such Amendment. Without limitation to the foregoing, CONTRACTOR will use reasonable, diligent efforts to perform any work needed to complete the current scope of Services under this POC per the POC Project Plan within the then current Total Services Fee Amount and consistent with the assumptions set forth in Section 8 (Assumptions) below.

**6.6 Bandwidth Increases.** CONTRACTOR will bill the actual network costs associated with network bandwidth increases that are deemed necessary to support the POC. The monthly cost increase is estimated to be Two Thousand Six Hundred Seventy-Five US Dollars (\$2,675.00). The estimated cost for a six- month period is estimated to be Thirteen Thousand Three Hundred Seventy-Five US Dollars (\$13,375.00).

**6.7. Invoices.** Invoices inclusive of both Total Services Fee Amount and Bandwidth Increases will not exceed Three Million Ten Thousand Five Hundred Seventy-Five US Dollars (\$3,010,575.00). CONTRACTOR will submit detailed, correct invoices in accordance with Consortium's standard invoicing requirements. Invoices will include all information reasonably requested by Consortium, including, without limitation, the AGREEMENT name and reference number, Federal Tax Identification Number, sales and use taxes, the calculation and legal and regulatory bases for any such taxes, the total amount due, the date of Service, type of Services provided, number of hours required and the Services Fees. Consortium will have the right to dispute any invoices submitted for payment by CONTRACTOR if Consortium believes the Services Fees are inaccurate or incorrect in any way. Consortium will use reasonable efforts to provide a Notice to CONTRACTOR within ten (10) business days after receipt of an invoice, specifying the reasons why Consortium believes the Service Fees are inaccurate or incorrect. In the event of any dispute regarding a portion of an invoice, the undisputed portion will be paid as provided herein. Consortium will pay CONTRACTOR undisputed amounts within thirty (30) days of receipt of a correct invoice.

**6.8. Estimated Effort by Project Phase.** Table 1 below shows the estimated effort anticipated by Project Phase.

**Table 1. Estimated Effort by Project Phase**

Section	Month 1		Month 2		Month 3		Month 4		Month 5		Month 6		Total	
	Hrs	Price	Hrs	Price	Hrs	Price	Hrs	Price	Hrs	Price	Hrs	Price	Hrs	Price
Initial Setup	2288	\$ 457,600.00	2798	\$ 559,600.00		\$ -		\$ -		\$ -		\$ -	5086	\$ 1,017,200.00
Test Phase One (LRS volume and transaction load)		\$ -	428	\$ 85,600.00	3460	\$ 692,000.00	893	\$ 178,600.00		\$ -		\$ -	4781	\$ 956,200.00
Test Phase Two (CalACES volume and transaction load)		\$ -		\$ -		\$ -	1423	\$ 284,600.00	1249	\$ 249,800.00		\$ -	2672	\$ 534,400.00
Test Phase Three (CalSAWS volume and transaction load)		\$ -		\$ -		\$ -		\$ -	445	\$ 89,000.00	1092	\$ 218,400.00	1537	\$ 307,400.00
Roadmap		\$ -		\$ -	40	\$ 8,000.00	206	\$ 41,200.00	306	\$ 61,200.00	358	\$ 71,600.00	910	\$ 182,000.00
<b>Grand Total</b>													<b>14986</b>	<b>\$ 2,997,200.00</b>

**6.8.1** The level of effort described in Table 1 for each Project Phase is not intended to imply completion on an exact month end. The hours described in Table 1 illustrate the closure of a Project Phase that may occur at any point during a month and start of the next Project Phase immediately thereafter in the same month or the next month. It is assumed the decision by Consortium to proceed to the next Project Phase is provided in time for work to commence on the next Project Phase the week following conclusion of the previous Project Phase.

**6.8.2. LRS Application Re-Platform Roadmap Development.** Development of the LRS Application Re-Platform Roadmap will begin in Project Phase Three; the LRS Application Re-Platform Roadmap is a living document which will be updated throughout Project Phases Three, Four and Five. Section 2.5 Preparation of LRS Application Re-Platform Roadmap Phase and the supporting sub-sections outline the topics the LRS Application Re-Platform Roadmap will contain.

**Table 2: Estimated Staffing Plan**

Resource Name	Source	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Chris Scott	AABG	24	16	16	16	8	
David Stanton	AABG	160	160	40	16	16	8
Dimas Chbane	AABG		120	40	40	24	16
Ed Choi	AABG	160	160	160	160	160	160
TBD-Sec1	AABG		160				
TBD-Sec2	AABG		160				
AWS-Cloud Architect (Malini)	AWS	160	160	160	80		
AWS-DB Architect	AWS	40	160	160	40	80	
Wildzfor Balan	CalACES	160	140	60	44	20	20
Adolfo Escalante	CalACES	160	160		84	84	
Alain Kim	CalACES			80	40		
Alex Iliev	CalACES	128	160				
Ankit Jain	CalACES	160	160				
Ayyappa Kancharla	CalACES		40	168	162	142	160
Cassandra Mestayer	CalACES			80	40		
Chad Quan	CalACES			20	20		
Deron Schab	CalACES			100	60		
Eric Perkins	CalACES			100	60		
Eric Wong	CalACES		80	88	80	80	80
Ermias Negash	CalACES			120	110	100	40
Gerald Limbrick	CalACES			20	20		
Goldsmith	CalACES	100	100				
Jennifer Chen	CalACES			20	20		
Jesus Gutierrez	CalACES		10	110	150	145	60
John McMartin	CalACES	16		8			
Joseph Chiaromonte	CalACES		40				
Kevin Fohrer	CalACES		10	30			
Luz Esparza	CalACES	160	160	160	160	156	156
Marcelo Burgoa	CalACES	140	160	20	60	60	80
Nazeem Sheik	CalACES	30	80	160	40	90	60
Parul Dhawan	CalACES			80			
Ricardo Contreras	CalACES	50	120	150	70	120	70
Robert Gault	CalACES	160	140	140	160		
Robert Untalan	CalACES			80	40		
Ryan O'Mary	CalACES	20		140	140	60	
Sauvik Basu	CalACES	160	140	120	50	135	110
Sean Gardner	CalACES	160	160	160	160	160	160
Shankar Padmanabhuni	CalACES	140	60	60	40	40	40
Shilpa Suddavanda	CalACES			80			
Stephanie Hugo	CalACES			100	60		
Sumeet Patil	CalACES		60	140	10	10	
TBD-B1	CalACES		25	100	125	100	100
TBD-B2	CalACES		25	100	125	100	100
TBD-P1	CalACES			30		30	30
TBD-P2	CalACES		100	100	40	80	
Grand Total		2288	3226	3500	2522	2000	1450

Table 2 is the estimated staffing plan that support the described estimated hours in Table 1.

## 7. ATTACHMENTS

### 7.1 AWS Compute Resource Specifications Document (see attached, Attachment 1).

The “AWS Compute Resource Specifications” document provides a list of estimated compute resources required in the AWS Cloud for execution of the POC and is attached hereto and is incorporated herein as Attachment 1 to this Exhibit T to the AGREEMENT. AWS compiled the AWS Compute Resource Specifications based on the goals of the POC, but this list will be amended to address performance or availability concerns on the POC during the term of this POC. As changes become necessary or refinements are developed, these will be discussed with the Consortium at the weekly touchpoint meeting. As outlined in Section 8, Assumptions, the Consortium must make the resources identified in the AWS Compute Resource Specifications available before work can begin on the POC. Delays in making such resources available will postpone the Commencement Date and in turn push out the projected completion date of the POC by an equal number of days.



Attachment 1\_AWS  
Compute Resources S

### 7.2 Software/Licensing Specifications Document (see attached, Attachment 2)

The “Software/Licensing Specifications Document” outlines additional software/licensing required to perform the POC and is attached hereto and hereby incorporated herein as Attachment 2 to this Exhibit T to the AGREEMENT. The Software/Licensing Specifications Document may be amended to address items learned while performing the Services. As changes become necessary or refinements are developed, these will be discussed with the Consortium at the weekly touchpoint meeting. As outlined in Section 8, Assumptions, the Consortium must make the software identified in the Software/Licensing Specifications Document available before work can begin on the POC. Delays in making the specified software available will postpone the Commencement Date and in turn push out the projected completion date of the POC by an equal number of days. It is expected the Consortium will make these purchase utilizing the C-IV Hardware/Software purchase process through the existing Proquire agreement under the C-IV Agreement.



Attachment  
2\_Software\_Licensing

## 8. ASSUMPTIONS

CONTRACTOR's performance of the POC Services, at the rates and within the estimated schedule provided is dependent on the following assumptions. In the event the assumptions are incomplete or inaccurate, the parties will enter into an appropriate Amendment to the Agreement for this POC to address any incremental costs or timeline changes incurred by Contractor or in connection with the POC.

8.1 CDTs is not a party to the AGREEMENT but is providing services on behalf of the Consortium critical to the success of the POC. It is the Consortium's responsibility to resolve issues related to CDTs and/or the AWS Cloud. CONTRACTOR's performance of the POC Services are dependent on Consortium providing, or arranging to be provided, the following:

8.1.1 Consortium will define resource(s) to perform service requests on CONTRACTOR's behalf to CDTs prior to the Commencement Date.

8.1.2 CDTs will provide the necessary access to provision Services on the Commencement Date.

8.1.3 CDTs will have access to US Region 2 for the POC on the Commencement Date, which will have the necessary AWS compute resources specified in the AWS Compute Resource Specifications Document.

8.1.4 CDTs will enable AWS Cloud access to internet within five (5) business days of request.

8.1.5 CDTs will work with CONTRACTOR to adjust AWS organization settings within three (3) business days of being notified if those organizational settings are negatively impacting the POC.

8.1.6 CDTs will enable CONTRACTOR to raise incidents directly with CDTs and CDTs's vendor AWS.

8.1.7 CDTs will adjust internal capacity/configurations for access to the AWS Cloud to support the POC.

8.1.8 CDTs will allow access for management and data transfer from Virtual Private Network "VPN". This access will remain in place throughout the POC.

8.1.9 CDTs will allow temporary network address translation "NAT" gateways for AWS based servers until establishment of CDTs network connectivity.

8.1.10 CDTs will allow internet-facing secure administrative hosts (commonly referred to as "bastion" or "jump" servers) until establishment of "VPN".

8.1.11 CDTs will provide NAT services for translating AWS private IP address space to county IP accessible address space if no technical solution exists in AWS Cloud.

8.1.12 The Consortium will respond in a timely manner to execute service/change request and resolve issues.

8.2 Consortium will provide the necessary resources to execute the "click-through" of the LRS Replica as defined in section 2.2.4 -.

8.3 Consortium weekly touchpoint meeting attendants will have appropriate and necessary empowerment to make decisions.

8.4 Consortium and CONTRACTOR will implement an action item list with expected delivery dates.

8.5 To expedite timely completion of the POC, the Consortium review period for authorization to proceed with each subsequent Project Phase of the POC will be no more than 5 business days from conclusion of respective Gate Review.

8.6 Consortium will submit the necessary service request to CDTS for CONTRACTOR to receive credentials from CDTS to obtain the necessary access to install and configure the LRS Replica in the AWS Cloud.

8.7 Consortium will be responsible for managing all of its third-party contractors and agents including CDTS and AWS (as the provider of the AWS Cloud) and ensuring it completes all necessary activities and services necessary for Contractor to complete its scope.

8.8 LRS systems are not included in the scope of the POC:

- Business Dashboards/Data Warehouse
- Online Reporting
- YBN
- ATS/ASH

8.9 Current LRS production correspondence data will not be replicated to the AWS Cloud.

8.10 The LRS Replica will not connect to any external interface partners/County services.

8.11 Consortium is providing approval to copy and host unmasked production data in the AWS Cloud as of the Commencement Date.

8.12 As with the current LRS online performance testing, the tests to simulate production load will use the top 80% most frequently used transactions.

8.13 The data scaling up technique used for Test Phase One and Test Phase Two will increase the size of the PPRDLRS1 database in the LRS Replica by adding additional records in the LA County tables. The additional data will be not be added into additional counties because the LRS application has not been tested with additional counties. Given the time constraints of the POC, the risk of breaking the functionality in the LRS Replica by using multiples counties outweighs the risk of using a single county configuration for performance testing.

8.14 The Consortium will procure the software/licensing documented in Section 7 by the Commencement Date.

8.15 The LRS application components for the LRS Replica are lrs-webapp.war, lrs-web-services.war, amp.war, and auditor.war

8.16 Facilities currently utilized under the AGREEMENT will be leveraged for this POC.

8.17 The warranties set forth in Article 11 of the AGREEMENT do not apply to Services performed under the POC. For the avoidance of doubt, the Services provided hereunder shall

be performed on an 'as-is' basis and all warranties and representations, whether express or implied, by operation of law or otherwise are hereby excluded. CONTRACTOR disclaims any implied warranties or merchantability and fitness for a particular purpose.

8.18 SLAs in the AGREEMENT do not apply to Services performed under the POC.

8.19 Any and all documents provided by CONTRACTOR to Consortium pursuant to this POC do not require formal approval by the Consortium.

8.20 CONTRACTOR, CDTS, and AWS will provide a 'shared responsibility model' for security, which shall be described as follows:

8.20.1 AWS is responsible for protecting the physical infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

8.20.2 CDTS is responsible for secure Internet access. This security includes IDS/IPS, traffic analysis, and DDOS attack prevention.

8.20.3 Contractor will be responsible for security of the application stack and supporting guest operating system not covered by CDTS or AWS.

## **9. SPECIAL TERMS AND CONDITIONS**

**9.1.** For purposes of this POC, in the event of a conflict between the terms and conditions of this POC and the AGREEMENT, the terms and conditions of this POC shall supersede.

**9.2** Neither party will be liable for any delays or failures to perform due to causes beyond that party's reasonable control (including a force majeure event). Without limiting the foregoing, to the extent Consortium fails to perform one or more responsibilities described in this POC, CONTRACTOR shall be excused from failure to perform any affected obligations under this POC. Each party will notify the other party as promptly as practicable after such party becomes aware of the occurrence of any such condition. Consortium shall grant to CONTRACTOR such additional time as is reasonable to provide the Services and/or the relevant documents, as the case may be.