Oregon State Police

The Honorable Representative Nancy Nathanson, Co-Chair
The Honorable Senator Rachel Armitage, Co-Chair
Joint Legislative Committee on Information Management and Technology
900 Court Street NE
H-178 State Capitol
Salem, OR 97301

LEDS 20/20 Project

Report for JLCIMT

V1.0

May 6, 2022

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1 Project Information

Project Name: LEDS 20/20 Implementation Project (Formerly CRIMEvue Replacement Project)

Agency: Oregon State Police (OSP)

Project Sponsor: Public Safety Services Bureau Commander Rebecca David

Project Start Date: May 1, 2014

Project End Date: Q1 2025*

Project Manager and Business Analyst Contractor: Online Business Systems (OBS)

Solution Implementation Contractor: Diverse Computing Incorporated (DCI)

Independent Quality Assurance (QA) Contractor: Gartner

* Subject to change due to active re-baseline work being performed between OSP and the vendor

2 Project Status

Scope/Quality: Red Yellow Green

Project scope remains unchanged for Phases 1 through 5. The addition of Phase 6 (Sex Offender Registry (SOR) System Replacement) was approved by the Project Steering Committee and contract amendments were executed.

Schedule: Red Yellow Green

Phase/Event	Baseline	Act./F-Cast	Diff.
✓ 0.0 Closure	12/04/17	11/29/17	-5
✓ 1.0 Go-Live	01/18/18	01/18/18	0
✓ 1.1 Go-Live	04/27/18	06/12/18	+46
✓ 1.4 Go-Live	11/16/18	11/14/18	-2
✓ 1.8 Go-Live	01/17/19	01/20/19	+3
✓ 1.3 Go-Live	04/01/19	04/01/19	0
✓ 2.0 Go-Live	10/16/19	10/16/19	0
✓ 3.1 Go-Live	01/22/20	01/22/20	0
✓ 3.2 Go-Live	04/15/20	04/15/20	0
✓ 6.0 Closure	07/21/20	06/23/20	-28
✓ 4.0 Go-Live	06/08/21	06/08/21	+62
5.0 Go-Live		T.B.D.	
4.1GC Go-Live		T.B.D.	
4.1RB Go-Live		T.B.D.	
6.1 Go-Live		T.B.D.	

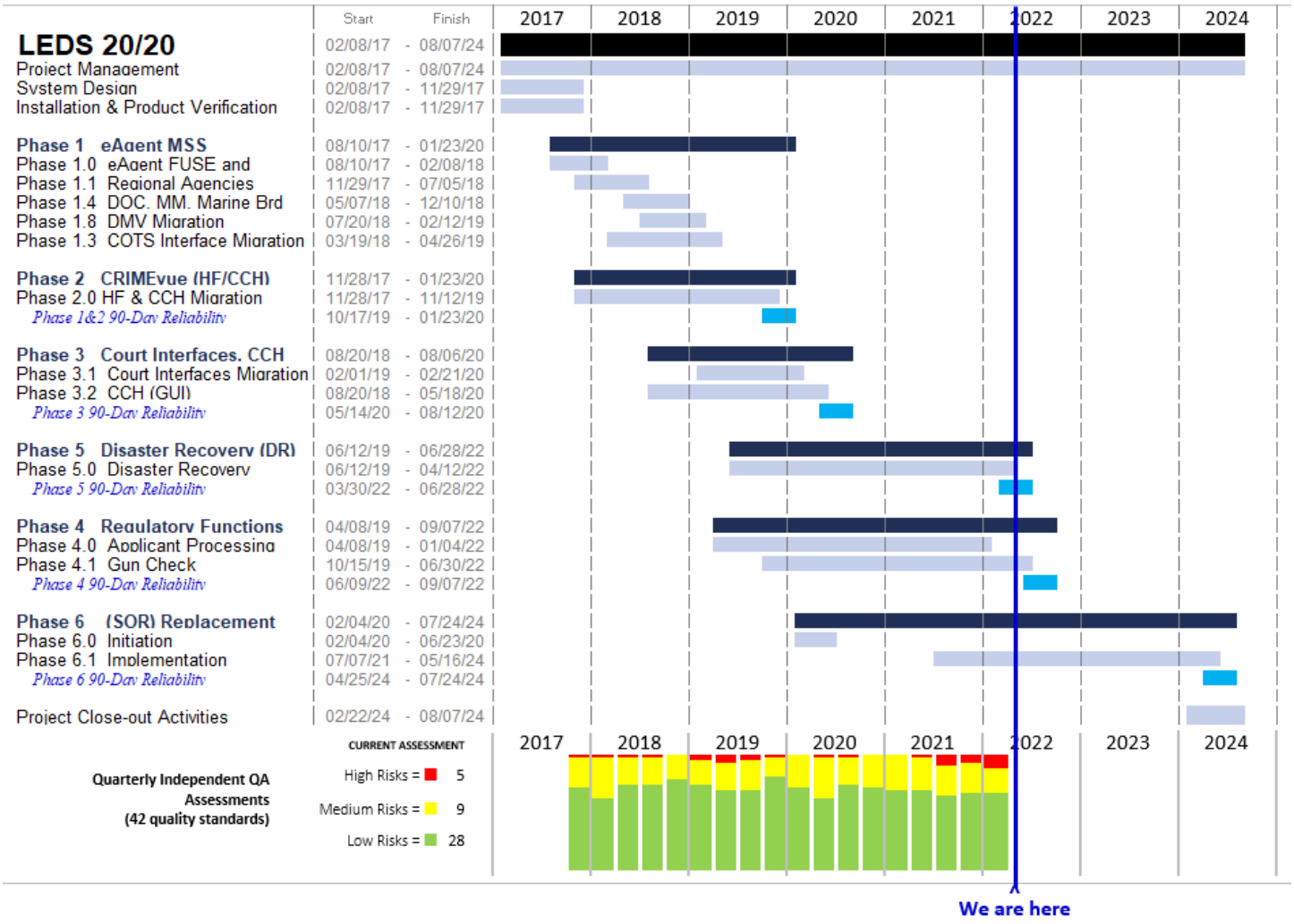
Budget: Red Yellow Green

In Feb, 2021, the Project Steering Committee approved schedule and budget updates to reflect (i) changes from the software vendor (DCI) to extend Phases 2.0, 4.0 and 4.1 to accommodate re-estimated work and (ii) the addition of Phase 6.

Project Performance: The project performance indicators for (i) Scope/Quality, (ii) Schedule and (iii) Budget are tracked and reported using a Red, Yellow, or Green indicator.

*T.B.D. listed for phase 5.0, 4.1 and 6.1 due to re-baseline work being completed currently with the vendor.

3 High Level Project Schedule



*Dates will readjust as we are currently working with the vendor to re-baseline the project.

4 Background

The previous system known as the CRIMEvue system which contained (i) Hot Files (HF), (ii) Computerized Criminal History (CCH) and (iii) the Law Enforcement Message Switch (LEMS) was a mission critical system that operated 24 hours a day, seven days a week, 365 days a year, to help ensure public safety under the stewardship of Oregon State Police (OSP). The system was also known as the Law Enforcement Data System (LEDS). Every day, the system:

- Helped Law Enforcement to (i) take dangerous people off the streets and (ii) protect victims through restraining orders
- Aided prosecutors in the preparation of criminal cases
- Guided courts in the research of criminal history to arrive at appropriate sentencing outcomes
- Facilitated the recovery of missing persons
- Helped prevent unlawful firearm sales
- Helped in the protection of vulnerable persons
- Tied the criminal justice system together through the exchange of data

The CRIMEvue System supported every law enforcement and criminal justice agency in the state and nationally. Additionally, a growing number of non-law enforcement agencies and organizations with the need to ensure vulnerable citizens are not being placed in harm's way, were receiving information from the CRIMEvue System.

The CRIMEvue database was purchased in the 1990's and was last upgraded in 2006. It is now past its technology end-of-life and is no longer supported by the vendor (SAIC). Because the platform is past its end-of-life and is no longer supported, it is at risk of catastrophic failure. Furthermore, the CRIMEvue database did not meet industry standards for reliability or sustained operations.

If the CRIMEvue database failed, OSP would have been unable to provide service to customer agencies and access to the data repository. The inability to provide services and access to data would reduce the safety of the public and place Oregon in a position of vulnerability. Examples of the potential impact to public safety include:

- The inability of a police officer to determine if a vehicle is stolen, a driver is wanted, or an individual is dangerous during a traffic stop
- The inability to determine if a firearm is being transferred to a prohibited person
- The inability to prevent potentially dangerous people from interacting with the vulnerable population
- Protection orders becoming ineffective (since law enforcement agencies cannot access the database)
- The inability of government agencies to make appropriate hiring or licensing decisions for sensitive positions
- The inability to return stolen property to the rightful owner

The skills required for programming and maintaining CRIMEvue are no longer common or taught in higher learning institutions. Consequently, maintaining staff with these skill sets had become increasingly difficult and expensive.

Technologically and operationally, CRIMEvue needed to be replaced by a modern and open architecture-based system that allows OSP to (i) maintain services without interruption and (ii) meet stakeholder and partner demand for new criminal justice tools as they emerge in the law enforcement industry.

5 Project Purpose and New System Benefits

5.1 Project Purpose

The project was initiated to replace the old CRIMEvue system and was originally called the CRIMEvue Replacement Project. The replacement system became known as LEDS 20/20 and the project was renamed The LEDS 20/20 Implementation Project. The goal of the LEDS 20/20 Implementation Project is to:

1. Eliminate the risks associated with existing aging technology that is subject to catastrophic failure
2. Implement technology improvements and replacement that allow OSP to (i) sustain existing law enforcement information services, (ii) continue to provide critical access to public safety data and (iii) enhance data delivery to local, state and national stakeholders
3. Minimize the impact of these improvements and replacements on daily law enforcement and business operations.

5.2 New System Benefits

Implementing the LEDS 20/20 system will eliminate the risks associated within the aging CRIMEvue system including the risk of catastrophic failure.

The LEDS 20/20 system will introduce a more modern and standardized environment. It will help to ensure continued operation, while leveraging resources and assets of newer hardware and software platforms. When the system is standardized, there will be ease of use across the nation as criminal justice agencies move in line with standardized rap sheets, information sharing and real time access.

Technology is ever changing and ever improving. The LEDS 20/20 system is being implemented in a way that will take advantage of these types of changes and will offer advantages in the areas of scalability and extensibility. This way, the new system will better serve current and future requirements of the criminal justice system, authorized regulatory agencies and the public.

The LEDS 20/20 system will include high availability features and a disaster recovery site which will allow the system to fail over in the event of an emergency or as needed for routine and non-routine system maintenance. Maintenance is a must for all technology systems, including LEDS 20/20. With high availability and disaster recovery implemented, the risk of this critical system being unavailable is greatly mitigated.

The LEDS 20/20 system is supported by the Department of Administrative Services (DAS) State Data Center Services (SDC) and Diverse Computing Incorporated (DCI) who are subject matter experts about the hardware and software that will comprise the LEDS 20/20 system. In moving to this model, the right people with the right skills, within their respective industry will be able to provide end users and the public with a system that is current in technology and supported. At the same time, it greatly reduces resource burdens on the OSP Information Technology (IT) and Business Divisions.

Improvements in technology allow for the opportunity to improve business processes. Throughout the implementation of the LEDS 20/20 project, OSP will capitalize on process improvements, removal of redundant processes and the opportunity to change business processes in a way that offers greater advantages. These may include reduced cost, increased productivity, reduced manual process and other identified efficiencies that will benefit the agency, partners, and customers.

5.3 Additional Modernization – Sex Offender Registry System

The Oregon Sex Offender Registry system (SOR) works along side the LEDS 20/20 system and interacts with much of the data that is contained within the LEDS 20/20 system. The SOR system was identified as an additional component to the LEDS 20/20 Implementation Project. The business analysis for this addition began in February 2020 and was completed within a few months. The duration of the LEDS 20/20 Implementation Project was extended by approximately 2 years.

This addition to the project will also expand the customer base and the services provided to the public safety community. The SOR addition has become known as Phase 6 of the LEDS 20/20 Implementation Project. Phase 6 will:

- Deliver a new SOR system that is integrated with other LEDS 20/20 components so that the efficiencies of good systems integration can be realized
- Deliver a new system that has the same look and feel as other LEDS 20/20 components so that there is a better overall user experience across systems and correlated training activities can be streamlined
- Leverage the existing LEDS 20/20 Implementation Project's project management framework, delivery methodology and overall approach
- Take advantage of the momentum that the LEDS 20/20 Implementation Project has established and eliminate delays and inefficiencies associated with starting a new and separate initiative

6 Major Accomplishments (January 2018 – April 2022)

- **Phase 1.0** - Installation of eAgent FUSE and eAgent 2.0 completed successfully with a deployment to production on the target date of January 18, 2018. Phase closure was approved on February 8, 2018, four days ahead of schedule.
  - Between January 1, 2021 and December 31, 2021, the eAgent Fuse (new message switch) has processed 237,129,910 messages, with an average monthly message total of 21,557,265.
- **Phase 1.1** - Regional Agencies Migration commenced in November of 2017 and a two-week Pilot at Lebanon PD completed on May 25, 2018. Phase 1.1 Go-live completed on June 12, 2018 (as per DCI's WBS 2.4 project schedule). Regional agencies were migrated to the new message switch (FUSE) (as per DCI's WBS 2.4 project schedule).
- **Phase 1.4** - DOC, Medical Marijuana and Marine Board Migration connections were deployed successfully to production on November 14, 2018 (2 days early). Phase closure was approved on November 10, 2018 (8 days early).
- **Phase 1.8** – DMV Interface Migration. This phase included effective collaboration between OSP and DMV and the successful implementation of a new systems interface between a new system at OSP (FUSE switch) and a new system at DMV (OLIVR). Phase closure was approved on February 12, 2019 (7 days later than planned).
- **Phase 1.3** - COTS Interface Migration. Successfully deployed to production on time (4/1/19) with the following caveats. Due to (i) the higher-than-expected number of bugs identified during UAT (and the time to fix and retest), and (ii) a desire to preserve the go-live target date, 70 of the originally targeted 163 message keys and 10 of the originally targeted 31 requirements were deferred to Phase 2.0.
- **Phase 2.0** - CRIMEvue (HF/CCH) Migration. Successfully deployed to production on time (10/16/19) as per the re-baselined schedule (10/8/19). This was a major project achievement with Phase 2.0 representing (i) a large portion of project scope and (ii) some of the most complex system functionality.
  - This successful deployment of Phase 2.0 it allowed for the decommissioning of the LEMS infrastructure and the CRIMEvue system as a whole. The new Record Manager system and Fuse message switch were launched in place of LEMS and CRIMEvue as part of the LEDS 20/20 system.
- **Phase 3.1** – Court Interfaces Migration. Successfully deployed to production on time (01/22/20) as per the re-baselined schedule (10/8/19).
  - With Phase 3.1 going live agencies were able to start accessing the LEDS 20/20 application (e-Agent) - a free, zero-footprint, full LEDS/NCIC access application developed by Diverse Computing, Inc. (DCI) and tailored specifically for Oregon LEDS Users as a part of the LEDS 20/20 Project.
  - OSP commenced roll out of the eAgent web application during the first quarter of 2020, with the intended recipients being OSP field locations and select agency partners. The goal is to roll the application out in a controlled fashion so that resource allocation and change management principles

can be closely adhered to throughout the rollout process. OSP is very proactive in promoting the use of eAgent moving forward since it represents a distinct value add to agency partners.

- To help make agencies aware of and promote this new resource, Oregon State Police conducts a live webinar demonstration of the application the first Tuesday of every month. On average we there are 15 agencies represented during each monthly session. Since go-live over 175 agencies have successfully implemented the application. This represents over 6,300 individual LEDS users (43% of all authorized Oregon LEDS users) taking advantage of this new tool.

- For reference LEDS 20/20 customers include:

  Over 700 Oregon local, state and federal criminal justice agencies

  Over 45,000 additional law enforcement and criminal justice agencies nationwide through Oregon's participation in national information sharing programs (in support of their duties for the apprehension, identification, sentencing and tracking of criminal offenders)

  Over 130 Non-Criminal Justice Agencies authorized to conduct regulatory and applicant criminal background checks

  International partners with access to LEDS through the International Justice and Public Safety Network (Nlets)

  Approximately 1,200 federally licensed firearm dealers to conduct criminal background checks for firearm purchases or transfers

  Approximately 3.9 million Oregon citizens who may request information maintained in the repository on themselves or others (as the law allows)

- **Phase 3.2** – The Computerized Criminal History (CCH) Graphical User Interface (GUI) was successfully deployed to production on April 15, 2020. This phase of the project replaced aging internal systems used by OSP employees with our CCH unit and elsewhere to add, update or delete information related to offenses, arrests, dispositions, flags, and other appropriate items within LEDS 20/20 system.
- **Phase 4.0** – The Applicant Processing GUI was successfully deployed to production on June 8, 2021. This phase of the project replaced aging internal systems used by OSP employees within our Automated Biometrics Identification System (ABIS) and elsewhere to process fingerprint cards for both criminal and regulatory functions.

7 Upcoming Key Milestones (January 2022 – December 2022)

The following represent upcoming Key Milestones for the LEDS 20/20 Project for January 2022-December 2022:

Phase	ID	Milestone Name	Current Start	Current Finish
4.0	1178	Approval of Phase 4.0 Closure (Excluding Reliability Period)	4/8/2019	Q2 2022
5.0	230	Approval of Phase 5.0 Go-Live (Steering Committee)	2/9/2022	**Q3 2022
5.0	1180	Approval of Phase 5.0 Closure (Excluding Reliability Period) (DEL-IMP38)	3/30/2022	**Q4 2022
**4.1*	213	Phase 4.1 Gun Check User Acceptance Testing	08/2/2022	**Q4 2022

*Phase numbers are out of sequence for two reasons. 1) Based on the reshuffling of work and the re-baseline of the project schedule in 2019, some phases originally scheduled to finish prior to other phases are now scheduled to finish later (i.e., Phase 4.1 is now finishing after Phase 5.0). 2) During the first three quarters of 2019, there are multiple phases being worked on concurrently. The re-baseline and reshuffling of phases did not have an impact on the overall project timeline.

** T.B.D. listed for phase 5.0, 4.1 and 6.1 due to re-baseline work being completed currently with the vendor.

8 Independent Quality Assurance (QA) (April 2022)

In October 2017, in conjunction with Department of Administrative Services Quality Assurance (DAS-QA), OSP entered into an Independent Quality Assurance contract with Gartner. The information contained in this section of the report is the executive summary from the 2022 first quarter Independent QA report produced by Gartner.

Executive Summary - *Quarterly QA Report #17 of OSP LEDS 20/20 Project (April 2022)*

The LEDS 20/20 project is operating at a MEDIUM-LOW level of risk with five high risk indicators in specific areas.

Positive Indicators

- *Project Progress has continued despite the lack of a baseline project schedule. Project leadership has not let the schedule challenge paralyze ongoing work and accomplishments.*
- *The Project Management Team is staffed with appropriate skills and experience.*
- *Project Leadership worked through some process challenges (e.g., product change management, which resulted in this area moving from High Risk to Medium Risk) and continued to maintain a positive working relationship DCI through some difficult discussions.*

Key Risk Areas Requiring Attention:

Key Risk Areas Requiring Attention

- *Lack of an approved project schedule. The project has been operating with an Integrated Project Plan (project schedule) that has not been in compliance with its approved baseline since early 2021. It is critical that a project schedule be baselined by the end of May so that the project has defined milestones towards which to manage. It is likely that the overall timeline will move past the current project completion date.*
- *Resource Utilization Plan should be provided with the schedule update. Gartner is concerned that DCI is under-resourced for tasks 4.1 and 5.0 and recommends that OSP ask DCI for an updated, detailed RUP when the schedule updates are provided.*
- *DCI's testing methodology needs attention. DCI's SAT Testing Plan and SAT Results documentation were deficient in several areas for Phase 5.0 (Disaster Recovery). Specific details can be found in Gartner's QC review of this documentation. DCI needs to address these areas in Phases 4.1 and 6.1.*

9 LEDS 20/20 Project Risks-Register/Issues-Log (Summary)

	Open	Parked	Closed
Issues:	3	1	43
Risks	2	12	146

Open items in general order of importance

180	Open Issue	Quality: DCI Resources over-stretched	[Jamie Blakley]
198	Open Issue	Schedule Delay – Phase 4.1 Velocity/Plan doesn't support target go-live date	[Jeff Moore]
194	Open Risk	Disagreement on When Change Management Process Should be Used	[Jeff Moore]
176	Open Issue	Schedule Delay – Demands of 4 Concurrent Workstreams (3 Phases, Phase 6.1 Planning)	[Neville Wallace]
207	Open Risk	Schedule/Quality while replacement BOG resources are acquired and brought up to speed	[Wendy Landers]

10 Budget

The project budget is being tracked to the February 2021 approved schedule and budget updates. With the additional scope of adding the Sex Offender Registry system modernization, the agency was able to apply for two grants related to that phase. The agency applied for the Federal NICS Act Record Improvement Program (NARIP) and the Federal Adam Walsh Act Implementation grants. The agency did not receive an award for the NARIP grant but did receive $392,083.00 from the Adam Walsh grant. In addition, during the 2021 Legislative session, the agency received $2,789,991.00 in general fund to help pay for the project. The project funding overview is on the next page.

LEDS 2020 (formerly CRIMEvue)
Project Funding Implementation Overview

Line		Updated Project Budget (February 2021)	Expenses through 3/31/22 Project Expenses May 2014 through March 31, 2022	Balance Remaining on Revised Project Budget
1	**PROJECT COSTS - DIRECT DCI**			
2	Hardware			0
3	Software	1,966,260	547,665	1,418,595
4	Implementation - Professional Services	7,450,308	4,618,506	2,831,802
5	Other/Contingency	1,284,428		1,284,428
6	Quality Assurance			0
7	Sub Total	10,700,996	5,166,171	5,534,825
8	**OTHER - INDIRECT**			
9	Personal Services	1,505,527	1,151,666	353,861
10	Project PM, BA & QA - OBS	7,097,807	4,962,003	2,135,803
11	OBS Phase 6 Initiation			0
12	External QA Maximus	91,000	91,000	0
13	External QA Gartner	1,163,642	625,690	537,952
14	Professional Services MTG + U Work (Covendis)	70,713	74,200	(3,487)
15	DAS Procurement Services costs	203,273	167,682	35,591
16	DOJ costs	89,028	88,418	610
17	Other Misc (CDWG, Dell, Travel, Training, Office Supplies, SPOTS card, Smartsheet, etc.)	37,419	28,494	8,925
18	DAS ETS charges	1,964,159	1,289,656	674,503
19	Disaster Recovery (NLETS)	802,596	503,221	299,375
20	Sub Total	13,025,164	8,982,031	4,043,133
			-	
21	**TOTAL DIRECT & INDIRECT PROJECT BUDGET**	**23,726,159**	**14,148,202**	**9,577,958**

Funding Overview by PCA Biennium Expenditures	Expenses through 3/31/22					
LEDS 20/20 Implementation	2013-15	2015-17	2017-19	2019-21	2021-23	Total Project Cost
49002 CRIMEvue-OF	192,493	1,422,748	2,735,743	5,238,304	721,201	10,310,488
49009 LEDS 2020-GF				50,514		50,514
49063 NCHIP FFY16-FF		162,796	2,601,910			2,764,706
49064 NCHIP FFY16-OF Match		292,976	21,874			314,850
49102 LEDS 2020 Maint-OF				323,454	384,189	707,643
Grand Total Build Cost	**192,493**	**1,878,520**	**5,359,527**	**5,612,273**	**1,105,390**	**14,148,202**
						-

11 Budget Request (2022 Legislative Session)

OSP did not request additional funding or expenditure authority during the 2022 Legislative Session.

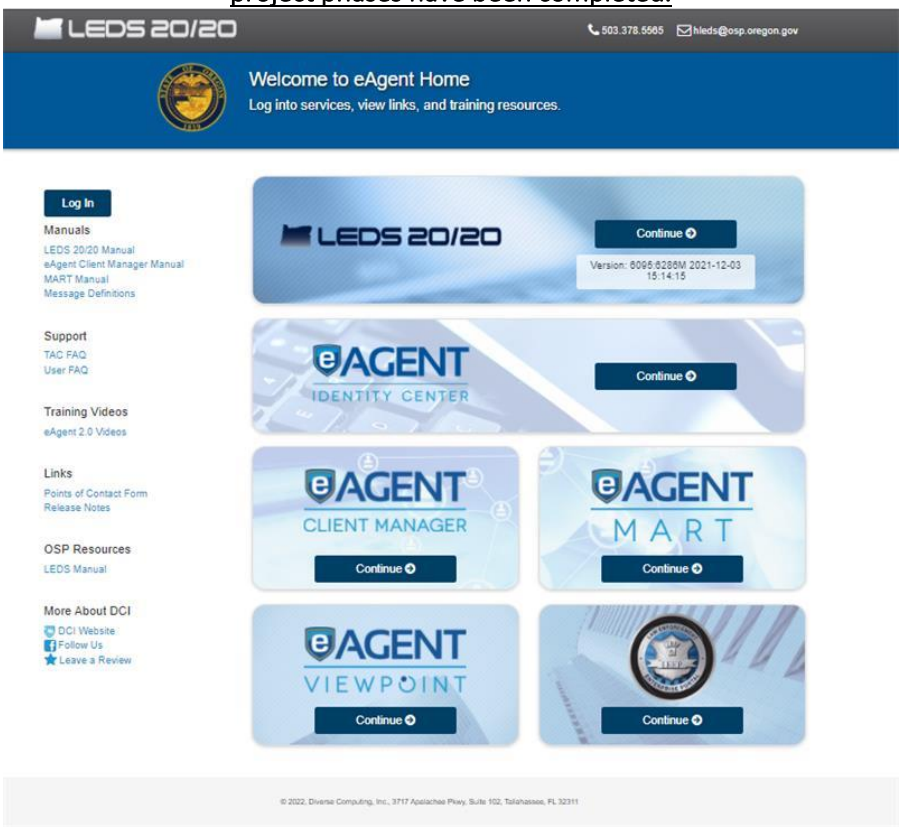
12 Change Log (Summary)

- The addition of Phase 6 SOR systems modernization
  - Phase 6 normalizes information system resources for OSP CJIS and aligned systems.
  - The addition of Phase 6 reduces the time needed to train OSP staff on the systems it will impact.
  - The uniformity between aligned systems will allow for ease and speed of transfer between business units OSP.
  - Phase 6 will modernize the SOR system and significantly streamline the business processes in the unit.
  - Implementing Phase 6 will reduce the number of vendors in the OSP environment.
  - The Project Steering Committee approved the schedule and budget changes needed for phase 6 and some re-estimated work efforts on phases 2.0, 4.0, and 4.1.
- A revised project baseline is currently being worked between OSP and the vendor.

13 LEDS 20/20 Screen Shot Examples

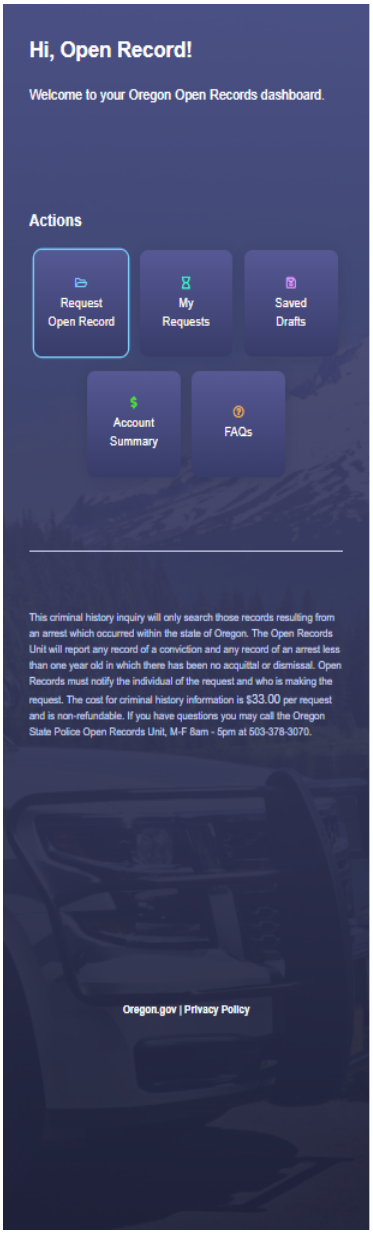
The following screen shots demonstrate portions of the system that have gone into production since the last report.

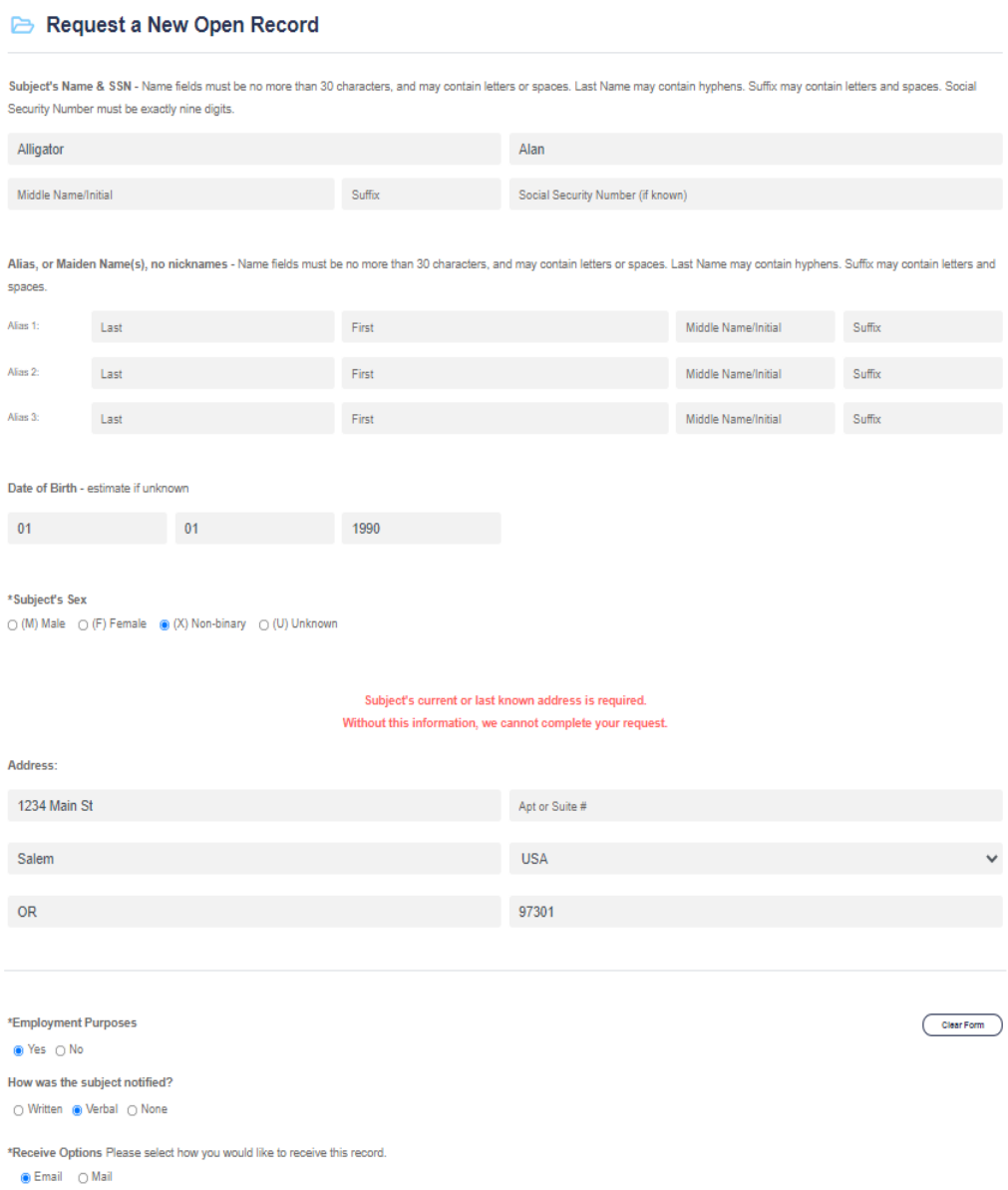
Login Screen for Criminal Justice and Law Enforcement Users – updated to show the expanded menu options as more project phases have been completed.



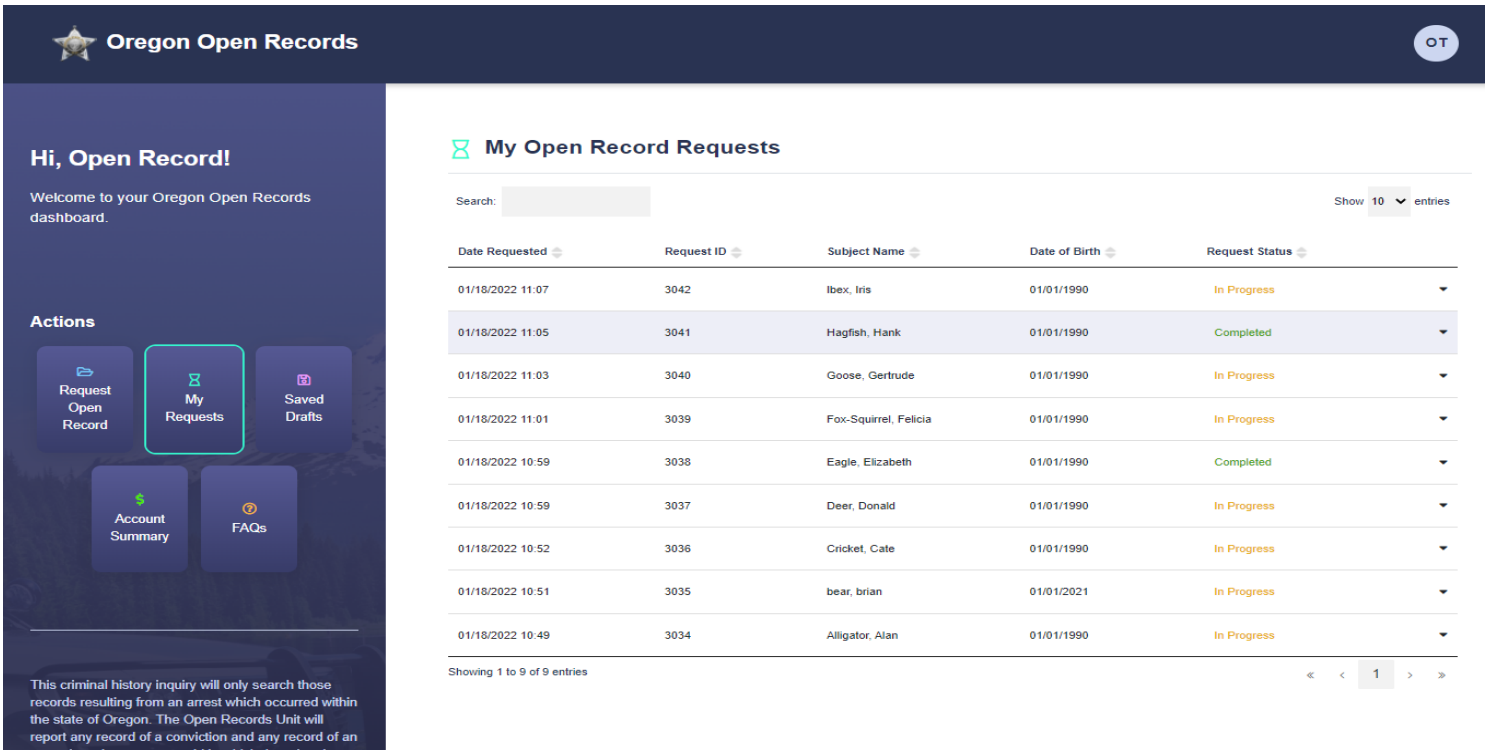
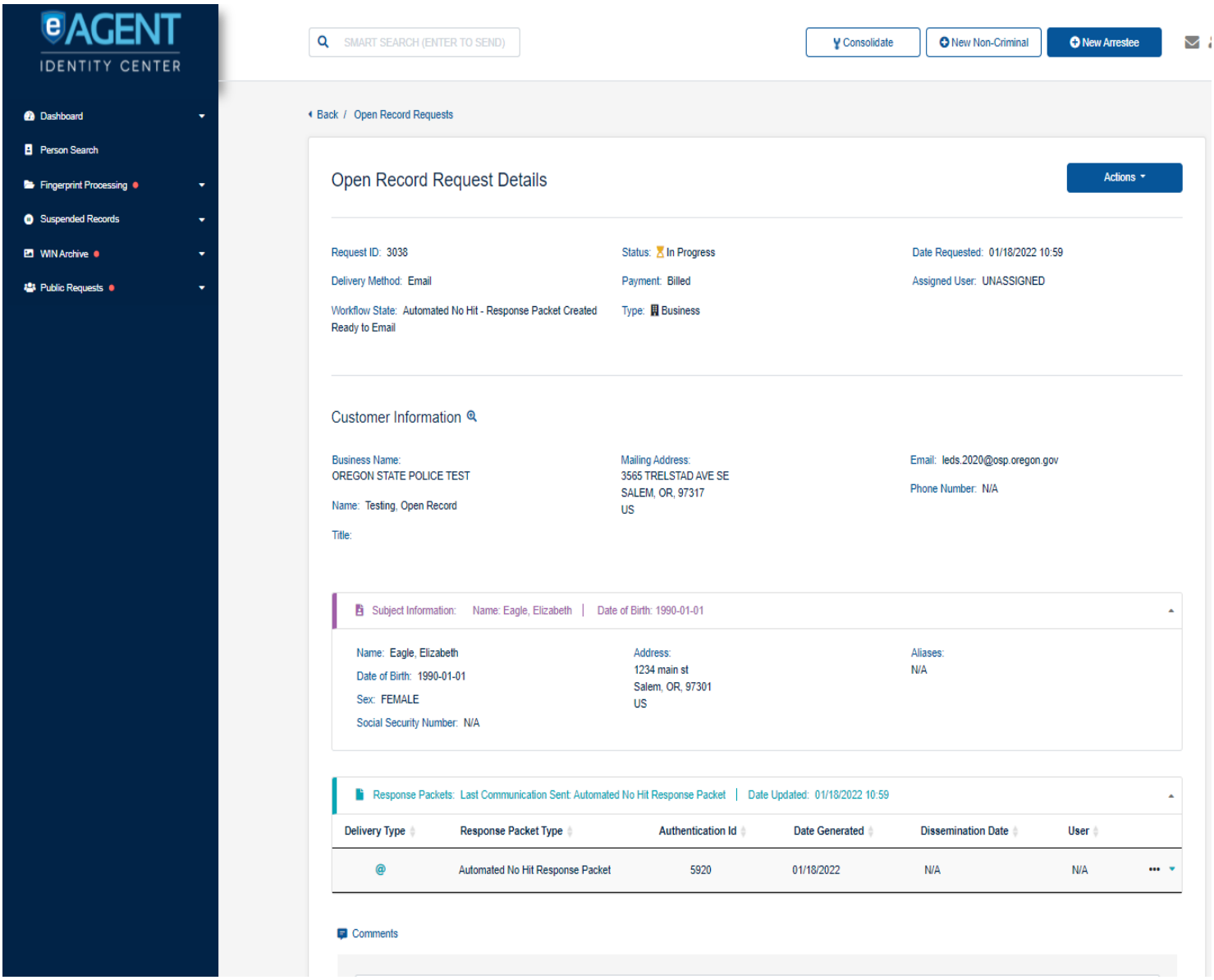
The remaining examples are from the recently closed Phase 4.0 and these represent the first of the OSP public access-related functions implemented to date within the overall project. These are examples of the screens that the public will interact with for various CJIS services.

Customer Request Form for a copy of a record:





Customer view of their request(s):



What the record request looks like for OSP processing staff: