

**Schedule 13**

**Department of Human Services**

**Funding Request for The FY 2019-20 Budget Cycle**

Request Title

**R-21 Salesforce Shield**

Dept. Approval By: Melissa Woodlet  
 OSPB Approval By: [Signature]

Supplemental FY 2018-19 \_\_\_\_\_  
 Budget Amendment FY 2019-20 \_\_\_\_\_  
 Change Request FY 2019-20 X

Summary Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$80,450,099	\$0	\$91,537,778	\$473,418	\$484,448
	FTE	0.0	0.0	0.0	0.0	0.0
Total of All Line Items Impacted by Change Request	GF	\$15,822,062	\$0	\$19,052,858	\$29,218	\$29,898
	CF	\$8,816,507	\$0	\$9,460,660	\$39,827	\$40,754
	RF	\$27,118,034	\$0	\$31,702,907	\$283,819	\$290,431
	FF	\$28,893,496	\$0	\$31,321,353	\$120,554	\$123,383

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$310,811	\$0	\$380,252	\$3,084	\$3,156
	FTE	0.0	0.0	0.0	0.0	0.0
01. Executive Director's Office, (C) Indirect Costs, (1) Indirect Cost - Indirect Cost Assessment	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$191,908	\$0	\$245,316	\$2,520	\$2,578
	RF	\$118,903	\$0	\$133,403	\$488	\$500
	FF	\$0	\$0	\$1,533	\$76	\$78

	Total	\$29,294,897	\$0	\$35,277,852	\$251,318	\$257,172
	FTE	0.0	0.0	0.0	0.0	0.0
02. Office of Information Technology Services, (A) Information Technology, (1) Information Technology - Payments to OIT	GF	\$15,822,062	\$0	\$19,052,858	\$29,218	\$29,898
	CF	\$0	\$0	\$0	\$0	\$0
	RF	\$13,472,835	\$0	\$16,224,994	\$222,100	\$227,274
	FF	\$0	\$0	\$0	\$0	\$0

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	<b>Total</b>	<b>\$277,396</b>	<b>\$0</b>	<b>\$298,870</b>	<b>\$971</b>	<b>\$994</b>
03. Office of Operations, (C) Indirect Cost Assessment, (1) Indirect Cost	FTE	0.0	0.0	0.0	0.0	0.0
Assessment - Indirect Cost Assessments	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$273,403	\$0	\$291,769	\$866	\$887
	RF	\$3,993	\$0	\$7,101	\$105	\$107
	FF	\$0	\$0	\$0	\$0	\$0
	<b>Total</b>	<b>\$10,745,176</b>	<b>\$0</b>	<b>\$11,516,603</b>	<b>\$43,086</b>	<b>\$44,090</b>
05. Division of Child Welfare, (A) Division of Child Welfare, (1) Division of Child Welfare - Indirect Cost Assessment	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$87,098	\$0	\$119,446	\$1,526	\$1,562
	RF	\$27,755	\$0	\$34,287	\$220	\$225
	FF	\$10,630,323	\$0	\$11,462,870	\$41,340	\$42,303
	<b>Total</b>	<b>\$3,182,251</b>	<b>\$0</b>	<b>\$3,449,927</b>	<b>\$13,264</b>	<b>\$13,573</b>
06. Division of Early Childhood, (C) Indirect Cost Assessment, (1) Indirect Cost Assessment - Indirect Cost Assessment	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$126,353	\$0	\$137,557	\$529	\$541
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$3,055,898	\$0	\$3,312,370	\$12,735	\$13,032
	<b>Total</b>	<b>\$16,421,036</b>	<b>\$0</b>	<b>\$17,946,833</b>	<b>\$70,905</b>	<b>\$72,557</b>
07. Office of Self Sufficiency, (F) Indirect Cost Assessment, (1) Indirect Cost Assessment - Indirect Cost Assessment	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$66,153	\$0	\$75,029	\$419	\$428
	RF	\$2,328,738	\$0	\$2,631,392	\$10,192	\$10,430
	FF	\$14,026,145	\$0	\$15,240,412	\$60,294	\$61,699
	<b>Total</b>	<b>\$6,966,774</b>	<b>\$0</b>	<b>\$7,851,004</b>	<b>\$37,085</b>	<b>\$37,948</b>
08. Behavioral Health Services, (F) Indirect Cost Assessment, (1) Indirect Cost Assessment - Indirect Cost Assessment	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$5,604,540	\$0	\$6,014,441	\$19,339	\$19,789
	RF	\$335,818	\$0	\$699,321	\$12,243	\$12,528
	FF	\$1,026,416	\$0	\$1,137,242	\$5,503	\$5,631

Line Item Information	Fund	FY 2018-19		FY 2019-20		FY 2020-21
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	<b>Total</b>	<b>\$12,940,955</b>	<b>\$0</b>	<b>\$14,384,513</b>	<b>\$52,680</b>	<b>\$53,907</b>
09. Services for People with Disabilities, (E)	FTE	0.0	0.0	0.0	0.0	0.0
Indirect Cost	GF	\$0	\$0	\$0	\$0	\$0
Assessment, (1) Indirect Cost Assessment -	CF	\$2,097,881	\$0	\$2,398,482	\$14,182	\$14,513
Indirect Cost	RF	\$10,829,992	\$0	\$11,972,409	\$38,471	\$39,367
Assessment	FF	\$13,082	\$0	\$13,622	\$27	\$27
	<b>Total</b>	<b>\$291,520</b>	<b>\$0</b>	<b>\$303,194</b>	<b>\$579</b>	<b>\$593</b>
10. Adult Assistance Programs, (F) Indirect Cost Assessment, (1) Indirect Cost	FTE	0.0	0.0	0.0	0.0	0.0
Assessment - Indirect Cost Assessment	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$149,888	\$0	\$149,890	\$0	\$0
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$141,632	\$0	\$153,304	\$579	\$593
	<b>Total</b>	<b>\$19,283</b>	<b>\$0</b>	<b>\$28,730</b>	<b>\$446</b>	<b>\$456</b>
11. Division of Youth Services, (D) Indirect Costs, (1) Indirect Costs - Indirect Costs	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$19,283	\$0	\$28,730	\$446	\$456
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0

Auxiliary Data			
Requires Legislation?	NO		
Type of Request?	Department of Human Services Prioritized Request	Interagency Approval or Related Schedule 13s:	Requires OIT Approval

*This page is intentionally left blank.*



### ***Cost and FTE***

- The Department requests \$473,418 total funds, including \$29,218 General Fund, \$39,827 cash funds, \$283,819 reappropriated funds and \$120,554 federal funds in FY 2019-20 and \$484,446 total funds, including \$29,898 General Fund, \$40,754 cash funds, \$290,431 reappropriated funds and \$123,363 federal funds in FY 2020-21 and beyond with an ongoing increase of 2.33 percent each fiscal year in order to support the secure encryption of client identifiable information stored on the Salesforce cloud.
- Of this amount, \$222,100 reappropriated funds in FY 2019-20 and \$227,274 reappropriated funds in FY 2020-21 is part of the Department's indirect cost plan.

### ***Current Program***

- The Department currently has Salesforce supporting 17 different applications, the majority of which contain client information.

### ***Problem or Opportunity***

- The Governor's Office of Information Technology (OIT) data security standards and industry best practice require encryption of client information in vendor-hosted systems.
- The Department's Salesforce Applications do not currently encrypt stored client data (i.e., data-at-rest) consistent with OIT standards and industry best practice. Data encryption is an addressable technical safeguard under HIPAA (45 CFR 164.312) and is a feature available within Salesforce.

### ***Consequences of Problem***

- Since Department applications hosted on the Salesforce cloud do not align with OIT and Health Insurance Portability and Accountability Act (HIPAA) encryption-at-rest security requirements, there is a risk for client information breach. If the data is accessed inappropriately by an unauthorized party, this is considered a breach under HIPAA, and the Department could be subject to financial penalties starting at \$100 up to \$10,000 per violation, including corrective action (45 CFR 160.404). However, if the data has been encrypted, this would not be considered a breach, and the Department would not be subject to financial penalties.
- Currently, existing data security does not meet the HIPAA standard to use reasonable and appropriate administrative, technical, and physical safeguards for protecting information.

### ***Proposed Solution***

- The Department requests \$473,418 total funds, including \$29,218 General Fund, \$39,827 cash funds, \$283,819 reappropriated funds and \$120,554 federal funds in FY 2019-20 for licensing an additional secure encryption of client identifiable information stored on the Salesforce cloud.

*This page is intentionally left blank.*



**COLORADO**  
 Department of Human Services

*John W. Hickenlooper*  
 Governor

*Reggie Bicha*  
 Executive Director

FY 2019-20 Funding Request | November 1, 2018

**Department Priority:** R-21  
**Request Detail:** Salesforce Shield

Summary of Incremental Funding Change for FY 2019-20	Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds
Salesforce Shield	\$473,418	\$29,218	\$39,827	\$283,819	\$120,554
Summary of Incremental Funding Change for FY 2020-21	Total Funds	General Fund	Cash Funds	Reappropriated Funds	Federal Funds
Salesforce Shield	\$484,446	\$29,898	\$40,754	\$290,431	\$123,363

**Problem or Opportunity:**

- The Department requests \$473,418 total funds, including \$29,218 General Fund, \$39,827 cash funds, \$283,819 reappropriated funds and \$120,554 federal funds in FY 2019-20 and \$484,446 total funds, including \$29,898 General Fund, \$40,754 cash funds, \$290,431 reappropriated funds and \$123,363 federal funds in FY 2020-21 and beyond with an ongoing increase of 2.33 percent each fiscal year in order to support the secure encryption of client identifiable information stored on the Salesforce cloud.
  - A recent clarification from the U.S. Department of Human Services, Office of Civil Rights (OCR), the federal agency responsible for enforcing compliance with the Health Insurance Portability and Accountability Act (HIPAA), confirms that client personally identifiable information (PII) held by an organization designated as a Covered Entity under HIPAA must be handled as electronic protected health information (ePHI). The Department is a designated Covered Entity.
  - The Governor’s Office of Information Technology (OIT) classifies PII and PHI as data requiring moderate security controls. These technical standards require encrypting data-at-rest if that data leaves a State-controlled area. CDHS hosts applications on the Salesforce cloud that are required to meet this standard, but currently cannot do so. Encryption-at-rest is included out-of-the-box for Salesforce-hosted solutions; however, OIT concluded that the encryption strength is too weak.

The problem does not impact workload or performance, but rather application data security. The problem was discovered after consulting with the CDHS HIPAA security and compliance officer as well as the Office of Information Security (OIS) within the Governor’s Office of Information Technology.

***Proposed Solution:***

The requested funding would be used to:

- Purchase Salesforce (Shield) security services. The license-based service delivers additional security configuration controls for solutions hosted on the Salesforce cloud that would bring these hosted solutions in alignment with the HIPAA Security Rule and OIT standard TS-CISO-001.
- The alternative is to re-platform all Salesforce-hosted applications onto custom-developed solutions hosted in State-controlled data centers. The short term and long term costs to implement such a solution are inappropriately high compared to the chosen solution of purchasing Salesforce “Shield” licenses.

***Anticipated Outcomes:***

CDHS is designated as a Covered Entity under HIPAA which means that all personally identifiable information (PII) is considered to be protected health information (PHI), even if a specific set of data doesn't contain what one might categorize as medical information. HIPAA considers the following information to be indicative of personally identifiable information: name, address (all geographic subdivisions smaller than state, including street address, city county, and zip code), all elements (except years) of dates related to an individual (including birth date, admission date, discharge date, date of death, and exact age if over 89), telephone number, fax number, email address, social security number, medical record number, health plan beneficiary number, account number, certificate or license number, vehicle identifiers and serial numbers, device identifiers and serial numbers, internet Uniform Resource Locator (URL), Internet Protocol (IP) address, finger or voice print, photographic image, or any other characteristic that could uniquely identify the individual.

HIPAA requires reasonable safeguards for data security and the OIT standard requires encrypting data-at-rest, particularly when data is not directly in the control of OIT data centers. The Department expects that the requested funding would bring the existing technology solutions that store and process client identifiable information into alignment with OIT encryption-at-rest standards and HIPAA reasonable safeguards. This anticipated outcome will be verified by a feature included in the Shield licensing cost that measures if encrypted fields are effectively protected.

***Assumptions and Calculations:***

Salesforce Shield is a license-based service that is a cost calculated by Salesforce applying a 30 percent premium to Salesforce user licenses. The applicable annual cost for CDHS Salesforce user licenses for

applications requiring encryption is expected to be \$837,728 in FY 2019-20, 30 percent of that total equates to a cost of \$251,318 to purchase Shield in FY 19-20. The Department anticipates a 7 percent year cost increase each time OIT renews the Salesforce Licensing Agreement, which historically has been for a 3-year term ( $7\% \div 3 \text{ years} = 2.33\%$  for projected annual inflation). There are no expected implementation costs for Shield as it is a configured solution and will be implemented with existing OIT resources.

<b>Table 1: Cost Breakdown of Salesforce Encryption</b>	
Applicable User License Base Cost	\$837,728
Shield premium of user license base	30%
<b>FY2019-20 Funding Request</b>	<b>\$251,318</b>
FY2020-21 Funding Request with 2.33% inflation	\$257,172

<b>Table 2: Cost Breakdown of Salesforce Encryption by Salesforce Organizational Unit</b>	
Division of Community and Family Support Early Childhood Mental Health, Early Intervention (EI) Colorado Program, SafeCare, Promoting Safe and Stable Families, Colorado Community Response	\$31,294
Office of Early Childhood (CHATS)	\$91,888
Division of Early Care and Learning, Colorado Shines (QRIS), Attendance Tracking, Background Investigation Unit	\$69,170
Division of Aging and Adult Services (CAPS)	\$26,086
Division of Employment and Benefits (ReHire)	\$12,408
Division of Refugee Services (CRSP) Low-Income Energy Assistance Program (LEAP)	\$20,472
<b>FY 2019-20 Funding Request</b>	<b>\$251,318</b>
FY 2020-21 Funding Request with 2.33% inflation	\$257,172

**Table 3: Cost Splits by Programs**

<b>Program</b>	<b>Licensing Cost FY19-20</b>	<b>With 2.33 % for inflation (growth and licensing cost increase)</b>	<b>Reappropriated Funds</b>	<b>General Funds</b>
Early Childhood Mental Health	\$4,732	\$4,842	\$2,421	\$2,421
Early Intervention (EI)	\$17,972	\$18,390	\$9,195	\$9,195
SafeCare	\$2,813	\$2,879	\$0	\$2,879
Promoting Safe and Stable Families	\$3,132	\$3,205	\$3,205	\$0
Colorado Community Response	\$2,644	\$2,706	\$0	\$2,706
<b>Office of Early Childhood, Division of Community and Family Support</b>	<b>\$31,293</b>	<b>\$32,022</b>	<b>\$14,821</b>	<b>\$17,201</b>
<b>Office of Early Childhood (CHATS)</b>	<b>\$91,888</b>	<b>\$94,029</b>	<b>\$94,029</b>	<b>\$0</b>
Colorado Shines (QRIS)	\$44,603	\$45,641	\$45,641	\$0
Attendance Tracking	\$9,065	\$9,275	\$9,275	\$0
Background Investigation Unit	\$15,503	\$15,865	\$15,865	\$0
<b>Office of Early Childhood, Division of Early Care and Learning</b>	<b>\$69,170</b>	<b>\$70,781</b>	<b>\$70,781</b>	<b>\$0</b>
<b>Division of Aging and Adult Services (CAPS)</b>	<b>\$26,086</b>	<b>\$26,694</b>	<b>\$26,694</b>	<b>\$0</b>
	<b>\$12,408</b>	<b>\$12,697</b>	<b>\$0</b>	<b>\$12,697</b>
Colorado Refugee Services Program	\$13,043	\$13,347	\$13,347	\$0
Low-Income Energy Assistance	\$7,429	\$7,602	\$7,602	\$0
<b>Economic Security</b>	<b>\$20,472</b>	<b>\$20,949</b>	<b>\$20,949</b>	<b>\$0</b>
<b>TOTAL</b>	<b>\$251,318</b>	<b>\$257,172</b>	<b>\$224,274</b>	<b>\$29,898</b>