



IT Project Oversight

Audit Highlights

House Energy and Digital Infrastructure Committee Presentation

February 5, 2025

Audit Issued – May 2023

Six Projects

- SOS Business Portal
- CCB Applications
- DLL Licensing/Enforcement
- DCF CDDIS
- DVHA IPA
- DVHA ABD Self-Service



DOUGLAS R. HOFFER
Vermont State Auditor

Agency of Digital Services

Selected Information Technology
Projects Had Cost Increases, Schedule
Delays, and Poorly Defined Measures

OBJECTIVE #1

Determine whether and why costs and schedules for selected IT projects changed.

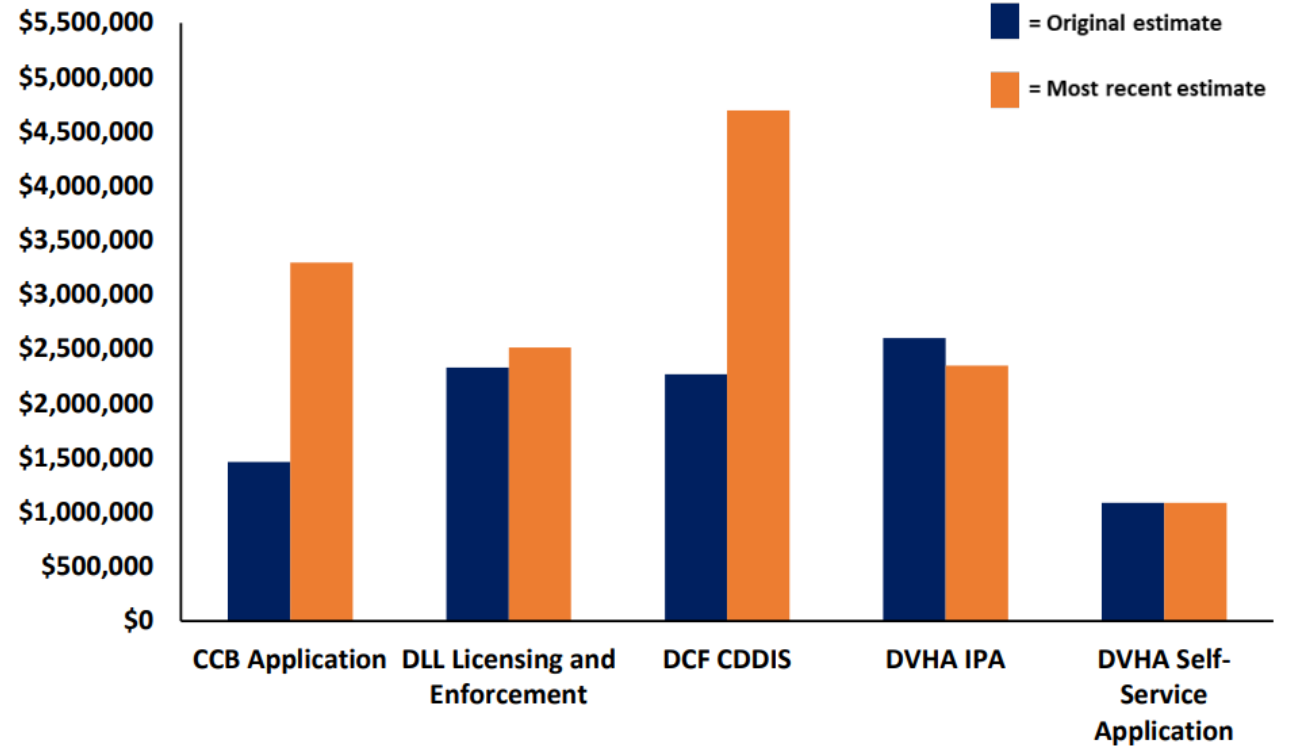
OBJECTIVE #2

Evaluate how the State measured, or planned to measure, whether the selected projects met their business goals.

Four of six projects audited exceeded original cost estimate.

Note: SOS Business Portal is not shown because of incomplete cost and schedule information.

Exhibit 1: Comparison of Original to Most Recent Estimate or Actual Implementation Costs for Five IT Projects

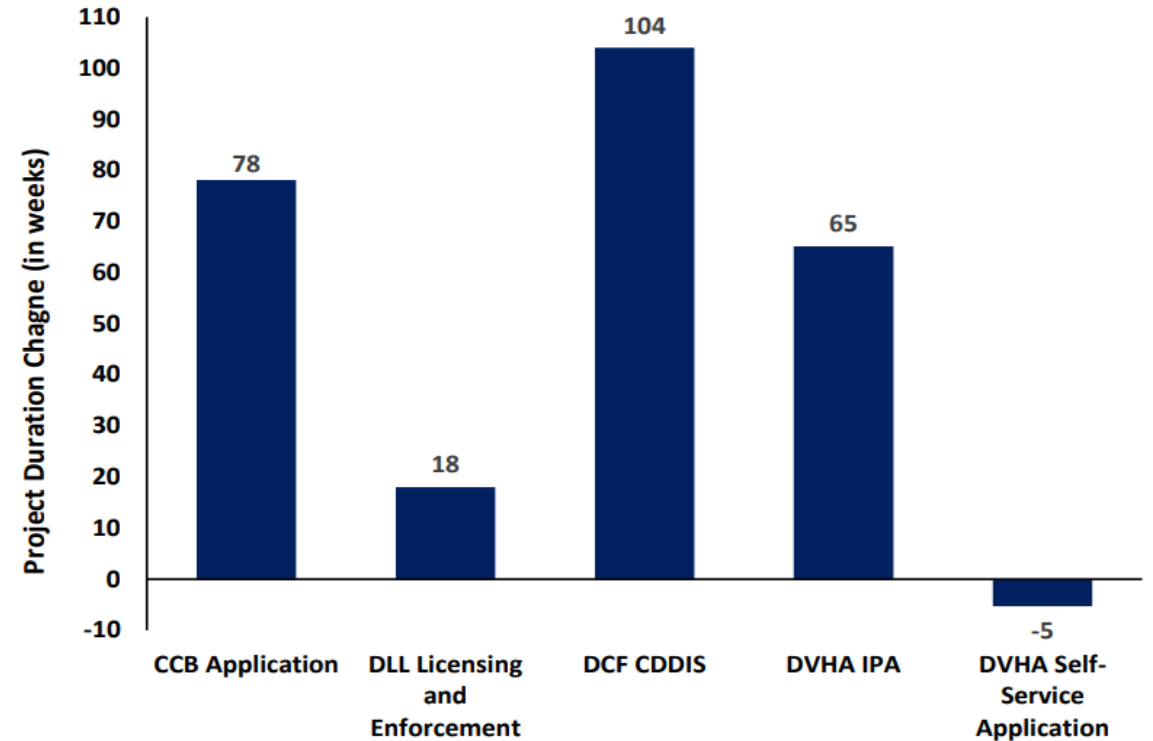


| | | | | | |
|---|--------------------|------------------|--------------------|-------------------|-----------------|
| Original Estimate ^{a, b} | \$1,463,335 | \$2,330,202 | \$2,270,477 | \$2,600,615 | \$1,088,822 |
| Most Recent Estimate/Actual ^{a, c} | \$3,297,097 | \$2,515,341 | \$4,695,874 | \$2,347,380 | \$1,086,756 |
| Amount of Change^d | \$1,833,762 | \$185,140 | \$2,425,397 | -\$253,235 | -\$2,066 |
| % Change | 125% | 8% | 107% | -10% | -0.2% |

Five of six projects audited exceeded original scheduled completion date.

Note: SOS Business Portal is not shown because of incomplete cost and schedule information.

Exhibit 4: Changes in Project Duration for Five IT Projects (in Weeks)



| | CCB Application | DLL Licensing and Enforcement | DCF CDDIS | DVHA IPA | DVHA Self-Service Application |
|--|-----------------|-------------------------------|-------------|------------|-------------------------------|
| Start Date | 11/15/2021 | 03/29/2021 | 07/01/2020 | 12/01/2020 | 03/15/2021 |
| Original Est. Completion Date ^a | 12/31/2022 | 04/22/2022 | 12/31/2021 | 06/30/2022 | 03/31/2022 |
| Most Recent Completion Date ^b | 06/30/2024 | 08/26/2022 | 12/31/2023 | 09/29/2023 | 02/22/2022 |
| Original Est. Duration (in weeks) | 59 | 56 | 78 | 82 | 54 |
| Current Est. Duration (in weeks) | 137 | 74 | 183 | 147 | 49 |
| Change (in weeks) ^c | 78 | 18 | 104 | 65 | -5 |
| Percent change | 133% | 32% | 133% | 79% | -10% |

Exhibit 7: Snapshot of ADS IT Project Dashboard Excerpt, April 24, 2023

| Agency | Name | Stage | Scope Complete | Timeline Elapsed | Budget Used | Est. Completion Date | Est. Implementation \$ | Budget | Resource | Risk | Schedule | Scope | Overall |
|-----------|---|------------|----------------|------------------|-------------|----------------------|------------------------|--------|----------|------|----------|-------|---------|
| ACCD | ACCD Grants Management Solution | Initiation | 5% | 48% | 1% | 1/1/2024 | \$1,725,000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AG | AGO Case Management System Project | Planning | 26% | 30% | 1% | 9/30/2024 | \$2,180,134 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AHS | AHS DCF CDD Integrated Information Sy... | Execution | 90% | 80% | 11% | 12/29/2023 | \$3,605,388 | ⚠ | ⚠ | ✗ | ⚠ | ⚠ | ⚠ |
| AOA | AOA BGS Workplace Information Manag... | Execution | 48% | 66% | 63% | 12/31/2024 | \$2,332,787 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AOA | AOA Enterprise Resource Planning (ERP)... | Planning | 11% | 38% | 1% | 9/30/2025 | \$11,005,691 | ⚠ | ⚠ | ⚠ | ⚠ | ✓ | ⚠ |
| AOE | AOE Dual Enrollment Voucher System | Planning | 25% | 76% | 14% | 9/29/2023 | \$450,210 | ✓ | ✓ | ⚠ | ⚠ | ✓ | ✓ |
| AOE | AOE Educator Licensing System (ELS) | Planning | 20% | 80% | 11% | 12/29/2023 | \$1,315,646 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AOE | AOE Vermont Adult Education and Liter... | Execution | 98% | 101% | 10% | 4/14/2023 | \$510,304 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AOT | AOT DMV Core Systems Replacement | Execution | 45% | 41% | 17% | 7/31/2025 | \$50,785,690 | ✓ | ✓ | ⚠ | ✓ | ✓ | ✓ |
| DPS | DPS Fire Safety Records Management Sy... | Planning | 20% | 85% | 7% | 7/1/2023 | \$1,047,096 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| NRB | NRB Act 250 Scanning Project | Planning | 12% | 44% | 5% | 12/31/2024 | \$500,000 | ✓ | ✓ | ⚠ | ✓ | ✓ | ⚠ |
| Def. Gen. | ODG Case Management System | Execution | 86% | 91% | 74% | 7/31/2023 | \$759,148 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SAS | SAS Case Management System (CMS) Pr... | Planning | 8% | 89% | 1% | 6/30/2023 | \$1,689,236 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VDOL | VDOL Unemployment Insurance Moder... | Planning | 25% | 50% | 4% | 6/30/2025 | \$3,500,000 | ✓ | ⚠ | ⚠ | ✓ | ✓ | ✓ |
| VDOL | VDOL Workforce Development CRM | Execution | 30% | 93% | 10% | 6/30/2023 | \$1,769,684 | ⚠ | ✓ | ✓ | ⚠ | ✓ | ⚠ |
| SOS | Vermont Business Portal | Execution | 75% | 79% | 91% | 12/30/2023 | \$2,556,530 | ⚠ | ✓ | ⚠ | ⚠ | ✓ | ⚠ |

EPMO Project Dashboard Then (Time of Audit) and Now (January 31, 2025)

| | | | | | | | | | | | | | | |
|------|-------|---|-----------|-----|-----|-----------|-------------|-------------|---|---|---|---|---|---|
| Then | SOS | Vermont Business Portal | Execution | 75% | 79% | 91% | 12/30/2023 | \$2,556,530 | ! | ✓ | ! | ! | ✓ | ! |
| Now | Other | SOS - Business Filing System | | NaN | 82% | 1/31/2025 | \$3,508,272 | ✓ | ✓ | ! | ✓ | ✓ | ✓ | ✓ |
| Then | VDOL | VDOL Workforce Development CRM | Execution | 30% | 93% | 10% | 6/30/2023 | \$1,769,684 | ! | ✓ | ✓ | ! | ✓ | ! |
| Now | VDOL | VDOL - Workforce Development CRM | | 90% | 15% | 6/30/2025 | \$1,464,388 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| Then | AOA | AOA BGS Workplace Information Manag... | Execution | 48% | 66% | 63% | 12/31/2024 | \$2,332,787 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Now | AOA | AOA - BGS - V2 Workplace Information System (WIMS) | | 80% | 68% | 4/30/2026 | \$2,781,671 | ✓ | ✓ | ! | ! | ✓ | ✓ | |
| | AOA | AOA - BGS - Workplace Information System (WIMS) | | 80% | 68% | 4/30/2026 | \$2,781,671 | ! | ! | ! | ! | ! | ! | |
| Then | AHS | AHS DCF CDD Integrated Information Sy... | Execution | 90% | 80% | 11% | 12/29/2023 | \$3,605,388 | ! | ! | ✗ | ! | ! | ! |
| Now | AHS | AHS DCF CDD Integrated Information System | | 97% | 86% | 3/18/2025 | \$5,459,295 | ! | ! | ! | ! | ! | ! | |
| | AHS | AHS DCF CDD IS Phase 2 | | 47% | 2% | 7/31/2026 | \$5,243,472 | ✓ | ! | ✓ | ! | ✓ | ✓ | |
| Then | AOE | AOE Educator Licensing System (ELS) | Planning | 20% | 80% | 11% | 12/29/2023 | \$1,315,646 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Now | AOE | AOE - Education Quality - Educator Licensing System (ELS) | | 87% | | 12/8/2025 | \$1,315,646 | ✓ | ! | ✓ | ! | ✓ | ✓ | |

Exhibit 8: Excerpts from the 2022 and 2023 Annual IT Activity Reports for the IPA Project

Annual Reports used color coding to suggest health of project but didn't paint the whole picture.

2022
Annual
IT
Activity
Report

| IT ACTIVITY ANNUAL SUMMARY REPORT | | | | | |
|-----------------------------------|-----------------------|--|-----------|-----------------------------|---------|
| Project | MMIS Interoperability | | | | |
| Agency | Human Services | Report Date | 12/1/2021 | | |
| Department | Vermont Health Access | | | | |
| Project Start Date | 1/1/2021 | Project End Date | 6/30/2022 | Solution Life Cycle (Years) | 5 |
| Current Project Phase | Exploring | Initiating | Planning | Executing | Closing |
| Project | Status | Update | | | |
| Schedule | Yellow | The approved project schedule does not meet the requested Centers for Medicare and Medicaid Services (CMS) date and several activities are very tight to the current schedule. | | | |

2023
Annual
IT
Activity
Report

| IT ACTIVITY ANNUAL SUMMARY REPORT | | | | | |
|-----------------------------------|-------------------------------------|---|------------|-----------------------------|---------|
| Project | AHS DVHA MMIS Interoperability | | | | |
| Agency | Agency of Human Services | Report Date | 12/12/2022 | | |
| Department | Department of Vermont Health Access | | | | |
| Project Start Date | 1/1/2021 | Project End Date | 12/29/2023 | Solution Life Cycle (Years) | 5 |
| Current Project Phase | Exploring | Initiating | Planning | Executing | Closing |
| Project | Status | Update | | | |
| Schedule | Green | Interoperability and Patient Access (IPA) Workstream: Initial Go-Live July 2022 and Clinical Data Go-Live remains on track for May 2023 MMA / Buy In File Workstream: April 2022 Closed | | | |

Exhibit 9: Snapshot of EPMO Performance Measure Results on the ADS Website, April 24, 2023

| | | | | |
|---|---|--|---|--|
| <h3>Project Management</h3> <p>Provides project management, oversight, and procurements services for Partner Agencies. Ensures IT projects are managed to accepted standards, proper stakeholder engagement, and success.</p> | <p>Projects in Progress</p> <p>95</p> <p>?</p> | <p>On-Target Projects</p> <p>69.5%</p> <p>?</p> | <p>New Initiative Projects</p> <p>85%</p> <p>?</p> | <p>Maintenance Projects</p> <p>15%</p> <p>?</p> |
|---|---|--|---|--|

“On-Target Projects” reflected revised cost and schedule estimates, so legislators and the public would not know if there were pervasive cost and schedule overruns.

Exhibit 10: Recommendations and Related Issues

| Recommendation | Report Pages | Issue |
|---|--------------|--|
| 1. Include client entity's staff costs in implementation estimates. | 5, 6 | The cost section of the ABC Form does not currently include the staff costs incurred by the client entities. The ABC Form states that business-related costs "are considered operation costs not specific to projects." However, the staff of the client entities serve as subject matter experts for the project and perform critical tasks, such as testing. Not including such costs in the ABC Forms understates the total project cost. |
| 2. Before approving IT projects, work with client entities to ensure that the project has performance measures that include baseline data, quantify results, and are relevant to the project. | 13-15 | Five of the six selected projects had measures to evaluate the success of the project that did not include a baseline, did not quantify results, or were not relevant to the project. |

| | | |
|--|--------------|--|
| <p>3. Include in EPMO's project dashboard on the ADS website and the annual report on the status of IT projects, baseline cost and schedule information. Also include in the annual report, the criteria of the color scale used.</p> | <p>16-18</p> | <p>The EPMO project dashboard on the ADS website and its annual IT activity report do not include baseline cost and schedule data. In addition, the annual report on the status of IT projects uses, but does not define, a red/yellow/green color scale to denote the status of project elements like schedule.</p> |
| <p>4. Develop a tracking mechanism on the extent to which IT projects met their original cost and schedule estimates for the division as a whole.</p> | <p>19-20</p> | <p>EPMO does not currently track the extent to which the division's IT projects meet their original cost or schedule estimates. Without such tracking, ADS lacks key mechanisms to establish transparency and accountability about the cost and schedule performance of its IT projects.</p> |
| <p>5. In conjunction with client entities, implement a process to obtain information on the extent to which IT projects achieved their business goals after completion once sufficient time has lapsed to allow for evaluation of a mature system (e.g., 6-12 months).</p> | <p>20-21</p> | <p>ADS does not have a mechanism in place to effectively collect information and report on the extent to which IT projects met their business goals. The EPMO project management process requires projects to complete a close-out report that contains an assessment of whether the project successfully achieved value for the business. However, the close-out reports are expected to be completed shortly after projects are deployed and do not always have data available about whether its business goals and measures were met.</p> |

| | | |
|---|-------|--|
| 6. Include on the ADS website and in the annual performance report, performance measures that show the extent to which projects (1) met their original cost and completion date estimates and (2) achieved their intended business goals. | 20-21 | ADS's programmatic performance measures for IT project management do not (1) include the extent to which IT projects met their original cost and schedule estimates (either before or after a contractor was selected) or (2) demonstrate the extent to which IT projects result in organizations or people that are better off. |
| 7. Develop procedures to ensure that contract deliverables are formally accepted before paying invoices. | 21 | Contracts for each of the six selected projects required the State to formally accept deliverables before paying invoices. In three projects some invoices were paid before the related deliverable was accepted or when acceptance of the deliverable was not documented. |

Exhibit 11: Matters for the Consideration of the Legislature

| Recommendation | Report Pages | Issue |
|--|--------------|--|
| 1. Consider modifying statute to require ADS to include client entity staff costs in its estimates to implement IT projects. | 5-6 | Statute requires ADS to include life-cycle costs for IT projects with a total cost of \$500,000 or more. ADS indicates it believes that life-cycle costs do not include client entity costs associated with IT projects. While client entity costs are not in ADS's control, nothing prevents ADS from including those costs. Failure to include these costs presents an incomplete picture of a project's true costs. |
| 2. Consider modifying statute to require ADS to include baseline cost and schedule data in reports on the status of IT projects. | 18 | Statute requires ADS to provide an annual report to the Legislature detailing the scope, schedule, budget, and status of IT projects with total costs of \$500,000 or more. ADS does not include baseline cost and schedule information in this report. As a result, it is not always clear when project schedules are delayed or costs are increased. |

| | | |
|---|--------------|--|
| <p>3. Consider modifying statute to require ADS to track and report on whether its IT projects achieved their business goals.</p> | <p>20-21</p> | <p>Statue requires ADS to report performance metrics to the Legislature for each division, which includes EPMO. While ADS reports some EPMO performance measures, it does not track or report on the extent to which IT projects met their business goals. As a result, ADS cannot demonstrate the impact and benefits of IT projects to executive leadership and the Legislature.</p> |
|---|--------------|--|