SANDAG

OIPA | Office of the Independent Performance Auditor

INVESTIGATION

DATE: October 7, 2024

TO: Chair Nora Vargas, Board of Directors
            Chair David Zito, Audit Committee
            SANDAG Board of Directors
            SANDAG Audit Committee
            Mario Orso, Chief Executive Officer
            Dawn Vettese, Chief Financial Officer
            Amberlynn Deaton, Deputy General Counsel
            Residents of San Diego County and Toll Users

FROM: Courtney Ruby, Independent Performance Auditor

SUBJECT: Office of the Independent Performance Auditor's Whistleblower
            Investigation Report on SANDAG's New Tolling Back-Office
            System Implementation

Introduction

In December 2023, the Independent Performance Auditor, Audit Committee, Board Chair, and several Board members determined that the publicly disclosed allegations of SR 125 Toll customer mischarges and accounting issues warranted an independent investigation. The Office of the Independent Performance Auditor (OIPA) began its investigation to determine if SANDAG's SR 125 financial accounting can be relied upon and what steps SANDAG took to rectify the known errors with customer accounts that were publicly disclosed in November 2023.

The OIPA published the results of their investigation in March 2024, revealing significant matters beyond customer mischarges and accounting issues; among them, ETAN's implementation of the Back-Office System (BOS) Fastlane was headed for trouble from the beginning, and SANDAG executive management failed to address the situation in a timely manner, including informing the Board of Directors.

On January 12, 2024, SANDAG's Board of Directors (BOD) authorized a $28 million sole source contract to Deloitte Consulting (Deloitte) and A-to-Be USA (A-to-Be) for a Regional Back Office System Replacement. This contract was awarded due to the

performance issues related to ETAN's implementation of a BOS for SANDAG's SR 125 Toll Road and I-15 Express Lanes.

On May 29, 2024, the Office of the Independent Auditor's Whistleblower Hotline received a complaint alleging that the replacement BOS being implemented by Deloitte and A-to-Be for tolling operations "is unsuitable for fulfilling the financial reporting needs required by SANDAG to capture and complete reliable financial reporting required by GAAP." Further, "the need to produce reliable and accurate financial reports was not considered when A-to-Be was selected and awarded a sole source contract."

Background

In February 2022, former Chief Executive Officer (CEO), Hasan Ikhrata, delegated oversight of SR 125 Operations to the former Chief Financial Officer (CFO), Andre Douzdjian, while the Project Management Office Reorganization for Toll Operations was assigned to former Deputy Chief Executive Officer (CEO), Ray Major. In August 2022, a new Director of Regional Transportation Services was hired. The CFO, Deputy CEO and Director of Regional Transportation Services were tasked with procuring a new back-office tolling system to replace ETAN.

The former CFO played a key role in the procurement process until mid-October 2023, at which point the former Deputy CEO appeared to take over leadership. This included contracting Deloitte in November 2023 to assess ETAN's BOS data for data migration to a replacement system and presenting management's recommendation to the Board of Directors to award a sole source contract to Deloitte inclusive of A-to-Be's MoveBeyond BOS Software Solution in January 2024.

On October 2, 2023, prior to Deloitte and A-to-Be being selected to provide a new tolling BOS, Fagan Consulting (Fagan) provided SANDAG a report titled, "SANDAG Transition Plan." Both the former CFO and the Director of Regional Transportation Services received the report. The report included a section on the procurement of a new system that stated the following:

> "SANDAG has started the process of acquiring a new BOS. Fagan has several recommendations that would help SANDAG in procuring the new BOS."

The report then lists six bullet points for SANDAG to consider. For this investigation, we would like to highlight three of Fagan's recommendations (*the OIPA added bold emphasis):*

- The BOS RFP should be written to emphasize *detailed, in-depth demonstrations* showing actual system capabilities as opposed to brief

written descriptions of how the system works (i.e., make the procurement process require the bidders to "show me" as opposed to "tell me").

- Address the defects previously noted in the Requirements during Fagan's Operational Assessment and *rework the* overly cumbersome *Business Requirements Document* (BRD) as SANDAG has a better understanding of what requirements and functionality are needed.

- Ensure that the *new operational and technical requirements* provide the ability to conduct end-to-end system audits via screens, queries, searches, and *reports on both individual and bulk transactions and revenue.*

On January 12, 2024, the SANDAG Board of Directors, per the recommendation from SANDAG management, authorized a sole source contract with Deloitte to provide system integration, implementation, and infrastructure services for the SANDAG Commercial Back Office Migration and Rapid Deployment Project. Deloitte is also responsible for managing the payment process to the A-to-Be vendor, who provides the MoveBeyond tolling back-office platform (MoveBeyond). This contract was awarded due to the performance issues related to ETAN's implementation of a back-office system for SANDAG's SR 125 Toll Road and I-15 Express Lanes.

Objectives

The objectives of the investigation were to determine if:

1. SANDAG's Financial reporting needs were taken into consideration during the selection of Deloitte and A-to-Be as vendors for the new BOS to replace ETAN's BOS.

2. A-to-Be's Move Beyond back-office system can provide the requisite financial reporting.

Findings

The investigation found:

1. The Finance Department's financial reporting **needs were not considered** during the procurement process.

2. **System requirements were not developed** for the replacement BOS implementation and therefore are absent in the contract with Deloitte.

3. The A-to-Be MoveBeyond **software does not include an internal financial accounting system**, or a similar internal general ledger, like ETAN's BOS.

4. SANDAG discovered a **critical component** needed to facilitate the integration of the new BOS with SANDAG's ERP system **was missing.**

FINDING 1: The Finance Department's financial reporting needs were not considered during the procurement process.

SANDAG's consideration of various vendors to provide a new tolling BOS was limited to approximately five vendors. The documentation on these vendor presentations and communications with SANDAG is limited. Additionally, there is no documentation evaluating and comparing the vendors ability to satisfy SANDAG's financial reporting needs. Deloitte and A-to-Be had the most meetings, delivered the most presentations, and corresponded the most with the Director of Regional Transportation Services as referenced in the other OIPA investigation released on October 7, 2024. There is no written analysis as to why Deloitte and A-to-Be were selected for a $28.7 million contract over the other vendors interviewed, except for a sole source justification prepared by the Director or Regional Transportation Services dated January 30, 2024.

On July 19, 2024, in a response to the OIPA's inquiry related to the implementation of the new tolling BOS, management stated, "staff were unable to find any information or documentation related to how Finance's needs were considered in the selection of the Deloitte/A to Be system."

When the former CFO was interviewed in June 2024 and asked if the Finance Department had any role in determining that Deloitte and A-to-Be was the right software solution, he stated:

> "no, accounting[1] wasn't involved. I can say that obviously... I was involved in the decision making to go with Deloitte. Deloitte is one of the Big four accounting firms and...A to B is the backbone, the software that's gonna do the operations..."

He then affirmed that the Finance Department was not provided any demos of the system providing the financial reporting information they want. Other Finance Department team members confirmed they have not seen any demos as well.

The Chief Financial Officer is the highest executive financial leadership position in SANDAG. The former CFO's responsibilities included oversight of SR 125, and the procurement of a new BOS to replace ETAN's BOS. The former CFO's statements are

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[1] Accounting and Finance are used interchangeably by SANDAG, they both refer to the Finance Department.

evidence of SANDAG's lack of executive accountability as discussed in previous OIPA investigations. One of the primary reasons SANDAG needed to procure a new BOS was that ETAN's BOS financial reporting could not be relied upon.

FINDING 2: System requirements were not developed for the replacement BOS implementation and therefore are absent in the contract with Deloitte.

System requirements detail what is required by an agency for their business needs to be met by a software system implementation. A typical system implementation would involve a pre-project phase where system requirements would be defined, followed by planning, design, implementation, validation and deployment. The pre-project phase includes all stakeholders identifying their needs to ensure system requirements are developed to meet such needs and then vetting these requirements to confirm they meet the defined needs of the stakeholders.

SANDAG did not create system requirements for this procurement. Instead, SANDAG defined the outcomes (outcome matrix) it wanted the system to produce. It is unclear why SANDAG believed an "outcome matrix" was a viable option. SANDAG's outcome matrix for "Financial Reports" included in the contract with Deloitte states:

> "Agency [SANDAG] will provide current reports needed for alignment with current COTS [Commercial Off-the-Shelf] reports available in system."

Thus, the outcome is not defined, instead it is an **action item for SANDAG to produce in the coming months**, highlighting that critical corners were cut to expedite the contract. In addition, this is contrary to Fagan's recommendations:

- Address the defects previously noted in the Requirements during Fagan's Operational Assessment and *rework the* overly cumbersome *Business Requirements Document* (BRD) as SANDAG has a better understanding of what requirements and functionality are needed.

- Ensure that the *new operational and technical requirements* provide the ability to conduct end-to-end system audits via screens, queries, searches, and *reports on both individual and bulk transactions and revenue.*

Regardless of whether it is an off-the-shelf software procurement or software is being developed, system requirements are the norm, not the exception.

The Fagan tolling implementation expert stated they had never seen a project with an outcomes matrix and a typical project would include system requirements and take three to four years to implement.

SANDAG's prior 2016 back-office system Request for Proposals (RFP) took over three years to prepare, involved outside consultants and included over 2,000 system requirements.

Deloitte and A-to-Be proposed a seven-month implementation schedule to user acceptance testing, production install and "go-live". An off-the-shelf software solution can be capable of shorter implementation times, however, there are many factors this would be dependent upon, and given system requirements were not produced, SANDAG, at a minimum, would not have been able to conclude that a seven-month implementation schedule was achievable. It is also unclear why Deloitte and A-to-Be, with their industry and system implementation expertise, would have offered such a short implementation schedule without a thorough vetting of system requirements.

Both SANDAG and their external contractors appear to have not engaged in an adequate process of due diligence for a complex system implementation with so many known and unknown variables.

FINDING 3: The A-to-Be MoveBeyond software does not include an internal financial accounting system, or a similar internal general ledger, like ETAN's BOS.

For months, SANDAG has struggled internally with moving the BOS implementation project forward. One cause for delay has been a significant misunderstanding on what the procured BOS can and cannot do.

The development of system requirements, as stated earlier, includes all stakeholders identifying their needs to ensure system requirements are developed to meet such needs, and then vetting the requirements to ensure they address the needs. If system requirements had been developed, the Finance Department would have been required to weigh in on what their needs were, and the process would have confirmed if the system was able to meet those needs.

On July 19, 2024, in a response to the OIPA's inquiry related to the implementation of the new tolling BOS, management stated, "The MoveBeyond system is a tolling commercial back-office system and not designed to be an accounting system."

According to the Director of Regional Transportation Services, the A-to-Be back-office software did not contain a financial accounting solution. They stated:

> "A to B doesn't have a financial package. They connect to whatever your financial package is, or we could have told them to go get one. But we said no,

you're just gonna, you have to use the ERP (Enterprise Resource Planning System[2])."

The Director of Regional Transportation Services also stated that SANDAG's former Deputy CEO and former CIO stated that the SANDAG ERP system would be able to handle the financial transactions for the new tolling back-office system.

And as reported above, the former CFO stated:

- the Finance Department was not involved in picking the financial solution, and

- the Finance Department was not given demos of the system providing financial information.

These comments demonstrate the confusion among SANDAG Senior staff members regarding the new systems capabilities, and its reliance on SANDAG's ERP system.

The Finance Department team working on the implementation believed the new BOS system would be like the current ETAN BOS system and include a general ledger accounting system embedded in the tolling BOS. This is not the case. The new BOS does not include an internal general ledger system.

Discussion and disagreements regarding the systems capabilities have gone on for months and involved all levels of SANDAG staff in addition to multiple consultants. SANDAG's Finance Department is currently working with Deloitte and A-to-Be to define reports, a chart of accounts, and posting rules. Financial reporting capabilities integrated between the new BOS and SANDAG's ERP are planned to occur during "phase 2" of the Deloitte system implementation. In phase 1, (the initially seven month phase) the process will be performed manually by the Finance Department staff in what has been described as a more laborious and manual process than what they are currently doing to produce financial statement from ETAN's BOS.

Last, it is important to note the same Finance Department staff, who are responsible for performing workarounds on ETAN's BOS to produce current financial reports while meeting annual audit deadlines, are also responsible for working with Deloitte and A-to-Be on the new system implementation. They are also involved in implementing a new organization-wide ERP system that has proven to be challenging as well. This example highlights SANDAG's ineffective internal project management and resource planning that is contributing to employee burnout and low morale.

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[2] An Enterprise Resource Planning system is software that brings together and handles different business processes in a company. It integrates different business processes, such as finance, HR, supply chain, and customer management, into one central database and user interface for easier management.

FINDING 4: In April 2024, SANDAG discovered that a critical component was missing to facilitate the integration of the new BOS with SANDAG's ERP system.

The BOS financial data must interface with SANDAG's new ERP to prepare SANDAG's financial statements. The standard industry document defining how a system interfaces with another system is an Interface Control Document (ICD). An ICD describes all data inputs going into, and data outputs coming out of a system. An ICD from SANDAG's ERP system would explain to programmers how to send financial information from A-to-Be's MoveBeyond software to the ERP system.

The contract with Deloitte states that the interface between the BOS and third-party financial system (SANDAG's ERP):

> "Must adhere to ICD provided by Agency [SANDAG]."

In April 2024, SANDAG informed Deloitte there was no ICD for SANDAG's ERP system. Deloitte sent a response to SANDAG (April 8, 2024) stating: :

> "SANDAG has informed us that there is no pre-existing ICD for the ERP system. Rather, SANDAG will be creating a new Interface Control Document (ICD) that once created, will be provided to the Deloitte Team. As this will be SANDAG's first time integrating a third-party system into the ERP, there's no established protocol for this connection. Advancing this activity increases risk due to the novelty of the ICD and the inexperience with 3rd party systems automatically creating entries into the SANDAG ERP system. Given that SANDAG plans to create an untested ICD for this purpose, we need to extend the project schedule to make room for risk mitigation testing and revisions to this ICD on both the MoveBeyond and the Tyler ERP systems. In addition, further delays may be encountered if the produced ICD introduces delays to development and/or testing, beyond this assumption, requiring an additional change request."

It is likely this issue would have surfaced earlier had SANDAG developed system requirements and confirmed whether SANDAG's ERP had an ICD.

Conclusion

SANDAG embarked on an expedited and uncoordinated process to replace ETAN's back-office system. Best procurement and project management practices were not utilized, and lessons learned from the prior ETAN BOS implementation were ignored. The goal was to "fix-it" quickly without laying the groundwork for success as recommended by Fagan. Creating system requirements with subject matter experts and stakeholders would have flushed out risks and failure points in the project. While A-to-Be is an off-the-shelf commercial tolling system, a significant piece SANDAG failed to consider was the amount of planning which needed to occur on the front end to successfully implement A-to-Be's MoveBeyond BOS, even though SANDAG's vendor (Fagan) had warned significant pre-planning was needed.

Recommendations

The OIPA recommends management, at a minimum, implement the following:

1. Clearly defined senior management roles, responsibilities and expectations. Special project assignments, such as a management oversight for a system implementation, must also have clearly defined roles, responsibilities and expectations. The CEO should hold senior managers accountable to such.

2. Require key senior leadership positions have the requisite project management skills to effectively manage large-scale internal projects. The process should align with best practices, include proper certifications, and result in a thorough analysis of internal and external capacity including technical expertise, documented risk assessments, and demonstrated alignment with SANDAG's core responsibilities.

3. Revise sole source policies and procedures for IT to preclude sole source awards except for demonstrated proprietary, compatibility or unique functionality issues only. An IT system implementation would not qualify.

4. Require system requirements be developed for IT system solutions and all stakeholders are formally included in the process. Project planning must include the requisite time to accomplish this.

5. Multi-million-dollar contract awards must include sufficient pre-award analysis to demonstrate a vendor has been formally evaluated against SANDAG's project requirements. SANDAG's project requirements must be fully defined before award is determined.

6. Formal post-evaluations of all multimillion-dollar projects should be conducted, lessons learned documented and corrective action plans for future projects prepared and presented to the CEO.

Next Steps

The report will be presented to SANDAG's Audit Committee on October 11, 2024, and the Board of Directors on October 25, 2024, for discussion and possible action.

SANDAG Management should provide the OIPA, the Audit Committee and the Board of Directors an initial written response to the report's recommendations within two weeks.

The Office of the Independent Performance Auditor will publicly report on the status of the recommendations bi-annually to the Audit Committee, and the Board of Directors.

Methodology

The OIPA conducted an investigation to arrive at the findings and conclusions in this report. The following work was completed:

- Reviewing Whistleblower complaint
- Requesting information from management
- Attending and/or reviewing SANDAG board meetings
- Reviewing SANDAG meeting notes and materials received from prospective vendors
- Reviewing SANDAG legislative records
- Reviewing current and former SANDAG staff members emails
- Reviewing SANDAG contracting records
- Interviewing Fagan representatives
- Interviewing current and former SANDAG staff members
- Reviewing Fagan reports