Centralizing Utah's Traffic Data for AI Driven Traffic Management

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OBJECTIVE

This operational plan outlines how the Office of Artificial Intelligence Policy (OAIP) would manage a pilot project evaluating the interoperability, governance, and AI readiness of traffic technologies currently deployed by the Utah Department of Transportation (UDOT). This effort aims to identify concrete opportunities to strengthen data coordination, reduce operational inefficiencies, and ensure that Utah's infrastructure is prepared to support AI enabled traffic management solutions. The plan provides a framework for coordinating current vendors, assessing technical performance, and documenting lessons to guide future policy and investment decisions.

By selecting a site that is already equipped with multiple overlapping systems, this plan would ensure a successful pilot that produces a clear, actionable understanding of how the current network of tools (e.g., light detection and ranging [LiDAR] sensors, adaptive signal controllers, and real time analytics platforms) function synergistically and identifies needed interventions. The pilot aims to determine how these technologies interact, whether they generate duplicative or siloed data, and the degree to which their outputs align with Utah's legal standards for privacy and AI transparency. This includes identifying where data is being underutilized or duplicated, where integration or coordination is technically possible but not implemented, and whether current deployments provide the necessary infrastructure for responsible AI use now and in the future.

OPERATIONAL OVERVIEW

OAIP would coordinate this pilot in collaboration with UDOT and current external technology vendors. A contracted subject matter expert (SME) would lead the technical evaluation of an intersection or corridor where multiple traffic systems are used concurrently. OAIP's role would be to ensure access to necessary documenta–tion, facilitate vendor and agency participation, and oversee the review process.

The pilot would not involve infrastructure modification or new hardware installation. Instead, it would focus on mapping existing systems, identifying duplicative tools or data flows, and assessing how current deployments align with AI and data governance standards.

The findings from the pilot assessment would inform OAIP's ongoing responsibilities under Utah's Artificial Intelligence Policy Act and serve as a model for future traffic or AI coordination initiatives. The anticipated outcomes include a detailed architecture map of the systems in use, a technical review of data formats and interoperability, and an assessment of whether current deployments are consistent with the Utah Consumer Privacy Act and the Artificial Intelligence Policy Act. These insights would inform OAIP's ongoing responsibilities under the latter act, particularly those pertaining to transparency, coordination, and oversight. The findings could also provide a replicable model for future traffic or AI integration efforts statewide and identify legislative requirements for seamless and safe AI integration at scale.

KEY COMPONENTS

Technical Coordination and Assessment

The SME would conduct a field based technical walkthrough with UDOT operations staff, reviewing the configuration and performance of deployed technologies. This would include mapping the system architecture across platforms (e.g., sensors, controllers, analytics dashboards, and communications infrastructure) and analyzing how data are collected, formatted, and transmitted. OAIP would provide coordination support and ensure that the SME has access to vendor technical leads and relevant internal documentation. The SME would assess latency and data refresh intervals and identify any areas where systems are duplicative, siloed, or incompatible. These technical observations are foundational to understanding how well existing systems are integrated and whether they are capable of supporting AI driven applications that require coordinated real time data. The findings would allow OAIP to identify technical bottlenecks, surface opportunities for data sharing, and evaluate which components need adjustment before broader policy and governance frameworks can be proposed.

Governance and Compliance Review

In parallel with the technical assessment, the SME would evaluate how data use at the pilot site aligns with the legal requirements outlined in the Utah Consumer Privacy Act and the Artificial Intelligence Policy Act. This review would focus on access controls, data–sharing protocols, and transparency of system operations. It would also examine whether existing vendor or agency governance models are sufficient to manage emerging AI capabilities. OAIP would coordinate with privacy and legal officers to confirm that the review addresses both statutory compliance and best practices in public sector data governance.

This governance and compliance review would ensure that future AI deployment is grounded in a legally sound and publicly trusted data environment. It would help OAIP identify policy gaps in data management and additional safeguards or coordination frameworks that may be needed. The review would also clarify

OAIP's role in supporting interagency alignment and ensuring that AI driven initiatives respect Utah's strong privacy commitments.

Stakeholder Engagement

OAIP would convene targeted interviews and working sessions with UDOT's central and regional teams, vendor representatives, and internal policy staff. These engagements would clarify roles in system operation, data handling, and support obligations. Vendor insights would also be used to assess road-map alignment and identify operational constraints. OAIP's role in these discussions would be to ensure that the findings reflect diverse technical and operational perspectives and that any barriers to coordination are clearly surfaced. By convening a broad group of stakeholders, OAIP would be able to identify inconsistencies in how systems are maintained, understand informal data-sharing practices, and uncover governance or contract terms that may limit integration. These insights are critical for developing a realistic picture of the types of policy interventions—such as standardizing procurement language, aligning service expectations, or facilitating interagency data agreements—that would be most impactful and feasible going forward.

Documentation and Reporting

The SME would produce a comprehensive technical report for OAIP, including a system architecture map, analysis of operational gaps, and a set of short- and long-term coordination options. The report would outline areas where current systems fall short of AI readiness, such as a lack of interoperability, redundant tools, or limited transparency, and identify opportunities to improve coordination or standardization.

OAIP would review the report internally and, where appropriate, engage UDOT leadership or legislative stakeholders to discuss its implications. The findings could inform future sandbox initiatives, signal the need for procurement reform, or serve as a foundation for policy guidance that promotes secure, interoperable, and AI ready infrastructure across the state.

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Policy Primer

OPERATIONAL PLAN

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