INTERNAL AUDIT REPORT

MoveSmart Mobility Management Strategy Audit

November 2024

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MOVESMART MOBILITY MANAGEMENT STRATEGY AUDIT

CONCLUSION AND SUMMARY

The MoveSmart Mobility Management Strategy (MoveSmart or the Strategy) helps form and direct the City's vision to provide a safer, more efficient, and sustainable transportation system. In the 2018 Citizen Satisfaction Survey, 59 percent of residents said transportation is the most important issue facing the community. The City continues to focus on ensuring an efficient and reliable transportation system that ultimately gets citizens and businesses where they need to go. MoveSmart sets the direction and priorities for the next five years (2022-2026).

Operationally, the MoveSmart program team reports to the Public Works Portfolio and is supported by several City departments, including but not limited to the Program Management Office (PMO), Office of the Chief Information Officer (OCIO), Infrastructure Planning and Corporate Asset Management (IPCAM), Development Engineering Services, Legal Services, Financial Planning and Development Finance, Financial Services, Procurement Services, Bylaw and Compliance, Licensing and Permit Services (BCLPS), Risk, Access and Privacy and Communications, Marketing and Engagement (CME). Several external stakeholders also provide either direct or indirect support to the program. Examples include the York Region and the City's neighbouring municipalities.

At the time of the audit, several of the projects within MoveSmart are well underway and many milestones have been successfully achieved. The audit found that management has efficiently and effectively communicated timelines and updates to the Mayor and Members of Council and the general public through Committee Meetings and corporate communication channels.

While MoveSmart has made significant progress on several initiatives over the past three years, opportunities were identified to improve administrative oversight and ensure risks related to the implementation of the Strategy are efficiently and effectively mitigated. Many of the issues that were identified are corporate-wide in nature and improvements will benefit several City initiatives. The following opportunities were identified:

- Continue coordination and discussions with the Region of York to address road safety improvements and traffic management-related issues.

- Continue developing comprehensive Key Performance Indicators (KPIs) to evaluate MoveSmart's overall effectiveness by aligning with peer municipalities.

- Ensure City projects adhere to industry frameworks and best practices for Data and Security Management.

Traffic management is a shared responsibility between the City of Vaughan and York Region, with Vaughan managing local roads and York Region overseeing regional roads. Given the interconnected nature of these road networks, effective collaboration is essential to addressing congestion and road safety. While the City is making notable progress in data sharing and safety infrastructure with the Region, further opportunities for collaboration include future integration of smart technologies, such as synchronized traffic signals, and harmonizing both road safety improvements and mobility action plans that will be consistent and help to reduce congestion across City and Regional roads.

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KPIs are essential for aligning organizational performance with strategic goals, providing a clear link between departmental actions and desired outcomes. They are categorized into output KPIs, which measure immediate, tangible actions such as completed projects, and outcome KPIs, which assess broader impacts and effectiveness. At the current stage, the MoveSmart Annual Progress Reports include both output and some outcome-focused metrics. With the progress of the Strategy, areas for improvement include balancing output and outcome KPIs, increasing benchmarks against other municipalities, and automating KPI calculations to enhance accuracy and enable real-time decision-making. These enhancements are crucial for fully assessing MoveSmart's effectiveness and ensuring it meets long-term goals like improved road safety and sustainable transportation.

Data and technology are central to MoveSmart, with a Data Management Program underpinning all initiatives for evidence-based decision-making. As new technologies and cloud-based systems are integrated, traffic data becomes more accessible, helping the City identify road safety improvements. The Traffic Engineering Division, in collaboration with IPCAM, is developing a Transportation Data Management Roadmap to create a modern multi-modal database. To ensure alignment with the City's data management practices, the City should enhance third-party agreements with strong data protection terms and establish review processes for service provider audit reports. As this is a City-wide issue, improvements in this area will help all City projects, including MoveSmart, enhance operational efficiencies and data accuracies and minimize security risks.

This audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing.*

During the audit, management took steps to improve the processes. Internal Audit will follow up on the status of outstanding management action plans related to this audit and will report the status to a future Audit Committee meeting.

BACKGROUND

On March 10, 2021, Council endorsed the five-year MoveSmart Mobility Management Strategy. MoveSmart is comprised of four highly integrated programs designed to encourage a safe network for all modes of transportation, including active and sustainable travel. The MoveSmart Strategy reinforces the City's commitment to advancing transportation and mobility while enhancing road safety and supporting sustainable active transportation options like cycling and walking. As the City's population increases – forecast to rise to more than 407,000 people by 2031 – road safety and effective traffic management will become even more important and require innovative solutions to meet the goals. MoveSmart works alongside other City of Vaughan transportation initiatives, such as the Transportation Master Plan, to build a functioning, efficient, and focused interconnected transportation network.

The MoveSmart programs and initiatives aim to facilitate operational improvements through best practices and policies, operation, and design and are supported by data-driven and evidence-based decisions.

MoveSmart is a five-year capital and operational plan that sets the direction for advancing the city's transportation goals. It is founded on three pillars: safety, sustainability, and mobility. Its objectives include the following:

- Provide a framework for collaboration with internal and external partners and to engage Vaughan citizens;

- Define a set of goals for transportation encompassing community values and identifying a plan to address the City's mobility needs in an effective, responsible, and sustainable manner; and

- Identify opportunities for a more balanced approach to transportation including the most vulnerable road users.

MoveSmart is designed to be fluid and adapt as the needs of the transportation network change. The strategy will be updated every five years (in parallel with the Transportation Master Plan) to reflect the growth and availability of innovative technologies and align with the City's new term of Council priorities.

The MoveSmart project team within the Traffic Engineering Division of the Transportation and Fleet Management Services Department (TFMS) manages the strategy.

OBJECTIVES AND SCOPE

The objective of the audit is to evaluate the adequacy and effectiveness of the internal controls, processes, and procedures in place to mitigate the business risks associated with the implementation and administration of the MoveSmart.

The audit approach included a review of the strategic goals, objectives, and oversight of the business unit, a review of relevant programs, legislation, policies and procedures, use of technology, and interviews with staff and management.

The scope of the audit will cover the relevant activities during the ongoing development and implementation of MoveSmart.

This audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing.*

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DETAILED REPORT

1. ***Continue Coordination with the Region of York to Address Road Safety and Traffic Management Related Issues***

    Traffic operations are shared between the City and York Region, each with distinct responsibilities. The City of Vaughan manages local roads, and York Region oversees regional roads that connect multiple municipalities and handle higher traffic volumes.

    Collaboration between Vaughan and York Region is a continued and integral process due to the interconnected nature of local and regional roads. Traffic issues on regional roads can cause congestion and safety concerns within the City's boundaries. Coordinated efforts in traffic program alignment and infrastructure improvements help ensure a seamless driving experience, reduce congestion, and enhance road safety. Joint initiatives in smart technology integration and data sharing further enable the City and the Region to address traffic challenges effectively, creating a more efficient and resilient transportation network.

    According to the MoveSmart Mobility Management Strategy 2024 Annual Report included in the annual progress is the advancement of a Regional Traveler Safety Plan (the Plan), developed in collaboration with York Region and local municipalities, and establishes an integrated road safety plan across the Region. The Plan aims to create a safer road environment for all users in the Region by employing a holistic, data-informed, and collaborative approach to reduce severe collisions over the next five years. One of the action items identified in the plan is the integration with the City's MoveSmart Mobility Management Strategy.

    Also, according to the Intelligent Transportation Systems Single Source Procurement of an Advanced Traffic Management System Report, the City is investing in smart technology by implementing an Advanced Traffic Management System (ATMS) that is consistent with the standards and protocols adopted by the Region and will facilitate seamless traffic signal integration when the systems are ready to communicate. A common and integrated traffic signal system will ensure transparency and better corridor optimization, refine critical emergency response times, and coordinate signal operations between the City, York Region, and local municipal partners. The end goal is to establish synchronized traffic signals where warranted based on data, along with other collaborative measures to optimize traffic movement across municipal boundaries. Once the traffic signal controllers are upgraded in the field, the implementation of the ATMS software will facilitate the integration of both networks as required.

    The City has been working collaboratively with York Region to leverage technical expertise and advisory services throughout the planning of MoveSmart's various programs and initiatives, and progress has been made in areas such as data sharing, road safety and mobility improvements, and most recently with the Intelligent Transportation Systems (ITS) program. Some examples of the collaborative efforts between the City and York Region include:

    - Sharing of traffic data through a cloud-based Traffic Engineering Software. The Traffic Engineering Software (TES) now provides Vaughan and York Region data sharing

capabilities and program integration that supports evidence-based decisions when executing on the various initiatives under the MoveSmart Strategy and York Region Traveller Safety Plan. The traffic data management program houses information such as speeds, volume and collisions and serve as the central hub used to make mobility and road safety decisions, taking a more quantitative approach. TES stores data efficiently, allowing for quicker analysis, to support operations and planning services across our transportation network. The data alignment with the Region is critical for data accuracy and TES provides greater functionalities and advanced capabilities, including built-in comparative analysis, safety performance function calibration, annual network screening updates, improved mapping and dashboard displays, expanded customization and much more.

- Quarterly York Region Vison Zero Traveller Safety Plan meetings allow for collaboration amongst local partners and ensure milestones for the various road safety initiatives are being met and ensuring that mobility projects continue to support the harmonization of traffic plans, road safety initiatives, and other long-term strategies. Local partners will continue to identify and develop targeted road safety countermeasures that include standardizing approaches to traffic calming, traffic control warrants, provision of pedestrian and cycling infrastructure, as well as create education and outreach initiatives to support the most vulnerable road users.

- Continued engagement on the Intelligent Transportation Systems (ITS) initiative. Collaboration continues on the progress of the in-field traffic signal controller conversion, and the implementation of the ATMS, scheduled to be completed by Q4 2025. The objective is to ensure a seamless operation and signal progression when signal systems pass from one authority to another. ATMS is a systematic way to achieve signal progression through municipal boundaries. York Region has provided valuable insight, best practices and lessons learned throughout the development of the ITS plan. Future discussions will focus on the integration, optimization and operational requirements and responsibilities of both parties for the system. The ATMS central software and municipal Traffic Management Centres (TMC) will allow autonomy of operation for each jurisdiction, with the ability to collaborate on common corridors and intersections that require attention. Just recently City staff attended York Regions TMC to gain a better understanding of their operation in real time, discuss the prerequisites to develop a future TMC for Vaughan. Once the ATMS is established and all traffic signal controllers upgraded, Vaughan will be able to commit to a partnership with York Region that will facilitate and advance the use of smart technologies benefiting both local and arterial road networks.

- Current development of a comprehensive Construction Management and Work Zone Safety Plan (CWSP) where York Region has been identified as a vested stakeholder and will form part of the technical advisory committee. The first phase of the CWSP is to identify opportunities for both Vaughan and York Region to have effective traffic management and coordination between local and regional roads. This collaboration will focus on minimizing disruption to traffic flow while ensuring the safety of both construction workers, the general public and city infrastructure assets. The plan will include strategies for optimizing traffic routing, managing detours on local roads, and establishing clear

communication channels with all stakeholders to be proactive and to provide real-time updates on road closures or changes. The second phase of the CWSP will establish a comprehensive framework and policy development to ensure the safety and compliance of all personnel and operations within the designated construction area. This 1st phase of the plan is anticipated to be achieved by Q4 2025.

In addition to data sharing and road safety infrastructure, consistent application of regulatory transportation and road safety standards across Vaughan and York Region reduces driver confusion and enhances overall road safety.

Effective traffic management and road safety infrastructure collaboration between Vaughan and York Region can improve traffic flow, reduce congestion, and enhance road safety. A unified approach, including coordinated signal timing and uniform traffic strategies, creates a more efficient driving environment. By aligning safety infrastructure and technology, both jurisdictions can optimize traffic management solutions, benefiting all road users and contributing to a safer, more cohesive transportation network.

Internal Audit is satisfied with the actions management has already taken to address the risks identified in this observation as management intends to continue to work in collaboration with the Region to identify and address road safety and traffic related issues within the City. We have no further recommendations at this time.

2. *Continue to Develop Comprehensive KPIs to Evaluate the Overall Effectiveness of MoveSmart by Aligning With Peer Municipalities*

KPIs help organizations understand how well they are performing in their strategic goals and objectives and, therefore, help to monitor the execution of strategy. They should demonstrate the cause-and-effect relationship between departmental processes and outcomes to the City's desired results from the strategic plan. It helps all levels of the organization see the impact of their work on performance and trace that impact up to organizational performance. This ensures that everyone works together to execute the strategy and achieve high performance.

The MoveSmart team prepares and submits an Annual Progress Report to Council on accomplishing tasks and initiatives, including KPIs. Consultants have been engaged in researching and recommending relevant KPIs for the strategy. The proposed KPIs are based on research using academic literature for Vaughan based on Canadian and international jurisdictions. Queen's University proposed twenty KPIs with a combination of output and outcome metrics. Output KPIs measure tangible projects and programs administered, while outcome metrics measure the effect of the Strategy, focusing on the broader impacts of the initiatives implemented. Output KPIs allow for immediate tracking of activities, ensuring that short-term efforts are on track. Outcome KPIs, conversely, ensure that these efforts translate into meaningful, long-term improvements and achieve desired behavioural changes.

Our review of the KPI and performance measurement processes had the following observations:

- While the current MoveSmart Annual Progress Report updates include some outcome-focused metrics, such as reductions in average traffic speeds and the number of speeding tickets issued, the reports, have to date, focused on output-based KPIs (highlighting completed actions including the establishment of community safety zones, traffic signal improvements, and the implementation of the Automated Speed Enforcement (ASE) Program. A balanced approach is currently being developed, including recent data collection and outcome-focused metrics to measure the impacts of MoveSmart's projects and initiatives.

- Currently, some of MoveSmart KPI calculations rely on manual data processing for annual reporting by staff with data provided by external consultants. Automated data collection and analysis can facilitate more efficient KPI calculations, including developing computerization tools (e.g., MITAC for Community Safety Zones and Traffic Calming Plan Screening and Assessment Tables). Also, through the 2nd phase of the ITS and ATMS plan, identified technology solutions will allow staff to monitor and report on traffic volumes at intersections in real-time allowing for automated KPI data collection to help expedite traffic signal coordination where warranted. This will enhance the accuracy, timeliness, and accessibility of KPI data and allow for continuous monitoring and real-time decision-making in traffic management.

- While the City's current Citizen and Business Survey includes questions related to specific MoveSmart initiatives, such as traffic flow, congestion, and cycling infrastructure, it lacks direct questions regarding public satisfaction with the overall effectiveness of

MoveSmart and the public's acceptance of active transportation modes. Including these questions is important for assessing the Strategy's effectiveness and improving community engagement with sustainable transportation options.

The focus on output KPIs in the MoveSmart program stems from the complexities of developing robust outcome metrics, which are still in progress. The program is advancing its data collection capabilities by exploring new technologies, aiming to enhance KPI reporting and development.

Comprehensive and balanced KPIs help to achieve a complete assessment of the MoveSmart Strategy's effectiveness in achieving long-term goals, such as improved road safety and congestion level, sustainable transportation and desired behavioral changes. Additionally, benchmarking against peer municipalities increases the ability to gauge performance and learn from best practices. The manual KPI calculation process may cause delays and add to the workload, while automation can facilitate real-time monitoring and timely decision-making, potentially enhancing the overall effectiveness of MoveSmart's operations.

Recommendations

We recommend that management:

- Continue the development of comprehensive outcome KPIs that align closely with strategic objectives and community needs, such as reduced collisions, improved traffic operations and increases in adoption of sustainable transportation modes, and effectiveness of construction work zone safety. Regularly review and update the KPI framework to ensure its relevance and alignment with evolving strategic priorities. Facilitate MoveSmart's transition towards a balanced approach that effectively measures immediate outputs and lasting outcomes, enhancing its overall effectiveness and transparency.

- Investigate and evaluate the feasibility of acquiring new technologies to assist in the development of automated KPIs. This could involve implementing APIs to extract data from the source to make real time decisions to improve traffic flow immediately.

- Continue to benchmark protocols to regularly compare MoveSmart's KPIs with peer municipalities. Foster collaboration with regional peers to share best practices and enhance strategy effectiveness, promoting transparency by incorporating benchmarking findings into annual updates to provide context on MoveSmart's performance relative to external benchmarks

- Consider including specific questions regarding the public's satisfaction with the MoveSmart Strategy and acceptance of active transportation modes in future Citizen and Business Surveys and incorporating results in annual updates.

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Management Action Plan

Management agrees with the audit recommendations.

Public Works Strategic Portfolio and Business Performance is currently engaged in discussions with the OCIO department to develop a data mart that will allow data to be managed independently. This solution is intended to effectively organize and oversee data such as ASE, while also being adaptable for use in other areas of the MoveSmart initiative, enhancing overall data management capabilities. This can be achieved by the end of Q2 2025.

Efforts are currently underway to refine data metrics, with a targeted completion of Q4 2025. The program is exploring new technologies to enhance its data collection and reporting capabilities, subject to available funding through the annual budget process.

Continue to use benchmark protocols to compare MoveSmart's KPIs with municipalities in York Region through the York Region Vision Zero Traveller Safety Plan. This includes sharing the City's plans, policies, standards and guidelines to support best practices through a central repository developed by York Region in November 2024. By Q4 2025, we will incorporate benchmarking findings into annual updates to provide context on MoveSmart's performance relative to external benchmarks, promoting transparency.

Continue to work with internal and external stakeholders (e.g., True North Safety and York University MITAC) to advance data automation and analysis to inform KPIs for continuous monitoring. This involves implementing APIs to extract data from the source and automate calculations already underway. Scope of work is scheduled for Q1 2025 completion with design and implementation for Q3 2025, subject to resources.

Staff have reached out to CME to ensure that appropriate questions are developed for future surveys. These questions will focus on citizen satisfaction with the implementation of MoveSmart programming, as well as road safety and mobility management efforts. The next Citizen Survey is scheduled for release in 2026.

3. *Ensure City Projects Adhere to Industry Frameworks and Best Practices for Data and Security Management*

Data and technology are considered the cornerstones of MoveSmart. The Data Management Program is the foundation that supports all the initiatives within MoveSmart to inform evidence-based decisions and policy development. As new technologies are implemented within the data warehouse and as information sharing and analytics are enhanced through various cloud-based systems provided by third-party vendors, traffic data is more readily available to help identify road safety improvements in areas of focus based on evidence.

MoveSmart is currently in the phase of developing its data management framework. According to the Committee of Whole (Working Session) Report on March 6, 2024, entitled "MOVESMART MOBILITY MANAGEMENT STRATEGY 2024 ANNUAL REPORT" (Report 1, Item 5), the Traffic Engineering Division of TFMS is working in conjunction with IPCAM to develop a Transportation Planning Data Management Strategy or "Roadmap" (the Transportation Data Management Roadmap Project or the Project), which will identify the actions needed to establish a comprehensive, modern, and high-quality multi-modal database upon which the City will be able to monitor the implementation progress of the 2023 Vaughan Transportation Plan and the MoveSmart Mobility Management Strategy.

As traffic data form part of the City of Vaughan's data asset and inventory, OCIO should be engaged to ensure that new technology solutions are aligned with the City's overall data management practices, IT infrastructure architecture and security framework. The OCIO Workplan process requires a Business Request be submitted for any activity involving information or technology components, in consultation with the OCIO Business Relationship Manager. Examples include new software acquisitions, process automation, and data management. Each request must be assessed for readiness, including items like process mapping, documented requirements, cost determination, secured funding, stakeholder agreement, and OCIO skill availability. In addition, per discussion with the City's Legal Services, it is best practice to incorporate data protection and privacy terms into the City's agreements, with refinements, additions, and/or deletions, subject to risk assessments conducted in each situation.

Our review of the data management practices and processes had the following observations:

- At the time of the audit, although the need for OCIO involvement was acknowledged, the OCIO had not received a formal Business Request from the IPCAM Project Team to engage with the Project.

- Third-party data management agreements and procurement documents need key data protection and privacy terms, such as data security and confidentiality measures, data retention and deletion period, and the "right-to-audit' clause. The City's Procurement Services and Legal Services are currently reviewing and updating the procurement templates to ensure that appropriate terms and conditions are included.

- A process is not in place to request and review service organization audit reports for third-party service providers hosting the City's traffic data. These reports play a crucial

role in evaluating and communicating the effectiveness of a service provider's internal controls related to handling data and services.

The need for a better data management framework has arisen due to the increasing importance of data in MoveSmart's operations. The City's procurement templates did not reflect current data protection and privacy requirements. In the past, contracts were not always required to be reviewed by Legal Services to ensure they included comprehensive data protection and privacy terms. However, in 2023, procurement policies were updated to mandate a legal review for certain projects that fall under these policies. The absence of clear security, confidentiality, and data privacy terms could increase the risk of unauthorized access and legal non-compliance, which could impact the ability to successfully deliver on MoveSmart initiatives if appropriate indemnity efforts are not in place.

Since the commencement of the audit, with the assistance of the City's stakeholder departments, they have been working to improve the related processes to support MoveSmart and other City Services.

Recommendations

We recommend that:

- The IPCAM Project Manager of the Transportation Data Management Roadmap Project communicate with OCIO and extend a formal business request to OCIO to engage with the Project.

- Procurement Services, Legal, and Risk Management Services continue reviewing and updating the procurement templates to include:
    - Appropriate data protection and privacy terms and conditions.
    - A right-to-audit clause in contracts to allow the City to verify compliance with data protection and cybersecurity measures by vendors.

- Management implements a process to request and review annual service organization audit reports from third-party service providers to ensure ongoing compliance with data protection standards.

Management Action Plan

Management agrees with the audit recommendations.

The IPCAM Transportation Planning Data Management Strategy continues to gather background information. The Project Team recently sent out internal surveys to impacted staff/departments, which included multiple members of the OCIO team and responses are being currently reviewed. It was agreed that a formal Business Request would be submitted at this stage of the Project before the end of 2024.

Legal Services currently reviews and considers data and privacy terms for all agreements. The review and updating of templates for privacy and data protection terms will be part of a longer-term project to revamp the procurement agreement templates and to introduce a new

suite of IT-specific agreements. Given that Legal Services is also currently in the process of working with Procurement on the new RFP template and suite of non-IT and non-construction agreements, it is expected that the new suite of IT agreements will be complete midway through 2026.

4. ***Continue to Enhance Project Management by Leveraging Best Practices and Advances in Technology***

To achieve MoveSmart's goals, the MoveSmart team engaged external consultants under the guidance of Project and Program Managers. The City's PMO oversees projects and provides templates and tools for consistent delivery, while the Public Works Financial Performance Management Hub monitors finances in real time.

The Public Works Financial Performance Management Hub maintains Capital Budget Dashboard and an Operating Dashboard designed to empower staff with unparalleled financial clarity. The Capital Budget Dashboard extracts data directly from the City's JDE financial system (JDE). It is designed to provide real-time visibility into capital expenditure allocations, monitor project progress, and make informed decisions that align with the department's financial goals.

The City's Program Management Office (PMO) provides oversight and advisory services for designing and delivering projects and their lifecycle. The PMO has recently developed standard templates for different project phases, adhering to established project management frameworks and best practices. At the time of the audit, the PMO was undergoing integration with the City departments, including Public Works (PW). This integration will ensure that PW identifies and delivers projects, including those related to MoveSmart, through the Program Management Process. As a result, all applicable projects will be chartered, monitored, and reported consistently using standard templates and tools, with changes approved systematically.

Our review of selected MoveSmart project management processes had the following observations:

- During the audit, a glitch in the PW Capital Budget Dashboard was identified that prevented it from displaying and allocating invoices correctly, following a recent automation of the process. The issue led to the failure of the Capital Budget Dashboard to update properly. Per discussion with management, the root of the problem lies in the absence of regular data quality checks of the City's data mart, which resulted in a log error. The glitch may increase the risk of adverse decision-making based on incomplete or inaccurate data displayed on the dashboard. While the glitch has been rectified and the risk was currently considered low due to the slow movement of projects during the period, the incident underscores the need for enhanced system monitoring and improved business processes to detect and prevent similar glitches in the future.

- PW project managers use a manual Purchase Order Receiving Copy tracking sheet to monitor invoice status. Currently the manual process is used due to the absence of a comprehensive corporate-wide tracking and notification solution. However, this manual process lacks real-time detailed information on invoice processing stages, which could lead to occasional delays in processing invoice payments.   Per discussion with management, due to system limitations, JDE currently does not provide the project managers with direct visibility into invoice status. Delays in invoice payments can affect

vendor relationships and potentially disrupt project timelines if vendors withhold services due to non-payment.

The MoveSmart team is dedicated to a project management approach that emphasizes clarity, efficiency, and accountability. However, challenges have arisen in the consistent application of PMO standard templates, particularly for projects initiated in 2022 before the establishment of our current tools. In that year, the team engaged with the PMO and departmental stakeholders to explore applicable resources. Given the varying scope and complexity of the projects, not all tools are suitable for every initiative. The audit has identified a need for improved communication and training to enhance the understanding and application of these tools, which will foster consistency among client departments. The inconsistency in the use of PMO templates can be linked to the City's evolving project management maturity. Addressing these challenges is essential for achieving reliable outcomes and leveraging past experiences to improve future processes. For example, conducting Post Implementation Reviews (PIRs) could be improved for completed projects is crucial to gauge success and gather lessons learned.

Recommendations

We recommend that management:

- Continue to enhance system monitoring and improve business processes, particularly by increasing the frequency of data quality checks of the PW Dashboards.

- Before a corporate wide tracking and notification solution is implemented, staff should improve the invoice tracking business process by periodically tracking invoice status on the PW Capital Dashboard.

- Ensure all PMO standardized project templates are developed and enforced through additional communication and training plan. MoveSmart should institute a monitoring process to complement this and ensure compliance.

Management Action Plan

Management agrees with the audit recommendations.

Project and Program Managers will review invoice status every quarter within the PW Capital Dashboard to improve invoice tracking efficiency. Q1 2025.

PMO will work with MoveSmart management team to disseminate information including project management guidelines and tools, when ready.

An annual monitoring process will be undertaken internally among Project and Program Managers within MoveSmart to review and support compliance and provide support where needed. Q3 2025.

5. *Finalize Developing Automated Speed Enforcement (ASE) Operating Procedures and Staff Training*

According to the Committee of the Whole (Working Session) Report on November 29, 2023, entitled Automated Speed Enforcement (ASE) Implementation Plan (Report 1, Item 5), the City is in the process of implementing the ASE Program (ASE or the Program). The ASE Program aims to reduce speed, increase road safety, and raise public awareness to drive within the posted speed limits. It is a highly effective road safety tool designed to work in parallel with other MoveSmart initiatives, including engineering traffic calming measures, enforcement, and education. ASE promotes compliance with posted speed limits and reduces speeds and collisions in school and community safety zones. The City of Vaughan's ASE Program is anticipated to be active in Q1 2025.

The complexity and coordination challenges in developing ASE procedures stem from the need to synchronize efforts across various stakeholders while ensuring compliance with provincial regulations. This task is inherently complex due to each City department's diverse roles, from data collection to ticket screening and adjudication, and the need for consistent communication and policy alignment. Providing staff training requires significant resources and effort. Without comprehensive procedures or proper staff training, procedures may be incomplete or flawed, risking legal challenges and operational bottlenecks. This can undermine the ASE Program's credibility, increase administrative costs, and reduce its effectiveness in enhancing road safety, ultimately failing to achieve the intended outcomes.

Concurrently with finalizing the program milestones such as the selection of Joint Processing Centre (JPC), camera installation, and agreements with vendors and the Province, management was developing internal ASE operating procedures. The procedures outlined a comprehensive process for managing the Program, with the tasks and responsibilities divided among various vendors and City Departments. At the time of the audit, the procedure was still a work in progress, with some open questions to be addressed, including ticket processing, payment collection, City fleet ticket handling, legal compliance, and communication strategies. This has now been completed.

A dashboard is being developed to track various program performance metrics as well as the revenue and costs of the ASE program once ASE is active. It will serve the purpose of ensuring that any premium from the program will be reinvested into road safety initiatives, so the program stays cost neutral. The dashboard will be developed by Q2 2025.

It was noted that staff from the ASE working group continue to refine comprehensive operating procedures and training programs within their respective divisions ensuring compliance with ASE regulations and operating requirements:

- The City's Fleet Management Services have identified two people in the department who will be processing internal user group payments and tracking associated data. They will be developing training materials and SOP's once they have a clear line on the payment process. At the moment they are still working with Finance as to how they will be paying. Completion for ASE training will be in Q1 2025.

- In Vaughan Fire & Rescue Service, ASE has been communicated to all staff (via email), including locations. Expectations on following all provisions of the Highway Traffic Act have been communicated. Any ticket(s) received for infractions are immediately paid internally by the VFRS, to save any late fees. In consultation with Human Resources/Legal, performance management will begin by the end of Q1 2025, with the individual who has caused the infraction, after an investigation has been concluded.

- The City's BCLPS department has identified all personnel requiring ASE program training. Training programs and materials are currently under development, including administrative policies and procedures, templated forms, and technical guides. The estimated timeline for completion is Q1 2025, before the anticipated ASE launch and penalty notices are expected to be issued. Key training sessions include supervisory staff training, administrative staff training, and onboarding for new Screening Officers.

- The Office of City Clerk and Service Vaughan also have identified all personnel within the departments who require training on the ASE Program. The necessary training programs and materials are being developed. The estimated timeline for the completion of all ASE training is set for Q1 2025, ensuring all staff are prepared for the Program's anticipated launch.

This various action plans will support the ASE stakeholder group in finalizing ASE operating procedures which will support the successful implementation of the program to align with regulatory requirements and City policies and practices. This will also ensure transparency, alignment with evolving regulations, coherent administration and training processes and standard data collection practices to ensure the on-going success of the ASE program. Identified processes include:

ASE Operating Procedures

Complete Procedure Development:
- Develop a central repository of information related to ASE programming and administration – outside of the City's webpage. Q1 2025.
- Finalize ASE operating procedures, and coordinate with all ASE working group stakeholders ensuring procedures and SOPs for ticket processing, adjudication, payment processing, collections, fleet policy, and communication plans are generated and executed. Q2 2025.
- Create a dashboard to monitor the program's performance based on specified metrics to satisfy legislative reporting requirements and ensure transparency. Q2 2025.
- Continue to collaborate with stakeholders to refine key performance metrics to be tracked on the ASE dashboard, including revenue and cost analysis Q2 2025.
- Develop a process for the regular review and updating of ASE procedures to adapt to evolving regulations and technologies. Q4 2025.

Stakeholder Training Q4-2024 to Q4-2025
- All Stakeholders to create appropriate training programs for all personnel involved in the ASE Program, focusing on roles and responsibilities. Currently underway and to be completed Q2 2025.

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- All Stakeholders to schedule and deliver training sessions to ensure staff understand and execute the policies and procedures effectively. Currently underway and to be completed by Q2 2025.
- Maintain records of completed procedures, training attendance, and dashboard metrics for audit purposes. Q4 2025.

Internal Audit is satisfied with the actions management has already taken to address the risks identified in this observation and we have no further recommendations at this time.

6. ***Continue to Develop Standard Operating Procedures (SOPs) for MoveSmart Projects and Policies***

A Standard Operating Procedure (SOP) is a set of written instructions documenting a routine or repetitive activity that staff follow. They document the way activities are to be performed to facilitate consistent conformance. SOPs serve as a key tool for standardizing processes, reducing errors, and ensuring all team members align with organizational goals and regulatory requirements.

The need for SOPs has become particularly pressing due to the expansion of the Division in recent years, which has brought new responsibilities and challenges such as the implementation of MoveSmart. The development and use of SOPs are an integral part of a successful quality system, as they provide individuals with the information to perform a job properly and facilitate consistent implementation of the quality and integrity of the result. Management has acknowledged the need to continue to develop and revisit their existing SOP documents to ensure that they are appropriate, up-to-date, and comprehensive to help ensure consistency and quality.

Management has begun to develop standard operating procedures (SOPs) for MoveSmart Programs and Policies and will continue to work on developing additional SOPs as programs become operational. Adhering to best practices is essential in this process. Furthermore, periodic reviews of these SOPs will be implemented and documented.

Internal Audit is satisfied with the actions management has already taken to address the risks identified in this observation and we have no further recommendations at this time.