Strategic Asset Management Plan

City of Los Angeles - Bureau of Street Services

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Executive Summary

The Strategic Asset Management Plan (SAMP) helps StreetsLA direct limited resources to the assets, services, and risks that matter most. Its purpose is to improve public safety, service reliability, investment transparency, and long-term infrastructure stewardship. The SAMP establishes a coordinated, risk-informed approach to asset lifecycle management that focuses on public value. It connects City and StreetsLA priorities with asset planning, operation, maintenance, renewal, replacement, and improvement. To translate the Asset Management Policy into practice, it defines strategic objectives, governance, decision criteria, performance management, capability requirements, and implementation priorities. The SAMP is structured to align with ISO 55001 asset management principles and the City of Los Angeles Mayor's Executive Directive No. 9.

The SAMP applies to infrastructure assets operated, maintained, or managed by StreetsLA and to the people, processes, information systems, governance, and organizational functions supporting them. The City-wide portfolio currently comprises 73 asset classes, outlined in Appendix A. StreetsLA-managed assets support mobility, accessibility, public safety, environmental sustainability, municipal operations, and community services. StreetsLA-managed assets are outlined in Table 3-1 OpenGov EAM Asset Types.

The SAMP's strategic objectives provide a practical basis for balancing cost, risk, performance, and service outcomes across the asset lifecycle. Equity, resilience, and sustainability are integral to that balance. The objectives address:

- Governance and accountability; alignment with City priorities and regulatory requirements.
- Reliable asset information and effective use of OpenGov EAM.
- Consistent risk management, lifecycle optimization, and defined levels of service (LoS).
- Workforce capability and long-term financial planning.
- Sustainability, resilience, compliance, value realization, and continual improvement.

The Risk Management Framework is central to the SAMP. It establishes a consistent risk management process covering identification, analysis, evaluation, treatment, monitoring, and communication. Assessments combine probability of failure (PoF), including underperformance, with consequence of failure (CoF). CoF considers impacts on public safety, mobility, service continuity, financial performance, regulatory compliance, the environment, equity, resilience, and public confidence. The resulting risk information is intended to guide inspection frequency, maintenance priorities, operational controls, rehabilitation, renewal, replacement, resilience investments, and capital-program decisions.

The Asset Condition and Performance Management (ACPM) Framework connects physical condition with operational performance, reliability, risk, lifecycle cost, and service outcomes. StreetsLA will progressively establish common assessment principles, condition ratings, performance measures, targets, and reporting practices. Methods will remain tailored to individual asset classes. OpenGov EAM and GIS will integrate inspection, work order, service request, risk assessment, parts inventory, and financial information to support asset health monitoring and lifecycle and investment decisions. Implementation will reflect

differences in assessment capability and data maturity across the portfolio. As capabilities mature, StreetsLA will expand assessment coverage, standardize methods, and improve data quality.

The Decision-Making Framework strengthens the consistency and defensibility of decisions, from daily operations and maintenance to long-term capital planning. It evaluates alternatives against asset condition, risk, service delivery, lifecycle cost, public safety, equity, sustainability, resilience, regulatory obligations, and strategic alignment. The framework supports lifecycle cost analysis, benefit-cost analysis, multi-criteria decision analysis, scenario planning, and portfolio optimization. These methods help compare competing needs and direct limited resources toward investments that provide the greatest overall public value.

Effective implementation requires clear governance, decision authority, and accountability. Building on existing organizational practices, the proposed governance structure brings together:

- Executive leadership, an Asset Management Steering Committee, and an asset management program function.
- Asset owners, division leadership, engineering, maintenance, and finance.
- GIS and data management, and OpenGov EAM administration.

A Responsible, Accountable, Consulted, and Informed (RACI) matrix will clarify participation and accountability across asset information, risk, condition assessment, maintenance planning, capital investment, performance reporting, technology administration, competency development, and continual improvement.

Successful asset management requires organization-wide adoption supported by, but not limited to, effective technical processes and systems. The SAMP's communication, organizational change management, and competency development strategies are intended to build leadership support, stakeholder understanding, role clarity, workforce readiness, and sustained adoption of revised business practices. Competency assessments will identify gaps, and development actions will address them across:

- Governance, lifecycle planning, risk analysis, and condition assessment.
- Work management, asset information, and financial planning.
- OpenGov EAM use and performance management.

Financial sustainability connects long-term funding decisions with asset condition, performance, risk, lifecycle needs, service expectations, and organizational capacity. The SAMP calls for multi-year financial planning supported by documented funding-gap analysis, sustainable reserve strategies, stronger business cases, and continued development of predictable revenue sources. This approach is intended to improve investment timing and transparency. It balances preventive maintenance, rehabilitation, renewal, regulatory obligations, and operational demands against available resources.

Implementation should proceed through coordinated, phased initiatives that:

- Establish governance and strengthen asset and risk data.

- Define service and performance expectations.
- Integrate risk and lifecycle information into budgeting and capital planning.
- Configure OpenGov EAM and build workforce capability.
- Establish ongoing monitoring and assurance.

The proposed governance structure requires appointed personnel to embed SAMP review and continual improvement into routine management. The SAMP should be reviewed annually and comprehensively updated every three to five years, or sooner when material changes affect policy, priorities, asset condition, risk, funding, technology, regulatory requirements, or organizational structure. It is a living management document. Keeping it current will help StreetsLA move from fragmented or reactive practices toward coordinated, proactive, transparent, and evidence-based infrastructure stewardship.

The following SAMP Implementation Roadmap sets out a multi-year approach to embedding asset management in governance, planning, investment, and operational decisions. Six overlapping phases move the program from foundational practices to portfolio-wide adoption and sustainment. Implementation begins with governance and accountability, followed by foundational data, risk, competency, and information management practices. Priority asset classes then pilot condition assessment, risk assessment, LoS, lifecycle planning, and asset management planning frameworks before these practices are integrated into operations and maintenance, budgeting, and Capital Investment Program (CIP) decisions.

As the program matures, StreetsLA will expand these frameworks across the portfolio. Improved integration of GIS, financial, inspection, and OpenGov EAM information will support this expansion, alongside preventive maintenance strategies, data quality controls, training, and portfolio-level reporting. The final phase sustains the program through performance and investment reviews, assurance and maturity assessments, benefits and risk-reduction tracking, annual SAMP reviews, and continual improvement. Key milestones extend from initial program mobilization at Month 6 to a sustainment and maturity review at Month 60.

Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
ACPM	Asset Condition and Performance Management
AM	Asset Management
AMS	Asset Management System
APM	Asset Performance Management
BCA	Benefit-Cost Analysis
CIP	Capital Investment Program
CoF	Consequence of Failure
EAM	Enterprise Asset Management
ED 9	Executive Directive No. 9
FCA	Facility Condition Assessment
GIS	Geographic Information System
ISO	International Organization for Standardization
IT	Information Technology
KPI	Key Performance Indicator
KRI	Key Risk Indicator
LCCA	Lifecycle Cost Analysis
PoF	Probability of Failure
LoS	Levels of Service
MCDA	Multi-Criteria Decision Analysis
MTBF	Mean Time Between Failures
O&M	Operations and Maintenance
RACI	Responsible, Accountable, Consulted and Informed
RUL	Remaining Useful Life
SAMP	Strategic Asset Management Plan
SMART	Specific, Measurable, Achievable, Relevant and Time-bound

Glossary

Term	Definition
Asset	An item, thing, or entity that has potential or actual value to the organization.
Asset Class	A grouping of assets that have similar functions, characteristics, management requirements, or lifecycle considerations.
Asset Criticality	The relative importance of an asset based on the consequences of its failure or inability to provide its intended service.
Asset Information	Data and documented information required to understand, manage, and make decisions about assets throughout their lifecycle.
Asset Information Requirements	The information needed to support asset management objectives, decision-making, operational activities, reporting, and assurance.
Asset Lifecycle	The stages involved in managing an asset, which may include planning, acquisition, design, construction, commissioning, operation, maintenance, rehabilitation, renewal, replacement, decommissioning, and disposal.
Asset Management	Coordinated activity of an organization to realize value from assets. Realization of value normally involves balancing of cost, risks, opportunities and performance benefits

Strategic Asset Management Plan (SAMP)

IMPLEMENTATION ROADMAP

1 Mobilize & Establish Governance
Months 0 – 6

Leadership, ownership, and implementation control

- Appoint Executive Sponsor and Program Lead
- Establish Asset Management Steering Committee
- Confirm asset owners and RACI
- Approve implementation plan, communications and change strategy

2 Build the Foundation
Months 3 – 12

Standards, data, risk, and capabilities

- Complete asset data and process gap assessments
- Establish data governance and information requirements
- Finalize risk methodology, appetite and tolerance
- Conduct competency assessment
- Prioritize assets for initial implementation

3 Develop & Pilot Core Frameworks
Months 9 – 18

Prove the approach on priority asset classes

- Pilot risk and criticality assessments
- Define condition methodologies, levels of service, KPIs and KRIs
- Develop pilot asset management plans and lifecycle strategies
- Configure OpenGov EAM workflows and reporting

4 Integrate into Business Processes
Months 15 – 30

Make the frameworks operational

- Integrate risk, condition, lifecycle, and value into O&M, budget and CIP decisions
- Implement dashboards and governance review cycles
- Apply prioritization and portfolio optimization
- Expand training and change management

5 Scale Across the Portfolio
Months 24 – 48

Enterprise rollout and consistency

- Extend AMPs, assessments and risk registers to additional asset classes
- Improve GIS, financial, inspection and OpenGov EAM integration
- Implement preventive maintenance strategies
- Expand data quality controls and portfolio reporting

6 Optimize, Assure & Sustain
Months 36 – 60+

Performance, assurance, and maturity improvement

- Conduct outcome and investment reviews
- Refine strategies and decision criteria
- Perform internal assurance and maturity assessments
- Track benefits and risk reduction
- Institutionalize annual SAMP reviews and continual improvement

Year	Year 1 (0 – 12 months)	Year 2 (12 – 24 months)	Year 3 (24 – 36 months)	Year 4 (36 – 48 months)	Year 5 (48 – 60+ months)
Governance & Accountability	Establish → Embed → Refine → Sustain				
Asset Information & Data Governance	Assess & Plan	Implement & Improve	Expand & Integrate	Sustain	
Risk & Criticality	Develop Methodology	Pilot & Implement	Expand Across Portfolio	Monitor & Improve	
Condition & Performance	Define & Pilot	Scale Assessment & Reporting	Refine Targets		
Lifecycle Planning & AMPs	Develop Template & Pilots	Expand to Additional Assets	Maintain & Update		
Decision-Making & Investment	Define Criteria	Apply to Budget & CIP	Portfolio Optimization	Continuous Improvement	
OpenGov EAM & Technology	Plan & Configure	Implement & Integrate	Expand & Automate	Optimize	
People, Change & Competency	Assess & Plan	Training & Adoption	Expand & Embed	Sustain	
Financial Planning	Define Requirements	Initial Forecasts & Gap Analysis	Integrate into Financial Planning	Refine & Update	
Assurance & Improvement	Establish Baseline	Review & Learn	Annual Assurance	Comprehensive Review	

Key Milestones

Month 6
Program Mobilization Approved

Month 12
Foundation Approved

Month 18
Pilot Frameworks Accepted

Month 30
Business Integration Demonstrated

Month 48
Portfolio Deployment Substantially Complete

Month 60
Sustainment & Maturity Review Completed

Term	Definition
Asset Management Objectives	These are objectives set by the organization, consistent with the asset management policy, to achieve specific results.
Asset Management Plan	Documented information that specifies the activities, resources, costs and timescales required for an individual asset, or a grouping of assets, to achieve the organization's asset management objectives.
Asset Management System (AMS)	Management system for asset management.
Asset Owner	The designated role accountable for the performance, risk, lifecycle planning, information requirements, and investment needs of an assigned asset or asset class.
Asset Portfolio	The collection of assets within the scope of the asset management system.
Competence	The ability to apply knowledge and skills to achieve intended results.
Consequence of Failure	The severity of the effects that could result if an asset fails, underperforms, or cannot provide its intended service.
Continual Improvement	Recurring activity undertaken to improve the suitability, adequacy, effectiveness, or performance of the asset management system and associated practices.
Corrective Action	Action taken to eliminate the cause of a nonconformity and prevent recurrence.
Critical Asset	An asset whose failure or loss of function could have significant safety, service, financial, regulatory, environmental, equity, resilience, or reputational consequences.
Documented Information	Information that an organization is required to control and maintain, together with the medium on which it is contained.
Enterprise Asset Management	An organization-wide approach, supported by processes and technology, for managing asset information and lifecycle activities.
Facility Condition Assessment	A systematic evaluation of the physical condition, deficiencies, renewal needs, and anticipated costs associated with a facility.
Key Performance Indicator	A measure considered important for evaluating progress toward objectives or intended outcomes.
Level of Service	A defined statement or measure describing the service outcomes and performance expected from assets or asset-related activities
Probability of Failure	The probability that an asset will fail, underperform, or cease to provide its intended level of service within a defined planning period.
Performance	A measurable result that may relate to an asset, service, process, activity, system, or organization. Asset performance refers to the extent to which an asset fulfills defined requirements or objectives.
Policy	Intentions and direction of an organization as formally expressed by its top management.
Risk	Effect of uncertainty on the organization's objectives. An effect is a deviation from the expected. Risk is also defined as the events or occurrences that will have an undesired impact on services.
Risk Management	Defined in ISO 31000:2018 as: 'coordinated activities to direct and control with regard to risk'.
Stakeholder	These are interested parties. A person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity.
Strategic Asset Management Plan (SAMP)	Documented information that contains and aligns asset management policy, objectives, strategies and approaches for developing and managing the asset portfolio and the asset management system.

1 Introduction

The StreetsLA Strategic Asset Management Plan (SAMP) connects policy intent with day-to-day asset management. It establishes a framework for managing the full asset lifecycle, including planning, operation, maintenance, renewal, replacement, and improvement. The SAMP translates the StreetsLA Asset Management Policy into actionable objectives, decision criteria, governance practices, risk and performance management processes, and implementation priorities. These elements support the City of Los Angeles' (City) strategic objectives, public service commitments, regulatory responsibilities, and long-term financial stewardship. The aim is public value. The SAMP provides a practical roadmap for balancing cost, risk, performance, and LoS, alongside resilience, equity, and sustainability across the asset lifecycle. It coordinates maintenance planning, capital investment, budgeting, asset information management, performance monitoring, and continual improvement. This consistent approach aligns operational decisions and investment priorities with long-term service delivery, infrastructure performance, safety, resilience, and responsible use of City resources.

The SAMP supports implementation, accountability, and long-term improvement of StreetsLA's asset management program through the following functions:

- Define asset management objectives and connect them with City goals, service commitments, and infrastructure stewardship priorities.
- Establish a consistent decision-making framework for asset investment, maintenance, renewal, and operational priorities.
- Clarify asset management governance, roles, responsibilities, and accountability.
- Provide a lifecycle framework for identifying, evaluating, prioritizing, mitigating, and monitoring asset risks and managing asset performance.
- Guide decisions using asset information, condition data, risk exposure, operational requirements, and financial considerations.
- Support OpenGov EAM implementation and use as a core platform for work management, asset information, inspections, reporting, and decision support.
- Identify capability gaps and improvement initiatives needed to advance asset management maturity.
- Promote continual improvement, transparency, and evidence-based decision-making.
- Maintain a living framework that can be reviewed and updated as asset conditions, service expectations, funding, organizational priorities, and technology capabilities evolve.

The SAMP is being developed to align with ISO 55001 asset management principles and the requirements of the Mayor's Executive Directive No. 9. Together, they provide the governing foundation for the SAMP's objectives and its provisions for governance, risk management, asset information, performance management, technology, and continual improvement. Their complementary roles are:

- ISO 55001 provides an internationally recognized framework for establishing, implementing, maintaining, evaluating, and continually improving an Asset Management System (AMS). It emphasizes leadership, planning, support, operation, performance evaluation, and improvement.

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- Executive Directive No. 9 reinforces the City's expectations for coordinated infrastructure planning, accountability, transparency, reliable information, clear governance, and responsible stewardship of public assets.

StreetsLA's AMS encompasses the infrastructure assets and supporting processes, information systems, governance arrangements, and organizational functions needed to plan, operate, maintain, renew, and improve assets within its accountability. The SAMP applies to infrastructure assets owned, operated, maintained, or managed by StreetsLA, as outlined in Table 3-1, and to the processes, information systems, and organizational functions supporting their management.

1.1 Relationship Between the Asset Management Policy and SAMP

StreetsLA's Asset Management Policy (Policy) sets the direction; the SAMP translates it into practice. Both are complementary components of the AMS. The Policy establishes the principles, commitments, and leadership direction for coordinated, risk-informed asset lifecycle management focused on value. The SAMP translates City objectives, stakeholder requirements, and Policy commitments into a structured implementation approach covering:

- Strategic asset management objectives, governance, and decision criteria.
- Lifecycle strategies and resource and capability requirements.
- Performance measures and improvement priorities.

In accordance with ISO 55001, the SAMP defines how StreetsLA's assets, asset management activities, and AMS support organizational objectives. It provides a common framework for planning, prioritization, and consistent decisions across asset portfolios. Together, the Policy and SAMP connect City and StreetsLA priorities directly to asset-level activities.

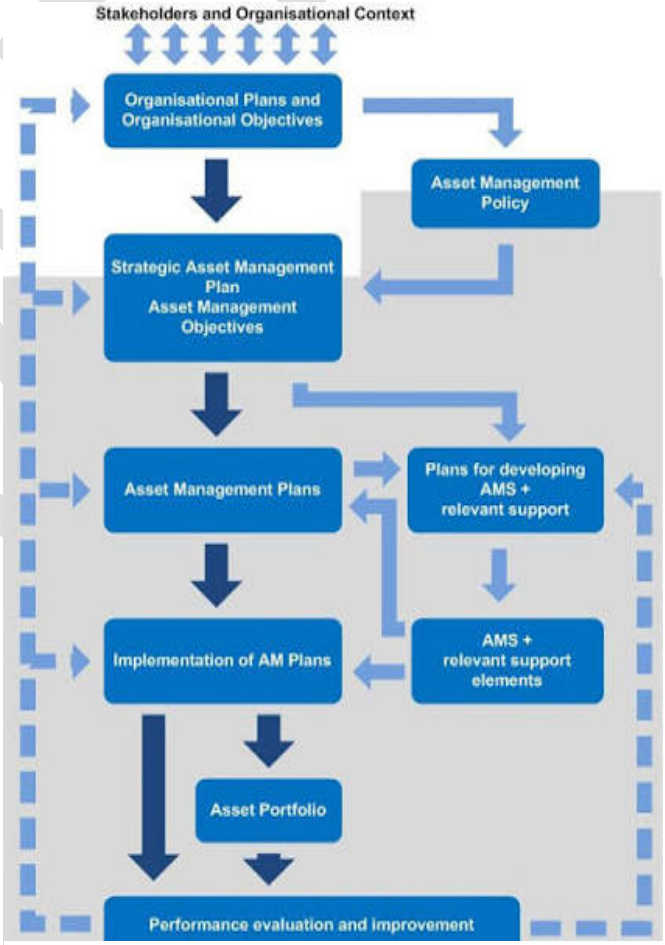


Figure 1-1 Asset Management System (ISO 55002:2019)

The Policy defines what StreetsLA is committed to achieving and the principles guiding asset decisions. The SAMP explains how those commitments will be applied and coordinated across organizational functions. Its implementation responsibilities include:

- Establishing common approaches to asset management objectives and value considerations throughout the asset lifecycle.
- Integrating technical and financial planning.
- Clarifying roles, responsibilities, authorities, and reporting requirements.
- Identifying the organizational capabilities needed to achieve asset management objectives.

Asset Management Plans (AMPs) turn the SAMP's strategic direction into asset-specific delivery. Guided by the SAMP, each AMP defines the activities, resources, costs, responsibilities, and schedules needed to manage individual assets or asset groups. AMPs translate strategic objectives, lifecycle strategies, performance requirements, risk management practices, and investment priorities into actions and programs tailored to asset groups or asset classes. They set out resource requirements and implementation activities, providing the tactical and operational detail needed for lifecycle delivery and asset-specific decisions. Alignment with the SAMP's objectives and direction remains central.

OpenGov EAM configuration, operational plans, and documented procedures embed this direction in routine business processes. OpenGov EAM should reflect Policy and SAMP requirements through:

- Workflows, data structures, and required fields.
- Inspection templates and work orders.
- Approval controls and reporting tools.

Operational plans and procedures apply these requirements to day-to-day activities:

- Inspection, maintenance, rehabilitation, renewal, and replacement.
- Capital planning, risk mitigation, work management, and performance monitoring.

This policy-to-delivery relationship promotes vertical alignment between organizational objectives and asset-level work. It also supports horizontal alignment among leadership, engineering, maintenance, operations, finance, planning, GIS, information management, and other supporting functions.

1.2 Strategic Asset Management Policy Objectives

The policy objectives in this SAMP translate StreetsLA's Asset Management Policy and strategic vision into clear priorities for asset decisions. Consistent with ISO 55001 and ISO 55002 principles, they align asset management with City priorities, service commitments, regulatory obligations, risk management, and long-term financial sustainability. They guide improvements in governance, asset information, risk-based decisions, lifecycle planning, service delivery, workforce capability, and continual improvement. The aim is

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coordinated action. Investments, operations, and improvement initiatives should work together to deliver lifecycle value for the City and its stakeholders.

Each objective below explains its alignment with applicable City policies, strategic priorities, and organizational commitments.

Objective 1: Establish and fully implement an asset management governance framework that defines roles, responsibilities, decision authorities, and reporting requirements.

StreetsLA will maintain a documented governance framework identifying who is responsible, accountable, consulted, and informed (RACI) for significant asset management activities and decisions. The framework will define responsibilities across:

- Asset ownership, data stewardship, and condition and risk assessment.
- Maintenance and lifecycle planning, capital-project development, investment prioritization, and financial planning.
- System administration, performance reporting, risk acceptance, and continual improvement.
- City alignment: clarify asset ownership and departmental responsibilities and strengthen cross-departmental accountability.

Objective 2: Ensure asset management plans, investment decisions, and programs are aligned with City priorities, service objectives, and regulatory requirements.

StreetsLA will align asset management strategies, operational programs, maintenance, and capital investment proposals with City objectives, Executive Directive No. 9, regulatory requirements, and community service expectations. This alignment connects citywide policy with asset-level priorities. It demonstrates how StreetsLA's programs advance infrastructure and service outcomes and directs resources toward priority services, risks, and community needs. Day-to-day decisions should reinforce public value, responsible stewardship, and consistent delivery of the organization's strategic direction.

Objective 3: Improve the quality, completeness, and reliability of asset data used for decision-making.

Reliable asset information is the basis for defensible decisions. StreetsLA will establish and maintain information about assets it owns or manages, covering:

- Location, classification, ownership, condition, and expected service life.
- Criticality, performance, maintenance history, lifecycle needs, risk exposure, and financial requirements.
- Decision use: support maintenance planning, condition and risk assessment, lifecycle forecasting, LoS monitoring, capital prioritization, financial planning, and reporting.
- City alignment: maintain centralized inventory, location, condition, and expected-lifespan records to improve maintenance deployment and capital forecasting.

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Objective 4: Utilize enterprise asset management systems as the authoritative source of asset information and work management activities.

StreetsLA will use OpenGov EAM and approved integrations as the authoritative operational source for applicable asset information and work management records. Implementation will address:

- Records: asset inventories and attributes, inspections, condition assessments, service requests, preventive and corrective maintenance, work orders, failure history, costs, risk information, and completed work.
- Controls: establish system controls, required fields, data ownership, validation rules, approval workflows, user permissions, and reporting requirements to maintain reliability and traceability.
- City alignment: support centralized asset management systems and shared platforms for crew deployment, maintenance reporting, coordination, and capital forecasting.

Objective 5: Implement a consistent risk-based approach for asset planning, maintenance, and investment decisions.

StreetsLA will apply a common Risk Management Framework to identify, analyze, evaluate, prioritize, treat, monitor, and communicate asset risks. Assessments will combine probability of failure, including underperformance, with consequence of failure. The framework will address:

- Consequences: public safety, mobility, accessibility, service continuity, legal and regulatory compliance, financial performance, the environment, equity, resilience, and public confidence.
- Decision use: determine inspection frequencies, maintenance priorities, operational controls, renewal and replacement needs, resilience measures, and capital investment priorities.
- City alignment: reduce risk, liability, and asset failures and direct limited resources toward investments with the greatest policy and service value.

Objective 6: Optimize lifecycle decision-making to balance cost, risk, performance, and service outcomes.

StreetsLA will apply lifecycle management principles to select interventions and determine their timing. Options include:

- Inspection, preventive and corrective maintenance, and preservation.
- Rehabilitation, renewal, replacement, expansion, and disposal.

Asset-class or portfolio strategies will connect near-term operations with long-term renewal forecasts and capital requirements. Better timing helps avoid unnecessary reactive work, premature replacement, and deterioration to failure. This objective supports the City's goals of maintaining assets in a good state of repair, extending public asset life, and anticipating staffing and funding needs.

Objective 7: Monitor and maintain defined levels of service for transportation infrastructure.

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StreetsLA will establish measurable LoS that define expected public outcomes and the performance standards needed to deliver them. Relevant considerations include:

- Safety, availability, condition, and reliability.
- Mobility, accessibility, responsiveness, and customer experience.
- Environmental performance, equity, and resilience.

Condition and performance measures will identify service gaps, establish intervention thresholds, evaluate trends, and determine when maintenance or capital action is needed. This objective supports the City's direction for outcome-oriented service standards that connect staffing and capital investment to infrastructure results.

Objective 8: Develop and maintain workforce competencies required to support asset management practices.

StreetsLA will identify the knowledge, skills, experience, staffing, tools, and support needed for asset management responsibilities. Targeted development will address competency gaps through:

- Training, guidance, mentoring, and access to appropriate technical tools.
- Recruitment, succession planning, knowledge transfer, and updated procedures.

Workforce and delivery-capacity constraints should inform maintenance programs, improvement initiatives, and capital schedules. Capacity matters as much as project funding. This objective reflects the City's recognition that infrastructure planning must account for staffing and operations, not only capital funding and construction.

Objective 9: Integrate asset management into long-term financial planning and investment decision-making.

StreetsLA will use condition, performance, risk, lifecycle, maintenance, service, staffing, and cost information to forecast long-term operating, maintenance, renewal, rehabilitation, replacement, and improvement needs. Financial planning will distinguish the costs of:

- Sustaining current services and addressing accumulated needs.
- Managing unacceptable risks and meeting future demand.
- Delivering approved improvements.

This objective supports coordinated infrastructure and fiscal planning, accounting for maintenance funding, investment history, current funding, future needs, and available funding sources.

Objective 10: Continually improve the maturity and effectiveness of the asset management system.

StreetsLA will regularly evaluate AMS performance and maturity and implement prioritized improvements. Reviews should consider:

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- Progress toward asset management objectives and SAMP implementation.
- Asset and service performance, data quality, risk management effectiveness, and lifecycle practices.
- Technology use, governance performance, workforce capability, and lessons from maintenance and completed projects.

The SAMP and its objectives should be updated when material changes affect StreetsLA's asset management approach. Triggers include changes in City policy, service expectations, asset condition, funding, organizational capacity, regulatory requirements, technology, or emerging risks.

Objective 11: Establish and maintain an effective asset management system supported by leadership oversight, governance, and adequate organizational resources.

StreetsLA leadership will provide the direction, oversight, resources, and organizational support needed to implement, maintain, evaluate, and continually improve the AMS. Governance will connect asset management with:

- Strategic planning, operations, maintenance, and engineering.
- Finance, budgeting, capital planning, and procurement.
- Information management, GIS, technology, and other relevant functions.

Leadership and governance bodies will review asset performance, priority risks, investment needs, resource constraints, implementation progress, and improvement actions. This objective supports the City's call for stronger governance, clearer accountability, coordinated technical review, transparent decisions, and better integration across asset-owning and supporting departments.

Objective 12: Optimize value from infrastructure assets through balanced lifecycle decision-making that considers cost, risk, performance, sustainability, and service outcomes.

StreetsLA will evaluate asset management alternatives against organizational objectives and the value they deliver over the planning horizon. Value assessments should balance financial and non-financial considerations:

- Lifecycle cost, risk reduction, performance, and service outcomes.
- Safety, accessibility, equity, preservation, sustainability, and resilience.
- Economic benefit, deliverability, and community impact.

This objective reinforces the City's policy-scoring approach: evaluate projects against citywide guiding principles before applying prioritization factors such as mandates, readiness, funding, asset condition, and corridor coordination.

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Objective 13: Maintain compliance with applicable legal, regulatory, environmental, safety, and organizational requirements.

StreetsLA will identify and maintain visibility of requirements applicable to its assets and asset management activities. Compliance must remain visible in both routine work and investment decisions. Implementation will address:

- Requirements: legal, regulatory, permit, environmental, safety, accessibility, policy, and organizational obligations.
- Application: reflect applicable requirements in inspections, maintenance programs, work procedures, design criteria, capital projects, data records, performance measures, and assurance activities.
- Prioritization: incorporate compliance needs into the Risk Management Framework and capital prioritization, consistent with the City's use of legal, regulatory, and other mandates as primary considerations.

Objective 14: Integrate sustainability and resilience considerations into asset management planning, investment, and operational decision-making.

StreetsLA will consider environmental impacts, climate hazards, resource use, long-term adaptability, and recovery from disruption throughout the asset lifecycle, from planning, design, and construction through operation, maintenance, renewal, replacement, and disposal. Asset and investment decisions should consider:

- Exposure to applicable hazards, vulnerability of critical services, and alternative service routes.
- Material durability, maintainability, and environmental performance.
- Opportunities to improve resilience.

This objective directly supports sustainability and resilience as a citywide guiding principle and a consideration in capital-project prioritization.

1.3 Monitoring of Asset Management Objectives

Supporting frameworks, asset management plans (AMPs), performance management processes, and implementation roadmaps will establish performance measures, targets, and monitoring requirements for asset management objectives. These measures should make progress visible and inform strategic, tactical, and operational decisions. Measures and targets should be reviewed periodically to maintain alignment with:

- Organizational priorities and service delivery requirements.
- Risk exposure and available resources.
- Evolving asset management maturity.

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2 Risk Management Framework

Risk management is foundational to StreetsLA's strategic asset management approach. The Risk Management Framework establishes a consistent process for identifying, analyzing, evaluating, treating, monitoring, and communicating risks to safe, reliable, equitable, and cost-effective community services. A common approach makes vulnerabilities visible. It helps StreetsLA understand their effects on service outcomes and prioritize actions that reduce unacceptable risk exposure.

The framework supports ISO 55001 principles by integrating risk into asset decisions and linking it to asset management objectives, service outcomes, lifecycle strategies, investment planning, and continual improvement. This risk-based approach helps StreetsLA prioritize resources, address vulnerabilities, strengthen infrastructure resilience, and make informed maintenance, rehabilitation, renewal, and replacement decisions. Investment evaluations consider both PoF and CoF, including impacts on:

- Public safety and mobility.
- Regulatory compliance and financial performance.
- Equity and community trust.

The framework also supports the intent of Executive Directive No. 9 through transparency, accountability, and evidence-based decision-making. Consistent risk management practices strengthen the defensibility of investment decisions and can increase stakeholder confidence. They also help StreetsLA deliver sustainable public value while responsibly stewarding City infrastructure and resources. Over time, the framework should shift the organization from reactive responses to proactive risk identification, prioritization, mitigation, and monitoring across the asset portfolio.

2.1 Principles and Framework

StreetsLA's Risk Management Framework should follow six principles that support consistent, transparent, and effective decisions across the asset portfolio. They guide risk identification, assessment, prioritization, communication, mitigation, and monitoring. The purpose is practical: reinforce organizational objectives, inform maintenance and investment decisions, and sustain long-term service outcomes.

Alignment with Organizational Objectives

Risk assessments should reflect StreetsLA's asset management objectives, service commitments, Executive Directive No. 9, regulatory obligations, and City strategic priorities. This alignment keeps attention on risks that could materially affect public value, infrastructure performance, community outcomes, and organizational success. It also connects risk decisions directly to the SAMP. StreetsLA can then prioritize actions and investments that support intended business outcomes and reduce unacceptable risk exposure.

Consistency

Risk assessments should use standard definitions, methods, scoring criteria, and evaluation processes across asset classes and functional areas. A common approach makes risks comparable. It supports

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defensible priorities and equitable resource allocation while giving departments, leadership, and stakeholders a shared basis for discussing PoF, CoF, risk tolerance, and mitigation priorities.

Transparency

Risk assessments should be understandable and traceable. Assumptions, methods, data sources, scoring logic, and prioritization results should be clearly documented and accessible. This record helps stakeholders understand how risks are identified and prioritized, strengthening confidence and accountability. It also supports audits, governance, regulatory compliance, continual improvement, and subsequent reviews of whether risk responses were appropriate and effective.

Lifecycle Focus

Risk changes throughout the asset lifecycle. Assessments should cover:

- Planning, design, acquisition, and construction.
- Operation, maintenance, and rehabilitation.
- Renewal, replacement, and disposal.

A lifecycle perspective helps StreetsLA identify vulnerabilities early, manage long-term costs, and improve asset performance and resilience. It supports sustainable infrastructure management and informed investment planning. It also improves intervention timing before deterioration or service risks become harder and more costly to address.

Integration with Decision-Making

Risk information should actively shape routine decisions, not remain a separate assessment exercise. It should inform:

- Maintenance planning and capital improvement programming.
- Budgeting, resource allocation, and project prioritization.
- Day-to-day operational decisions.

This integration directs limited resources toward assets and activities with the greatest potential impact on service delivery, safety, regulatory compliance, and organizational objectives. It connects risk management with practical business outcomes by making risk information an active input to planning, prioritization, and operational choices.

Continual Improvement

Risk management practices, assessment criteria, and scoring methods should be reviewed and refined regularly as organizational needs, asset conditions, technologies, regulations, and available data evolve. Improvement is an ongoing responsibility. It strengthens assessment accuracy, decision-making, and StreetsLA's ability to respond to emerging risks and changing service expectations. Lessons from

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completed projects and asset failures should inform these refinements, supporting organizational learning and the continual improvement requirements of ISO 55001.

Together, these principles support informed decisions, infrastructure resilience, reliable service delivery, and responsible stewardship of City assets and resources. They provide a consistent reference for risk procedures, OpenGov EAM workflows, risk registers, and reviews of mitigation effectiveness over time.

2.2 Risk Categories

StreetsLA should use common risk categories to evaluate potential effects on service delivery, asset performance, organizational objectives, and community outcomes. The categories below support consistent identification, assessment, and prioritization across the asset portfolio. They also make risk exposure easier to compare and communicate, linking identified risks to mitigation actions, funding priorities, and performance monitoring.

Public Safety

Public safety risk is the potential for asset conditions, failures, or operational deficiencies to cause injury, loss of life, property damage, or unsafe conditions for residents, visitors, contractors, or City staff. Protecting public safety is a primary responsibility. Risks affecting roadway users, pedestrians, cyclists, transit users, and workers therefore require close attention. Assessments should guide investments that reduce hazards, address known deficiencies, and maintain safe infrastructure, including exposure to:

- Accidents and unsafe access.
- Traffic conflicts and other public-facing hazards.

Mobility and Service Disruption

Mobility and service disruption risk is the potential for asset failures, deterioration, maintenance, or external events to interrupt transportation networks, accessibility, traffic operations, or public services. Disruptions affect travel times, emergency response, economic activity, and residents' quality of life. Assessing this risk helps StreetsLA maintain reliable infrastructure and minimize critical-service interruptions. Particular attention should be given to assets supporting:

- High-volume corridors, emergency routes, transit access, and freight movement.
- Pedestrian travel and access to schools, businesses, and community facilities.

Asset Failure

Asset failure risk combines PoF with CoF. Failure ranges from minor performance degradation to major breakdowns that disrupt services or create safety concerns. Assessments identify vulnerable assets and guide maintenance, rehabilitation, and lifecycle investment to extend asset life and improve reliability. They should consider:

- Condition, age, failure history, and maintenance needs.

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- Environmental exposure and asset criticality.
- Potential cascading effects across connected infrastructure systems.

Financial and Budget Exposure

Financial and budget exposure risk is the potential for asset-related issues to create adverse financial impacts. Sources include:

- Deferred maintenance, funding shortfalls, and unexpected asset failures.
- Cost overruns and inflation.

Poorly managed risk can increase operating costs, accelerate deterioration, trigger emergency spending, and divert funding from strategic initiatives. Assessing financial exposure supports sustainable budgets, long-term financial planning, and responsible stewardship of public funds. It also clarifies trade-offs among planned maintenance, rehabilitation, replacement, and emergency response so resources target the most cost-effective risk reduction.

Regulatory and Compliance

Regulatory and compliance risk is the potential for noncompliance with federal, state, regional, or local laws, regulations, policies, permits, standards, or Executive Directives. Consequences may include fines, penalties, legal challenges, project delays, required corrective actions, and loss of public trust. Proactive assessment helps StreetsLA protect public interests, maintain compliance, and respond to changing requirements. Assessments should address exposure arising from:

- Asset conditions, work practices, and reporting obligations.
- Environmental requirements, accessibility standards, and safety rules.
- Funding conditions.

Environmental

Environmental risk is the potential for asset activities or failures to harm natural resources, water and air quality, habitat, vegetation, or the surrounding environment. Infrastructure both affects and is affected by environmental conditions. Assessments should account for:

- Stormwater runoff, erosion, and urban heat.
- Tree canopy conditions and construction or maintenance activities.

Environmental assessment helps StreetsLA minimize adverse impacts, advance sustainability objectives, and integrate environmental considerations into planning, maintenance, and capital programs. Early identification of mitigation measures can reduce exposure while improving asset resilience and community outcomes.

Climate and Resilience

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Climate and resilience risk addresses changing environmental conditions and climate-related hazards, including extreme heat, flooding, sea level rise, severe storms, drought, and wildfires. These hazards may affect asset performance, service reliability, maintenance needs, worker safety, emergency response, and long-term investment. Assessments help StreetsLA strengthen adaptability and preparedness and improve the City's ability to withstand and recover from disruption. Findings should inform:

- Asset design and material selection.
- Inspection frequency and renewal timing.
- Redundancy and resilience investments for assets exposed to current or future climate stressors.

Equity and Community Impact

Equity and community impact risk considers whether asset conditions, LoS, investment decisions, or infrastructure failures disproportionately affect particular neighborhoods, populations, or vulnerable communities. StreetsLA is responsible for equitable infrastructure services across Los Angeles. Decisions should therefore consider differences in:

- Access, mobility, and safety exposure.
- Service reliability and community need.

Assessments support fairness, accessibility, transparency, community well-being, and City equity goals. They help identify where investment, maintenance, or service improvements can reduce disparities and benefit communities facing greater consequences from infrastructure deficiencies.

Operational Capacity

Operational capacity risk is the potential for organizational constraints to limit StreetsLA's service delivery. Funding alone is not enough; programs also need sufficient expertise, materials, equipment, and delivery capability. Assessments should consider:

- Staffing limitations, skill gaps, and process inefficiencies.
- Technology constraints, contractor availability, supply chain disruptions, and other organizational challenges.
- Whether tools, workflows, training, and contractor support can sustain maintenance, inspection, emergency response, and capital delivery at the required LoS.

Understanding these constraints helps StreetsLA improve workforce readiness, business processes, and operational effectiveness.

Reputational

Reputational risk is the potential for asset incidents, service failures, project delays, safety events, public complaints, or ineffective decisions to undermine confidence in StreetsLA and the City. Public trust supports stakeholder engagement, funding, and accountability. Assessing this risk reveals the broader

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consequences of asset decisions and supports proactive communication, transparency, and responsible management. Particular attention is warranted when risks:

- Are highly visible, affect many users, or involve sensitive community concerns.
- Require clear communication with leadership, elected officials, regulators, media, or the public.

Application of Risk Categories

Together, these categories provide a comprehensive basis for evaluating asset risks beyond condition or financial impacts alone. This broader perspective supports balanced, transparent, and defensible decisions that protect public safety, service reliability, infrastructure resilience, regulatory compliance, and long-term public value. The approach aligns with ISO 55001 principles and supports Executive Directive No. 9 through risk-informed asset management and responsible stewardship of City resources.

2.3 Risk Analysis and Evaluation

Risk analysis and evaluation identify the greatest threats to service delivery and where limited resources can deliver the greatest public value. This structured, repeatable process helps StreetsLA anticipate failures and understand their consequences for communities, the organization, and the City. It provides a defensible basis for comparing risks across asset classes, documenting assumptions, and explaining priorities for assets, locations, and activities. Consistent evaluation distinguishes among:

- Issues requiring immediate action.
- Risks requiring planned mitigation.
- Conditions suitable for routine monitoring and asset management.

Consistent risk evaluation helps StreetsLA prioritize asset interventions based on objective criteria rather than asset age, funding availability, complaints, or anecdotal observations alone. It strengthens transparency, resource allocation, infrastructure resilience, and accountability to City leadership, elected officials, and the public. A shared view of vulnerabilities, service impacts, and investment priorities also improves coordination among maintenance, engineering, planning, finance, and leadership teams. To turn assessment into action, risk results should inform:

- Budgeting and work planning.
- Capital programming and performance reporting.

This integration directs resources toward assets and activities that offer the greatest risk reduction and strongest contribution to service outcomes.

Risk analysis should evaluate both PoF, including underperformance, and CoF. Either can justify intervention. An asset may need attention because failure is likely, or because an unlikely failure would have significant consequences. Condition alone does not define risk; asset vulnerability, criticality, and the

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consequences of service disruption must also be considered. CoF assessment should address potential impacts on:

- Safety and mobility.
- Financial performance and regulatory compliance.
- Equity, the environment, and organizational reputation.

The resulting risk scores should guide:

- Mitigation planning, inspection frequency, and preventive maintenance strategies.
- Capital investment priorities and ongoing monitoring through OpenGov EAM and related performance reporting tools.

2.3.1 Risk Scoring Methodology

Risk scoring combines PoF with CoF. Together, these factors describe how likely an asset is to fail and how severe the resulting impacts would be. Condition alone does not tell the full story. An asset may warrant attention because failure is highly likely, its consequences would be significant, or both.

Risk Score = Probability of Failure (PoF) × Consequence of Failure (CoF)

This methodology provides a practical basis for comparing risks across asset types, service areas, and geographic locations. It helps StreetsLA identify the assets presenting the greatest overall risk and prioritize action. Risk scores should be:

- Documented in a consistent format.
- Reviewed with appropriate asset owners and functional teams.
- Used to guide maintenance planning, inspection scheduling, and mitigation strategies.
- Used to support capital prioritization and ongoing performance reporting.

The following risk matrix illustrates how PoF and CoF can be combined to assign an overall risk level. This example supports consistent prioritization of maintenance, mitigation, and investment decisions.

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Probability	Consequence: 1 Insignificant	2 Minor	3 Moderate	4 Major	5 Extreme
5 Almost Certain	Medium	High	High	Very High	Very High
4 Likely	Medium	Medium	High	High	Very High
3 Possible	Low	Medium	Medium	High	High
2 Unlikely	Low	Low	Medium	Medium	High
1 Rare	Low	Low	Low	Medium	Medium

Figure 2-1 Risk Matrix

2.3.2 Probability of Failure Assessment

PoF estimates whether an asset, system, or component will fail, fall below acceptable performance, or cease to provide its intended LoS within a defined planning period. Similar age or type does not imply similar PoF. An operational asset may still show warning signs through poor condition, recurring maintenance needs, heavy use, environmental exposure, or known defects. Consistent PoF assessment helps StreetsLA identify assets requiring closer monitoring, earlier intervention, or more detailed lifecycle planning.

PoF assessments should draw on available asset data, field observations, maintenance records, and inspection results, supplemented by professional judgment where data gaps exist. The following factors provide a practical basis for estimating failure or underperformance. Apply them consistently across asset classes while allowing for asset-specific considerations.

Asset Age

As infrastructure ages, materials degrade, components wear, and PoF often increases. Age alone, however, does not determine condition. Evaluate it alongside condition, usage, and maintenance history so newer, underperforming assets and older assets in good condition receive appropriate assessments. Age-related risk helps StreetsLA identify assets approaching or exceeding expected service life and plan renewal or replacement before failure.

Condition Rating

Condition assessments indicate an asset's physical state and operational health. Poor condition typically increases PoF, particularly when defects compromise structural integrity, safety, reliability, or service performance. Condition data strengthens prioritization and supports condition-based maintenance. Update ratings using inspections, field observations, and completed maintenance so PoF scores remain current.

Failure History

Repeated failures may signal underlying structural, design, operational, material, or environmental issues. Failure history helps StreetsLA identify recurring problems and assets susceptible to future failure. It also distinguishes isolated incidents from patterns warranting more intensive maintenance, rehabilitation, or replacement planning. Where available, records should capture:

- Failure frequency and severity.
- Location, cause, and timing.

Maintenance History

Maintenance quality, frequency, and effectiveness influence asset reliability. Inadequate or delayed maintenance can accelerate deterioration and increase PoF; consistent preventive or condition-based maintenance may extend service life beyond expectations. Maintenance history shows whether current practices sustain performance. It also identifies assets that need frequent repairs, consume disproportionate resources, or may be candidates for rehabilitation or replacement.

Usage or Loading

High traffic volumes, heavy loads, intensive use, and frequent operational demand increase asset wear and stress. Understanding demand helps StreetsLA identify assets needing more frequent monitoring, maintenance, or replacement than lower-use assets. Higher demand does not automatically mean poor condition. It can, however, accelerate deterioration or increase the operational consequences of defects. Usage and loading assessments should account for assets serving:

- Critical corridors, emergency routes, transit movements, and freight activity.
- Areas with concentrated pedestrian and bicycle activity.

Environmental Exposure

Harsh environmental conditions can accelerate deterioration and increase maintenance needs compared with similar assets in less demanding settings. Exposure assessments should consider:

- Flooding, heavy runoff, erosion, and coastal impacts.
- Extreme heat, seismic activity, soil movement, and other environmental stressors.

This factor is particularly important for assets exposed to climate impacts, drainage issues, heat stress, or recurring environmental loading.

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Known Defects

Inspections, engineering evaluations, service requests, and maintenance may reveal defects that increase PoF. These findings provide early warning and allow StreetsLA to address risks before service disruption. Document and prioritize defects and, where feasible, link them to corrective actions in work management processes. Examples include:

- Structural cracks, settlement, and corrosion.
- Drainage problems, missing components, and signal malfunctions.
- Pavement distress and recurring field observations.

Remaining Useful Life

Remaining useful life (RUL) estimates how long an asset will provide acceptable performance under current operating, maintenance, and environmental conditions. Assets nearing the end of useful life generally have higher PoF and need closer monitoring and planning. Update RUL estimates as condition information, maintenance records, rehabilitation activities, and performance trends change. Including RUL in PoF assessments helps StreetsLA forecast renewal needs and plan interventions before failure.

Inspection and Service Request Data

Inspection findings, citizen requests, complaint records, and operational observations can reveal emerging issues before they become major operational or safety concerns. Service request patterns may identify recurring locations, customer concerns, or deficiencies not yet captured in formal condition ratings. Combine these sources with inspection and work order data for a fuller picture of asset performance and more responsive PoF scoring.

2.3.3 Consequence of Failure Assessment

CoF measures the severity of impacts if an asset fails, underperforms, or cannot provide its intended LoS. Not all failures have the same consequences. Their effects vary across communities, public safety, mobility, regulatory compliance, financial performance, environmental outcomes, and organizational objectives. A consistent CoF assessment helps StreetsLA identify assets critical to service delivery and failures with the greatest public-facing or organizational impacts.

A minor failure of a low-priority asset may need limited attention. Failure of a critical transportation asset, however, could have significant safety, mobility, financial, regulatory, environmental, equity, and reputational consequences. CoF scoring should capture direct impacts and secondary effects, including:

- Service disruption and emergency response implications.
- Impacts on vulnerable communities and increased maintenance costs.
- Public complaints and loss of confidence in infrastructure management.

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CoF assessments should reflect asset criticality, service function, location, usage, adjacent land uses, regulatory obligations, customer impacts, and the scale and duration of potential disruption. The eight factors below provide a practical basis for assessing severity. Apply them consistently across asset classes while allowing for asset-specific considerations.

Public Safety Impact

Protecting public safety is a primary responsibility of StreetsLA. Assets whose failure could cause injuries, accidents, property damage, unsafe access, traffic conflicts, or threats to employee and contractor safety should receive elevated priority. Safety is often the most significant CoF factor because it directly affects residents, visitors, roadway users, pedestrians, cyclists, transit users, and field crews. Assess:

- Severity of potential harm and number of people exposed.
- Duration of exposure and ability to reduce or control the hazard.

Traffic and Mobility Disruption

Transportation failures can cause congestion, reduce accessibility, delay emergency response, interrupt transit or freight movement, and harm economic activity. Mobility assessment identifies assets essential to efficient movement throughout the City. CoF scoring should consider:

- Number of users affected and importance of the route or facility.
- Availability of detours or alternate access and duration of disruption.
- Effects on emergency access, transit service, pedestrian movement, and bicycle travel.
- Access to schools, businesses, and community facilities.

Cost of Repair or Replacement

Asset failures can create substantial unplanned costs. Understanding this exposure supports long-term budgeting and helps minimize unexpected spending. Assess both direct repair or replacement costs and secondary costs:

- Emergency response, labor, temporary service measures, and contractor mobilization.
- Traffic control, accelerated procurement, claims, and unplanned capital expenditures.
- Service interruptions and damage to adjacent assets.
- Opportunity costs of diverting funds from planned maintenance or capital priorities. Assign higher CoF scores where failure could create major financial exposure or limit StreetsLA's ability to deliver other priority work.

Regulatory Exposure

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Asset failures may breach federal, state, regional, or local regulations, permits, standards, policies, or executive directives. Consequences can include fines, corrective actions, legal liabilities, permit violations, project delays, lost funding eligibility, or increased oversight. Assessing regulatory exposure helps StreetsLA manage compliance obligations proactively and prioritize actions that reduce violations. CoF scoring should consider:

- Likelihood of enforcement and severity of potential penalties.
- Time required for correction and reporting obligations.
- Potential to compromise accessibility, environmental protection, safety, or other mandated requirements.

Impact to Vulnerable Communities

Infrastructure failures may disproportionately affect disadvantaged, transit-dependent, mobility-limited, or otherwise vulnerable populations. Assessing these consequences supports equitable decisions and broader City objectives. CoF scoring should consider whether affected communities have:

- Limited transportation alternatives or access to essential services.
- Higher exposure to safety risks or a history of underinvestment.

This factor identifies where failure could intensify existing disparities and where maintenance, renewal, or capital investment may provide meaningful community benefit.

Environmental Consequences

Asset failures may harm natural resources, air and water quality, vegetation, habitat, stormwater systems, or other environmental assets. Environmental assessment brings sustainability and stewardship into risk-based decisions. CoF scoring should consider:

- Extent, duration, and reversibility of potential harm.
- Sensitivity of affected resources, likelihood of public or regulatory concern, and mitigation or remediation needs.
- Potential runoff issues, erosion, pollutant releases, tree canopy impacts, habitat disturbance, and other effects on environmental quality and community resilience.

Emergency Response Implications

Some assets are essential to emergency services, disaster response, evacuation, incident management, and public safety operations. Their failure can restrict first-responder access, increase response times, reduce response effectiveness, and heighten community vulnerability. CoF scoring should consider whether the asset supports:

- Emergency routes, hospitals, fire stations, and police facilities.

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- Shelters, critical infrastructure, or areas with limited alternate access.

Assets essential during emergencies warrant elevated CoF consideration. Their availability directly influences life safety, continuity of operations, and recovery after disruption.

Public Visibility and Reputational Impact

Highly visible failures can affect public trust, stakeholder confidence, media attention, and perceptions of organizational effectiveness. Assessing reputational impacts supports proactive communication and management. CoF scoring should consider:

- Visibility of the asset or incident, number of people affected, and sensitivity of the location.
- Potential public complaints or attention from elected officials, regulators, community groups, or media outlets.

Consider reputational impacts alongside the other CoF factors. Public perception can influence confidence in StreetsLA's ability to manage infrastructure responsibly and adds context to the broader consequences of failure.

2.3.4 Risk Evaluation and Prioritization

Once PoF and CoF scores have been determined, risks should be categorized using a consistent rating scale to support prioritization, escalation, mitigation planning, and resource allocation. Categorizing risks allows StreetsLA to translate scoring results into practical management responses that can be understood by asset owners, maintenance teams, planners, finance staff, and leadership. A typical risk framework may include:

- **Low Risk**: Acceptable risk level requiring routine monitoring, standard inspections, and normal maintenance practices. These assets or conditions generally do not require immediate intervention but should remain visible through recurring performance reviews and work management processes.
- **Moderate Risk**: Manage through planned maintenance, periodic monitoring, targeted inspections, and improvement actions scheduled through normal operating or capital planning cycles. These risks may not require urgent action, but they should be tracked to confirm they do not increase over time.
- **High Risk**: Requires management attention, mitigation planning, and prioritization within maintenance and capital programs. High-risk assets or conditions should be reviewed by the appropriate asset owner or governance group to determine whether inspections, operational controls, rehabilitation, renewal, or funding actions are needed.
- **Extreme Risk**: Requires immediate action, executive visibility, escalation, and priority investment to reduce risk exposure. Extreme risks may require interim controls, emergency response planning, accelerated repair or replacement, additional monitoring, or formal acceptance by leadership if immediate mitigation is not feasible.

The purpose of risk evaluation is not simply to identify risks but to determine the most appropriate response based on the level of exposure, the urgency of action, and the value of potential mitigation measures. Results should help StreetsLA distinguish between risks that are acceptable, risks that require ongoing

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monitoring, risks that warrant planned mitigation, and risks that require escalation or immediate intervention. Mitigation strategies may include enhanced inspections, preventive maintenance, operational controls, rehabilitation projects, asset replacement, resiliency improvements, emergency response planning, or capital investment initiatives. Risk evaluation should also support clear documentation of why a particular response was selected and how that response is expected to reduce likelihood, consequence, or both.

Through a consistent risk analysis and evaluation process, StreetsLA can improve the defensibility of infrastructure decisions, direct resources toward the highest-priority needs, strengthen service reliability, and maximize the long-term value of City infrastructure investments. This risk-based approach supports ISO 55001 principles, advances the goals of Executive Directive No. 9, and provides a foundation for sustainable and resilient asset management. Over time, consistent application of the framework will also help StreetsLA track changes in risk exposure, measure the effectiveness of mitigation actions, refine scoring criteria, and improve the quality of future investment and maintenance decisions.

2.4 Risk Mitigation Strategy

Identifying risk alone does not reduce exposure or improve service outcomes. Risk mitigation turns assessment findings into actions that reduce PoF, lessen CoF, or improve StreetsLA's ability to respond to adverse events. These actions must be selected, implemented, monitored, and adjusted to deliver value. As a critical component of StreetsLA's Asset Management Framework, mitigation helps protect public safety, maintain reliable services, strengthen infrastructure resilience, optimize spending, and support long-term stewardship of City assets. It connects risk assessment results with day-to-day asset management activities, including:

- Inspections and maintenance planning.
- Rehabilitation, renewal, and replacement.
- Operational controls and emergency preparedness.

Structured mitigation planning helps StreetsLA direct limited funding and resources toward the greatest risk reduction. Responses should fit the risk. Mitigation actions differ in the benefits they provide, so strategy selection should consider:

- Asset type and criticality.
- Nature and severity of the risk.
- Available funding and operational capacity.
- Regulatory requirements.
- Expected reduction in risk exposure.

Mitigation planning should also distinguish between two time horizons:

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- Short-term actions, such as temporary controls or enhanced monitoring.
- Long-term actions, such as rehabilitation, replacement, design standard updates, or resilience improvements.



Figure 2-2 Risk Mitigation Approach

Proactive risk mitigation can reduce emergency repairs, avoid unnecessary service disruptions, extend asset life, and improve service reliability. It also makes investment priorities more transparent and defensible. By linking risk levels to appropriate mitigation actions, StreetsLA can demonstrate that maintenance and capital investments address objective business needs rather than simply react to failures. This connection provides a clear basis for explaining why particular assets, corridors, programs, or projects need priority attention.

StreetsLA should prioritize mitigation actions that deliver the greatest overall value across the following criteria:

- Public safety and service continuity.
- Long-term lifecycle costs and regulatory compliance.
- Infrastructure resilience and community benefit.

Give priority to actions that:

- Reduce high or extreme risks.
- Improve service reliability for critical assets.
- Address known safety or compliance exposure.
- Provide cost-effective risk reduction across multiple assets or service areas.

Table 2-1 Common Risk Mitigation Strategies

Mitigation Strategy	Purpose	Typical Triggers	OpenGov EAM Tracking Method
Preventive Maintenance	Reduce deterioration and failure risk through planned recurring work.	Asset type, maintenance interval, service level expectation, or recurring deterioration pattern.	Preventive maintenance schedules, recurring work orders, maintenance history, and completion status.

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Mitigation Strategy	Purpose	Typical Triggers	OpenGov EAM Tracking Method
Condition-Based Maintenance	Trigger maintenance based on observed asset condition or performance thresholds.	Inspection score, condition rating, declining performance, or defined intervention threshold.	Inspection templates, condition fields, work order triggers, and asset performance records.
Targeted Inspections	Focus inspection resources on assets with elevated risk, known defects, or high consequence of failure.	High risk score, recurring service requests, poor condition, prior failures, or critical asset designation.	Inspection programs, assigned inspection routes, findings, deficiency records, and follow-up work orders.
Renewal or Rehabilitation	Restore asset function, improve reliability, and extend useful life without full replacement.	Moderate to poor condition, increasing maintenance cost, declining performance, or planned lifecycle intervention.	Capital planning records, project work orders, condition updates, cost records, and post-project risk reviews.
Asset Replacement	Remove unacceptable risk by replacing assets that no longer provide acceptable service or lifecycle value.	End of useful life, recurring failures, extreme risk, unacceptable safety exposure, or poor lifecycle economics.	Replacement project records, asset retirement records, new asset records, lifecycle cost information, and updated risk scores.
Operational Controls and Procedures	Reduce risk through documented procedures, controls, restrictions, or temporary management actions.	Known hazard, seasonal condition, temporary service issue, emergency constraint, or pending capital solution.	Operational work orders, procedure references, escalation records, compliance checks, and monitoring activities.
Emergency Response Planning	Improve readiness and reduce consequences when failures or disruptive events occur.	High consequence of failure, limited redundancy, critical route, severe weather exposure, or emergency access concern.	Emergency response tasks, response work orders, incident records, resource plans, and after-action follow-up items.
Redundancy and Resilience Improvements	Improve the ability of assets and services to withstand and recover from disruptions.	Climate exposure, limited alternate service path, critical asset designation, or recurring disruption risk.	Resilience project records, risk attributes, asset criticality fields, inspection findings, and performance measures.
Staff Training	Build workforce capability to identify, document, mitigate, and monitor asset risks consistently.	New workflow, data quality issue, inconsistent risk scoring, new system configuration, or identified competency gap.	Training records, user assignments, workflow adoption measures, data quality reviews, and corrective actions.
Data Quality Improvement	Improve the reliability of asset, condition, risk, and maintenance information used for decisions.	Missing fields, inconsistent condition ratings, incomplete asset records, duplicate assets, or unreliable risk scores.	Data correction tasks, asset attribute updates, validation reports, data quality dashboards, and audit results.
Design or Maintenance Practice Updates	Address root causes by improving standards, procedures, specifications, or recurring maintenance practices.	Recurring failures, post-project lessons learned, performance gaps, safety concerns, or repeated maintenance issues.	Procedure update tasks, standards references, corrective action records, lessons learned, and improvement tracking items.

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Preventive Maintenance

Preventive maintenance is planned work performed at defined intervals to reduce asset deterioration and PoF. Small, routine interventions can often prevent major failures and significantly extend service life. This generally makes preventive maintenance one of the most cost-effective risk reduction strategies supporting reliable services. Activities may include:

- Scheduled inspections, cleaning, lubrication, and minor repairs.
- Vegetation control, drainage maintenance, and pavement preservation.
- Other recurring work that limits deterioration before it becomes more costly or disruptive.

Condition-Based Maintenance

Condition-based maintenance uses condition information, inspections, monitoring data, and performance indicators to determine when work is needed. Assets deteriorate at different rates. Responding to actual condition rather than predetermined schedules helps StreetsLA optimize resources, reduce unnecessary work, and focus on the greatest risks. Clear condition thresholds, inspection frequencies, and OpenGov EAM workflows should trigger maintenance when assets reach defined performance or risk levels.

Targeted Inspections

Targeted inspections focus on assets with elevated risk, known deficiencies, critical service functions, or high CoF. Early detection improves risk visibility and enables corrective action before emerging issues become major operational or safety concerns, affect the public, or disrupt services. Direct field resources toward assets most likely to require intervention by considering:

- Asset criticality and failure history.
- Condition trends and service request patterns.
- Environmental exposure.

Renewal or Rehabilitation

Renewal and rehabilitation restore asset function and performance without complete replacement. They can significantly extend service life, reduce failure risk, and defer larger capital expenditures while preserving LoS. Consider this strategy when an asset remains viable but needs investment to restore condition, improve reliability, reduce risk exposure, or maintain service performance. Examples include:

- Roadway resurfacing and bridge rehabilitation.
- Structural repairs, signal upgrades, and drainage improvements.
- Major component renewal.

Asset Replacement

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Complete replacement may be the most appropriate mitigation when an asset reaches the end of its useful life, repeatedly fails, presents unacceptable safety risks, or can no longer deliver required LoS. Continued maintenance or rehabilitation may no longer be viable. Replacement reduces long-term risk exposure and provides opportunities to improve performance, resilience, accessibility, safety, and operational efficiency. Decisions should be supported by:

- Lifecycle cost analysis and risk scores.
- Service impact evaluation.
- Comparison with feasible rehabilitation alternatives.

Operational Procedures

Operational controls and procedures can reduce risk without major capital expenditure. They can provide immediate protection while longer-term solutions are developed and funded. Document controls, communicate them to affected teams, review them periodically, and link them to the risk conditions they address. Examples include:

- Temporary traffic management measures and operational restrictions.
- Revised maintenance protocols, enhanced monitoring, and changes to work practices.
- Seasonal response procedures and escalation protocols.

Emergency Response Planning

Emergency response planning prepares StreetsLA for failures and disruptions that preventive measures cannot always avoid. Effective preparation helps minimize service interruptions, improve public safety outcomes, and shorten recovery time. Focus on assets and locations with high CoF, limited redundancy, critical service functions, or exposure to severe weather, seismic events, or other disruptions. Plans should address:

- Response procedures and communication protocols.
- Resource plans, detour strategies, and contractor support arrangements.
- Recovery strategies.

Redundancy and Resilience Improvements

Redundancy and resilience measures reduce vulnerability by providing alternative ways to maintain service during disruption. These investments are increasingly important as aging infrastructure faces extreme weather and changing environmental conditions. Prioritize improvements where failure could affect critical routes, emergency access, vulnerable communities, or services with limited alternatives. Measures may include:

- Backup systems and alternative routes.

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- Flood protection, seismic improvements, and climate adaptation initiatives.
- Upgraded materials or design modifications that improve performance under stress.

Staff Training

Effective risk management depends on workforce knowledge and capability. Role-based training helps field crews, supervisors, asset owners, analysts, system administrators, and leadership understand their responsibilities for identifying, documenting, mitigating, and monitoring risks. Workforce development improves consistency, decision-making, and organizational capacity. Training should cover:

- Risk assessment methods and mitigation techniques.
- Inspection procedures and maintenance practices.
- OpenGov EAM workflows and data quality expectations.

Data Quality Improvement

Risk assessments are only as reliable as their supporting data. Complete, accurate, consistent, and accessible information improves assessment of asset condition, PoF, CoF, lifecycle cost, and priorities. Better data strengthens risk prioritization, investment planning, and decision defensibility. Improvement activities may include:

- Validating asset inventories and correcting asset attributes.
- Standardizing condition ratings and improving failure and maintenance coding.
- Integrating GIS and OpenGov EAM records.
- Establishing ongoing data review and correction processes.

Changes to Design Standards or Maintenance Practices

Risk assessments may reveal recurring failures, performance challenges, or vulnerabilities rooted in existing designs or maintenance approaches. Updating standards and practices can address root causes and reduce future risk across multiple assets and programs, not just individual failures. Use lessons from failures, emergency repairs, post-project reviews, and field observations to improve:

- Design standards, specifications, and materials.
- Maintenance procedures, inspection protocols, and operational practices.

These refinements help make future assets more reliable, maintainable, resilient, and cost-effective.

Implementation Through OpenGov EAM

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Document and track mitigation actions in OpenGov EAM wherever appropriate to strengthen accountability and embed risk management in routine business processes. Connect identified risks with assets, work orders, inspections, preventive maintenance schedules, condition updates, service requests, capital planning records, and performance reporting. These links help StreetsLA determine whether actions are complete, risk levels are changing, or further intervention is needed.

Structured records, workflows, and reports connect each risk with its assets, work activities, responsible parties, and follow-up actions. They support progress tracking, completion records, and monitoring of changing exposure across maintenance, inspection, asset management, and capital planning. Use the following tools:

- Work orders: track corrective and preventive actions, assigned crews, due dates, labor, materials, costs, and completion status. Link each order to the asset or risk condition addressed.
- Inspection templates and condition assessment programs: standardize field data, document defects, update condition ratings, and trigger follow-up maintenance or mitigation.
- Preventive maintenance schedules: define recurring activities, frequencies, responsible teams, and planned interventions to reduce deterioration and avoid future failures.
- Risk and criticality attributes: identify high-priority assets, support risk-based prioritization, and link mitigation actions to PoF, CoF, and overall risk exposure.
- Condition fields and performance measures: track current condition, service performance, reliability, and maintenance trends. Use results to assess whether mitigation improves asset outcomes over time.
- Capital improvement and renewal planning records: document larger mitigation actions, project drivers, risk reduction objectives, estimated costs, funding status, delivery schedules, and post-project outcomes.
- Service request tracking and follow-up: capture community-reported issues and responses, identify recurring locations or asset concerns, and inform future mitigation priorities.
- Operational and compliance workflows: track required inspections, regulatory obligations, escalation actions, temporary controls, corrective measures, and evidence of completed mitigation.

OpenGov EAM provides a centralized mitigation record, supporting performance reporting, transparency, and evaluation of risk reduction over time. Records should show clear ownership, due dates, completion status, inspection results, costs, and follow-up actions. Asset owners, supervisors, managers, and leadership can then review progress using a common information base.

Effective mitigation helps StreetsLA move from reacting to failures toward proactively managing risk, protecting community interests, strengthening resilience, and maximizing long-term public investment value. This approach supports ISO 55001 principles and Executive Directive No. 9 objectives, alongside safe, reliable, equitable, and sustainable transportation and public infrastructure services. Review strategies regularly as risks and asset conditions change, funding decisions are made, and inspections, work orders, performance reports, and community feedback provide new information.

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2.5 Risk Monitoring and Evaluation Framework

Risk management extends beyond asset inventories, condition assessments, and capital planning cycles. Risk exposure changes as infrastructure, operating conditions, funding, regulations, community expectations, and environmental factors evolve. StreetsLA should therefore establish an ongoing Risk Monitoring and Evaluation Framework to track changing risk conditions, emerging threats, mitigation effectiveness, and overall program performance.

A low-risk asset today may become high risk as conditions change. Ongoing risk monitoring helps StreetsLA identify and respond to these changes before they cause service disruptions, safety incidents, regulatory issues, or significant financial impacts. Risk drivers include:

- Asset deterioration and increased demand.
- Funding constraints and operational challenges.
- Severe weather events and changing service expectations.

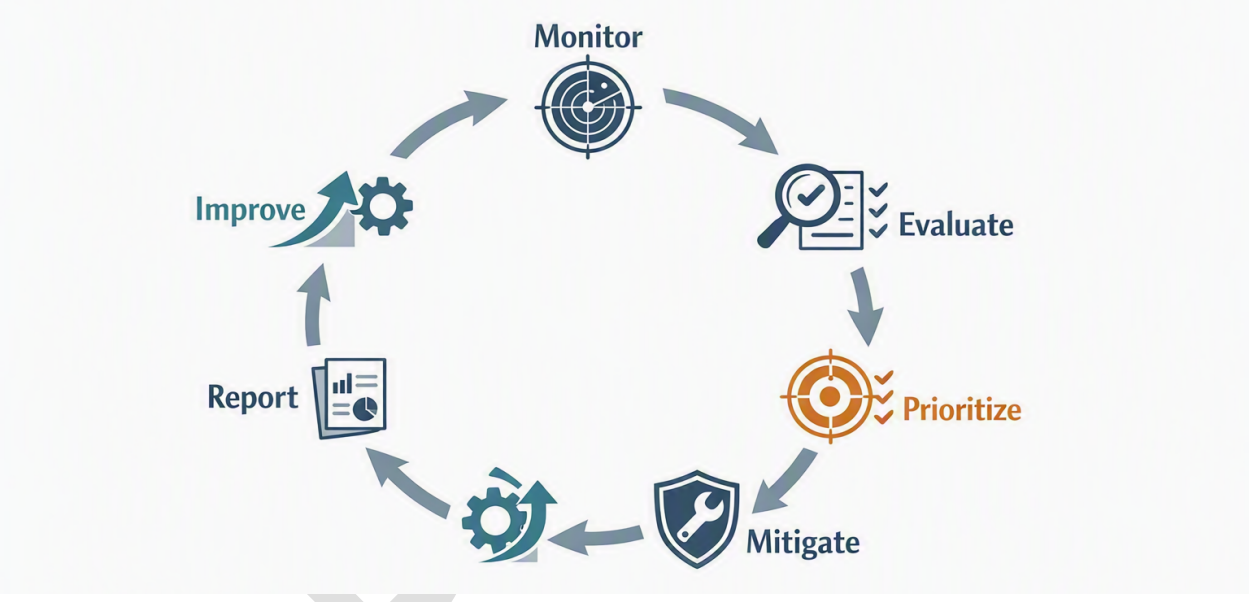


Figure 2-3 Continuous Risk Monitoring

Effective risk monitoring shows whether mitigation investments achieve their intended results. Tracking changes in risk exposure over time helps StreetsLA evaluate:

- Maintenance programs.
- Rehabilitation projects and replacement strategies.

- Operational improvements and policy decisions.

The resulting feedback supports informed decisions, continual improvement, and responsible stewardship of City resources.

Table 2-2 Key Components of Risk Monitoring

Monitoring Component	Purpose	Information Reviewed	Decision Use
Risk Registers	Maintain a centralized inventory of significant asset risks and mitigation actions.	Risk ratings, affected assets, owners, mitigation status, review dates, residual risk, and escalation needs.	Supports governance reviews, accountability, escalation, and mitigation tracking.
High-Risk Asset Dashboards	Provide visual insight into assets requiring management attention.	Condition, risk scores, backlog, inspection findings, mitigation status, and performance trends.	Supports prioritization, management reporting, and resource allocation.
Key Risk Indicators	Identify early warning signals that risk exposure may be increasing.	Backlogs, failures, overdue inspections, repeated repairs, service requests, unresolved defects, and funding gaps.	Triggers reassessment, mitigation planning, or escalation before failures occur.
Failure Trend Analysis	Identify recurring failures, root causes, geographic hotspots, and systemic issues.	Failure type, frequency, severity, location, cause, response time, repair cost, and service impact.	Guides maintenance strategy changes, design updates, inspections, and targeted mitigation programs.
Service Request Trends	Capture public-facing concerns and emerging service level issues.	Request type, location, frequency, response time, recurrence, resolution status, and community impact.	Supports customer response, inspection planning, maintenance prioritization, and capital planning inputs.
Work Order History	Evaluate maintenance demand, resource use, recurring issues, and repair effectiveness.	Labor, materials, equipment, costs, completion status, response times, backlog, and repeat work.	Supports maintenance optimization, budgeting, rehabilitation decisions, and replacement planning.
Inspection Results	Provide field-based evidence of asset condition, defects, and safety concerns.	Inspection findings, condition ratings, deficiencies, follow-up actions, trends, and compliance status.	Updates condition data, triggers work orders, refines inspection frequency, and informs risk scoring.
Condition Assessment Updates	Maintain current understanding of infrastructure health and deterioration trends.	Condition ratings, deterioration patterns, remaining useful life, completed work, and updated field observations.	Supports lifecycle planning, risk updates, maintenance timing, and capital prioritization.
Cost and Budget Variance Tracking	Monitor financial performance and emerging funding pressures.	Actual costs, budgeted costs, cost overruns, emergency repair spending, deferred maintenance, and funding gaps.	Supports budget adjustments, financial planning, affordability reviews, and investment trade-off discussions.
Post-Project Risk Reduction Reviews	Evaluate whether completed mitigation or capital actions reduced risk as intended.	Pre- and post-project risk, condition, costs, performance, service outcomes, and lessons learned.	Validates project benefits, improves future scoring, and strengthens continual improvement.

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Risk Registers for Critical Asset Classes

Risk registers give StreetsLA a centralized view of significant risks affecting critical asset classes. They establish accountability and make threats to service delivery visible across the organization. Keep them current as condition, performance, service requests, inspections, completed work, and mitigation progress change. Each register should document:

- Identified risks, affected assets, and potential consequences.
- Mitigation actions, responsible parties, and review dates.
- Current risk ratings.

Registers also give leadership a consistent basis for reviewing high-priority risks and mitigation progress during management and governance meetings. Identify risk owners, target completion dates, residual risk ratings, escalation requirements, and links to OpenGov EAM records so decisions and follow-up actions remain traceable.

Dashboards Showing High-Risk Assets

High-risk asset dashboards turn complex data into actionable information for managers, engineers, maintenance teams, and executive leadership. They provide real-time or near-real-time insight into:

- Asset condition and risk scores.
- Maintenance backlogs and inspection findings.
- Mitigation status and operational performance.

Dashboards improve situational awareness and focus resources where attention is most needed. Users should be able to filter by asset class, location, risk category, division, mitigation status, and risk level. Show changes in exposure over time, overdue mitigation actions, and adverse trends in condition, performance, or service response indicators.

Key Risk Indicators (KRIs)

KRIs are measurable early warnings of changing risk exposure. Align them with StreetsLA's risk categories and monitor them at frequencies suited to the asset class and level of exposure. Examples include:

- Growing maintenance backlogs, declining condition, and rising failure frequency.
- Overdue inspections, increased service requests, and repeat repairs.
- Unresolved defects and budget shortfalls.

Early warning creates time to act before issues become larger operational, financial, or safety concerns. Define KRI thresholds that trigger review, reassessment, mitigation planning, or escalation to the appropriate asset owner or governance group.

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Failure Trend Analysis

Historical failure data reveals recurring issues, deteriorating asset classes, geographic hotspots, seasonal patterns, and emerging risks that individual incidents may obscure. To distinguish isolated events from systemic problems, analyze:

- Failure type, frequency, severity, location, and cause.
- Response time, repair cost, and service impact.

Patterns can reveal root causes and support a shift from reactive maintenance toward predictive and preventive asset management. Use findings to guide investment priorities, maintenance strategies, design standards, inspection frequencies, and targeted mitigation programs.

Service Request Trends

Service requests reveal community concerns, asset performance deficiencies, and LoS expectations. Residents may spot emerging issues before formal inspections do. Review requests for patterns indicating broader performance or risk concerns, using:

- Request type, location, and frequency.
- Response time, resolution status, and recurrence.

These trends show how infrastructure conditions affect the public and where LoS may be declining. They support more responsive customer service and asset management, connecting community concerns directly with maintenance, inspection, and capital planning priorities.

Work Order History

Work order history shows how maintenance resources are used and which assets, locations, or work types create repeated operational demands. Review:

- Maintenance frequency, labor use, materials, and equipment.
- Failure causes, repair costs, and response times.
- Backlogs and recurring asset issues.

Repeated corrective repairs may not offer the best long-term outcome. Work order analysis identifies assets consuming disproportionate resources, experiencing repeated failures, or approaching renewal or replacement thresholds. Use it to inform budgets and compare preventive maintenance, condition-based maintenance, rehabilitation, and replacement strategies.

Inspection Results

Routine inspections provide direct, field-based evidence of asset condition, performance, safety concerns, operational issues, and emerging defects. Review individual findings alongside trends across asset classes,

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corridors, districts, and critical locations. Consistent inspection data strengthens risk assessments and supports maintenance and capital planning decisions.

Regular review helps detect issues before they become significant failures. Use findings to adjust work priorities, trigger follow-up work orders, update condition ratings, and refine inspection frequencies based on observed performance.

Condition Assessment Updates

Condition assessments establish a common basis for understanding infrastructure health and anticipated performance. They support condition comparisons, analysis of deterioration trends, remaining useful life (RUL) estimates, and the timing of maintenance, rehabilitation, renewal, or replacement. Update condition information as inspections, completed work, failures, and field observations provide new evidence.

Risk exposure depends heavily on asset condition. Accurate, current data strengthens risk assessments, lifecycle planning, and maintenance and capital prioritization. It also shows whether mitigation is slowing deterioration, improving performance, or needs adjustment.

Cost and Budget Variance Tracking

Comparing actual expenditure with budgeted costs reveals financial risks, program effectiveness, and the affordability of current asset management strategies. To understand where costs are changing and why, review:

- Planned and corrective maintenance.
- Emergency repairs, rehabilitation, and replacement.
- Capital delivery activities.

Variance tracking identifies funding gaps, cost overruns, deferred maintenance impacts, and emerging financial pressures. These findings support long-term financial planning and effective resource use. They also show where budgets, maintenance strategies, project scopes, or funding assumptions need adjustment.

Post-Project Risk Reduction Reviews

Following significant maintenance, rehabilitation, renewal, or replacement projects, StreetsLA should test whether the anticipated risk reduction was achieved. Compare pre-project and post-project results across:

- Risk ratings and condition information.
- Service performance, costs, and maintenance requirements.
- Stakeholder feedback.

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Actual outcomes provide a test of investment decisions, risk assessment methods, and project selection. Use the findings to refine scoring assumptions, cost estimates, intervention timing, and selection criteria. This feedback strengthens organizational learning and accountability.

Governance and Review Process

Asset risks often cross departmental, program, and service boundaries. Regular reviews should therefore bring together asset owners, maintenance managers, engineering staff, planners, operations personnel, finance representatives, data stewards, and executive leadership. This cross-functional approach aligns decisions with operational, financial, engineering, regulatory, data quality, and community perspectives.

Use current evidence from OpenGov EAM, inspections, work orders, service requests, risk registers, dashboards, and budget records. Each review should identify where action, escalation, mitigation adjustments, or additional analysis is needed. Review the following:

- Risk rating changes: increases, decreases, newly identified high-risk assets, and risks exceeding established tolerance thresholds.
- Emerging risks: new operational issues, deterioration patterns, climate-related exposure, regulatory concerns, and service delivery pressures.
- Mitigation progress: completion status, overdue actions, assigned responsibilities, cost impacts, and whether actions reduce risk as intended.
- Condition trends: deterioration rates, inspection findings, recurring defects, RUL changes, and assets nearing intervention thresholds.
- Service impacts: disruptions, response times, customer concerns, mobility effects, reliability issues, and effects on critical routes or community services.
- Budget and funding: cost pressures, deferred maintenance impacts, funding gaps, emergency spending, and resources needed for planned mitigation or capital actions.
- Compliance: permit obligations, accessibility requirements, safety standards, environmental commitments, reporting needs, and corrective action status.
- Resilience and climate-related risks: extreme heat, flooding, severe weather, seismic events, limited redundancy, and opportunities to improve adaptability.

Integration with Asset Management Decision-Making

Risk monitoring should inform timely and defensible decisions rather than serve as a separate reporting exercise. Embed Risk Monitoring and Evaluation Framework findings in routine planning, budgeting, maintenance, capital investment, and performance management. Findings should directly inform:

- Annual operating and maintenance budgets: justify resources for high-risk assets, recurring maintenance demands, and mitigation priorities.
- CIP planning: prioritize renewal, rehabilitation, replacement, and resilience projects using risk exposure and service impacts.
- Renewal and replacement forecasts: identify assets nearing intervention thresholds or showing increasing PoF or CoF.

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- Preventive maintenance optimization: adjust frequencies, work types, and treatment strategies using risk trends and performance results.
- Inspection schedules: increase frequency for assets with elevated risk, known defects, critical service functions, or changing condition trends.
- Asset criticality reviews: update ratings as service dependencies, asset use, community impacts, or emergency response needs change.
- Resource allocation: direct funding, staff, equipment, contractors, and materials toward the highest-priority risk reduction needs.
- SAMP updates: revise objectives, risk criteria, implementation priorities, and improvement actions using monitoring results.
- Performance reports and executive dashboards: communicate risk trends, mitigation progress, service impacts, and investment needs to leadership and stakeholders.

Embedding risk information in routine decisions helps StreetsLA maintain a proactive program that adapts to changing conditions. It strengthens resilience, service reliability, and accountability while directing investment toward the greatest value for the City and its communities. The feedback loop is practical: monitoring results inform future budgets, maintenance strategies, inspection programs, capital plans, SAMP updates, and OpenGov EAM configuration improvements. Over time, StreetsLA can demonstrate that decisions rest on current evidence, documented priorities, and measurable risk reduction outcomes.

2.6 Recommended Implementation Approach

StreetsLA should implement its Risk Management Framework in phases, progressively establishing governance, building organizational capability and risk information, integrating risk into decisions, and embedding continual improvement. Each phase builds on the last. Together, they support the transition from foundational planning to a mature, risk-informed asset management program that advances service delivery, infrastructure resilience, financial stewardship, and long-term sustainability.

To keep implementation practical, align activities with:

- Available staff capacity.
- OpenGov EAM configuration activities.
- Annual budgeting cycles and capital planning timelines.

Implementation should also align with broader SAMP priorities.

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Figure 2-4 Recommended Risk Management Approach

Phase 1: Establish Risk Governance and Framework Foundation

Phase 1 establishes the governance, policies, methods, and organizational structure for consistent, sustainable risk management. It should begin immediately after SAMP approval and before significant capital planning, budgeting, or asset investment decisions. Start early. Embedding risk in planning from the outset avoids treating it as a separate activity later and establishes consistent risk ownership, escalation, documentation, and reporting across divisions.

StreetsLA should establish a Risk Governance Team representing asset management, operations, maintenance, engineering, planning, finance, information technology, and executive leadership. The team should document the following requirements to support staff understanding, governance review, and repeatable application across asset classes:

- Risk management objectives, policies, and procedures.
- Risk categories, assessment methods, and scoring criteria.
- Risk tolerances and escalation thresholds.
- Risk ownership and responsibilities for ongoing monitoring and mitigation.

The outcome is a common foundation for assessing and managing risk across divisions. Without it, departments may interpret risks differently, creating inconsistent priorities, competing investment decisions, and risks that cannot be compared across asset classes. Clear governance also gives leadership a structure for reviewing high-priority risks, approving mitigation approaches, and monitoring progress.

Phase 2: Build Risk Data Foundation

Immediately after the governance framework and assessment methods are established, StreetsLA should build the data foundation for consistent, defensible, and repeatable risk assessments. Improve the quality, completeness, consistency, and accessibility of asset information. Reliable data reduces dependence on assumptions, incomplete records, and isolated field observations.

Risk assessments are only as reliable as their supporting data. Inaccurate inventories, incomplete condition data, missing maintenance histories, limited failure information, and inconsistent service request coding can weaken results. StreetsLA should:

- Validate asset inventories, confirm asset hierarchies, and identify critical assets.

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- Review the quality of condition, maintenance, and operational data; collect or update condition assessments where gaps exist.
- Review maintenance histories, analyze failure records, compile service request histories, and gather lifecycle cost information.
- Document and prioritize data gaps so improvements can be planned and tracked over time.

Configure standard risk attributes in OpenGov EAM consistently across asset classes so information can be compared, reported, and used in planning and budgeting. Include:

- Criticality ratings, risk categories, and condition fields.
- PoF and CoF factors.
- Performance measures, inspection results, and service request indicators.
- Mitigation status fields.

This phase creates a reliable information base for future assessments. Better data strengthens prioritization and reveals infrastructure vulnerabilities and investment needs more accurately. It also gives asset owners, maintenance teams, planners, analysts, and leadership a shared basis for reviewing exposure and selecting mitigation actions.

Phase 3: Perform Initial Risk Assessments

Following asset validation and condition assessments, StreetsLA should conduct its initial enterprise-wide risk assessment using the approved, standard methodology. This establishes a portfolio-wide baseline of infrastructure risk exposure. Treat it as a starting point: refine the baseline as data improves and the organization gains experience applying the method.

Identify, evaluate, and prioritize risks across major asset classes using the approved framework. Assess both PoF and CoF against the following criteria. Where data is limited, document assumptions and apply professional judgment consistently and transparently.

- PoF: asset age, condition, maintenance history, failure history, environmental factors, utilization, known deficiencies, and remaining useful life (RUL).
- CoF: impacts on public safety, mobility, service delivery, financial performance, regulatory compliance, environmental outcomes, vulnerable communities, emergency response, and organizational reputation.

Calculate scores using the approved method and document them in formal risk registers. Classify risks as low, moderate, high, or extreme and establish relative asset priorities across the portfolio. Review high and extreme risks with the appropriate asset owners and governance teams to confirm assumptions, identify mitigation options, and determine whether immediate escalation is required.

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The baseline gives leadership visibility into infrastructure vulnerabilities and supports investment planning, maintenance priorities, and mitigation. It also provides a reference for future comparison. StreetsLA can then evaluate whether mitigation actions, maintenance programs, and capital investments reduce exposure over time.

Phase 4: Implement Risk Prioritization into Planning Processes

Once assessments are complete, StreetsLA should integrate risk information into routine planning, budgeting, maintenance, and capital investment. This is where assessment becomes action. Risk information should guide work priorities, budgets, and investment decisions rather than remain confined to a risk register or report.

Decisions should reflect risk exposure, service impacts, criticality, and long-term value rather than historical spending, complaints, or reactive responses alone. Incorporate risk information into:

- Annual budgets and capital improvement planning.
- Renewal forecasts and asset replacement plans.
- Preventive maintenance programs and inspection schedules.
- Grant funding requests and LoS reviews.

Document decision rules for each risk level so staff can apply them consistently across asset classes and programs:

- Low risk: routine monitoring may be sufficient.
- Moderate risk: planned maintenance or targeted inspections may be appropriate.
- High risk: mitigation planning, management review, and priority funding consideration.
- Extreme risk: immediate action, leadership review, interim controls where needed, and accelerated resource allocation.

This phase strengthens funding requests and directs limited resources toward the greatest improvements in service delivery, public safety, resilience, and lifecycle costs. It also makes recommendations easier to explain to leadership by connecting risk evidence with maintenance, renewal, rehabilitation, replacement, and capital investment decisions.

Phase 5: Implement Risk Mitigation Programs

After prioritization and funding approval, StreetsLA should implement mitigation strategies that reduce identified risks. Assessment now moves into active risk reduction. Sequence actions by urgency, expected risk reduction, funding availability, operational capacity, and dependencies with other maintenance or capital programs.

Select mitigation activities according to the risk's nature and severity, asset criticality, available resources, and expected benefits. Evaluate whether each option reduces PoF, CoF, or both. Strategies may include:

- Preventive and condition-based maintenance, and targeted inspections.
- Rehabilitation projects, asset replacement programs, and resilience improvements.
- Emergency preparedness planning and operational controls.
- Workforce training, data quality improvements, and infrastructure design modifications.

Document and track mitigation plans in OpenGov EAM to support accountability and performance measurement. Each activity should identify its assets, risk records, responsible parties, expected outcomes, target dates, and follow-up reviews. Tracking should capture:

- Work order completion and inspection results.
- Costs and status updates.
- Changes in risk ratings after mitigation is complete.

Assessments alone do not reduce risk. Benefits depend on implementing, monitoring, and adjusting mitigation actions over time. Completed work should inform future risk scores, maintenance strategies, capital planning assumptions, and continual improvement.

Phase 6: Configure OpenGov EAM to Support Risk Management

OpenGov EAM should provide the technology platform for the Risk Management Framework. Configure it alongside assessment and mitigation efforts so risk information becomes part of routine business processes, rather than remaining in separate spreadsheets or static documents. Visibility should extend from individual assets to management reporting and executive review.

Configure OpenGov EAM to support the capabilities below. Automated reports and dashboards should give management and leadership near-real-time visibility into exposure, overdue actions, high-risk assets, condition trends, and mitigation progress.

- Criticality ratings, condition assessments, and risk scoring attributes.
- Inspection programs, preventive maintenance schedules, and work order prioritization.
- Risk dashboards, key performance indicator (KPI) reporting, and mitigation tracking.
- Service request integration and capital planning workflows.

Embedding risk management in OpenGov EAM supports sustainable information maintenance, performance reporting, and risk-informed daily operations. Linking risk records to assets, work orders, inspections, responsible teams, costs, and follow-up actions strengthens accountability. As system use matures, review and refine configuration using user feedback, reporting needs, and implementation lessons.

Phase 7: Establish Risk Monitoring and Evaluation

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Following mitigation implementation, StreetsLA should establish a formal Risk Monitoring and Evaluation Program. Risk changes as assets deteriorate, service demands and regulations evolve, environmental conditions shift, work is completed, new information emerges, and budgets change. Ongoing monitoring and updates keep decisions grounded in current conditions and documented evidence.

Establish regular reviews to assess changing exposure and test whether mitigation delivers intended outcomes. Update risk scores when new inspections, completed work, failures, or revised service expectations warrant reassessment. The monitoring program should include:

- Risk registers, high-risk asset dashboards, and KRIs.
- Failure analysis, service request trends, and maintenance backlogs.
- Condition assessments and inspection compliance monitoring.
- Mitigation status reviews and budget variance tracking.

Set the review frequency to suit the metric. A monthly, quarterly, and annual cadence supports proactive management and gives leadership continuing visibility into whether exposure is increasing, decreasing, or stable:

- Monthly: review dashboards and high-risk assets.
- Quarterly: review risk registers and mitigation status.
- Annually: use findings to support budget development, CIP planning, SAMP updates, scoring method refinements, and OpenGov EAM configuration improvements.

Phase 8: Continual Improvement

The final phase is not an endpoint. It is an ongoing process of evaluating and improving the Risk Management Framework as infrastructure, technology, organizational objectives, regulations, funding, and service expectations evolve. Treat continual improvement as routine business so the framework remains relevant, practical, and aligned with organizational priorities.

Document, assign, track, and review improvement actions to maintain accountability. Priorities should include:

- Refine scoring methods, improve data quality, and update criticality criteria.
- Evaluate mitigation effectiveness and project outcomes.
- Enhance OpenGov EAM workflows, extend assessments to additional asset classes, and update staff training.
- Incorporate lessons from failures, inspections, audits, completed projects, emergency responses, stakeholder feedback, governance reviews, and system use into future planning cycles.

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Continual improvement strengthens risk management maturity and decision-making while maintaining alignment with ISO 55001, Executive Directive No. 9, and SAMP objectives. Over time, it helps StreetsLA progress from largely reactive practices toward a mature, predictive, risk-informed enterprise that proactively manages infrastructure performance, service delivery, exposure, and public value. The framework should evolve as data improves, staff capability grows, OpenGov EAM use matures, and risk-informed practices expand across the portfolio.

Suggested Implementation Timeline

The suggested implementation timeline below translates the Risk Management Framework into a practical sequence of activities that StreetsLA can advance over time. It identifies the key phases needed to establish governance, strengthen the supporting data foundation, complete initial risk assessments, integrate risk into planning and budgeting, implement mitigation actions, configure OpenGov EAM, and establish ongoing monitoring and continual improvement. This phased approach allows StreetsLA to build risk management capability in a manageable way while aligning implementation activities with available resources, annual planning cycles, and broader SAMP objectives.



Figure 2-5 Suggested Risk Management Implementation Timeline

3 Asset Performance Management

Asset Performance Management (APM) measures, evaluates, and manages how effectively StreetsLA's infrastructure assets support organizational objectives, service commitments, and community expectations. Condition is only part of the picture. An asset in good physical condition may struggle to meet operational demand, cause service interruptions, or require excessive maintenance. Conversely, a deteriorating asset may continue to provide an acceptable LoS for many years. APM therefore evaluates the relationships among:

- Physical condition, operational performance, and reliability.
- Risk exposure and lifecycle cost.
- Contribution to public value.

For StreetsLA, APM connects infrastructure with the services it delivers. Roadways, sidewalks, traffic systems, streetlights, signs, urban forestry assets, and related infrastructure support mobility, accessibility, safety, economic activity, and quality of life throughout Los Angeles. Preserving assets is not the sole objective; they must provide safe, reliable, equitable, and sustainable services to residents, businesses, and visitors. APM helps StreetsLA assess these outcomes and identify emerging performance issues before they lead to service disruptions, increased costs, safety concerns, or community dissatisfaction.

A mature APM program integrates condition, operational performance, maintenance, risk, service, and financial information to support proactive, evidence-based decisions. This integrated view will help StreetsLA understand current performance, identify emerging trends, and select interventions that sustain desired service outcomes and long-term asset value.

3.1 Asset Condition and Performance Management Framework Overview

The Asset Condition and Performance Management (ACPM) Framework will give StreetsLA a consistent approach to evaluating and managing condition and performance across the asset portfolio. Common assessment principles, methods, information requirements, and reporting arrangements will support lifecycle planning, investment forecasting, and strategic decisions. The framework will integrate condition, operational performance, maintenance, risk, service, and financial information to clarify current performance and anticipated investment needs. It will also help StreetsLA determine whether maintenance programs and capital investments achieve their intended asset and service outcomes. Consistency does not require identical methods. Asset-class methods and measures will reflect asset function, failure modes, performance requirements, regulatory obligations, and available information. Shared evaluation principles, data requirements, and reporting structures will support portfolio-wide comparison and prioritization.

Quantifiable measures and performance targets will help StreetsLA identify:

- Underperforming assets and emerging risks.
- Service gaps and maintenance requirements.

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- Long-term renewal needs.

Results will support investment planning and direct available resources toward activities that balance cost, risk, performance, and service outcomes. Implementation may be phased by asset class according to:

- Asset criticality and service importance.
- Data availability and organizational capacity.
- Decision-making needs.

Once established, the framework will operate as an ongoing asset management process. It will be reviewed as information, service expectations, priorities, technologies, and organizational capabilities evolve.

3.2 Elements of the ACPM Framework and Integration Points

The ACPM Framework brings together people, processes, information, technology, and organizational functions. StreetsLA will establish an integrated information environment so asset data can be used consistently across:

- Condition assessment and maintenance management.
- Risk evaluation and lifecycle planning.
- Financial planning and performance reporting.

OpenGov EAM will integrate, as appropriate, with GIS, inspection, work management, risk, financial, and reporting systems. Together, these systems will support a common, reliable view of asset status, performance, risk, and investment requirements. Integration priorities will reflect:

- Business needs and decision value.
- Data quality and implementation capacity.

Standardized reports and dashboards will provide relevant performance information at asset, asset-class, program, and portfolio levels. Integration will evolve as business processes, information needs, asset management capabilities, and technology mature.

The following figure shows how OpenGov EAM brings together asset, operational, risk, and financial information to support coordinated asset management and performance monitoring.

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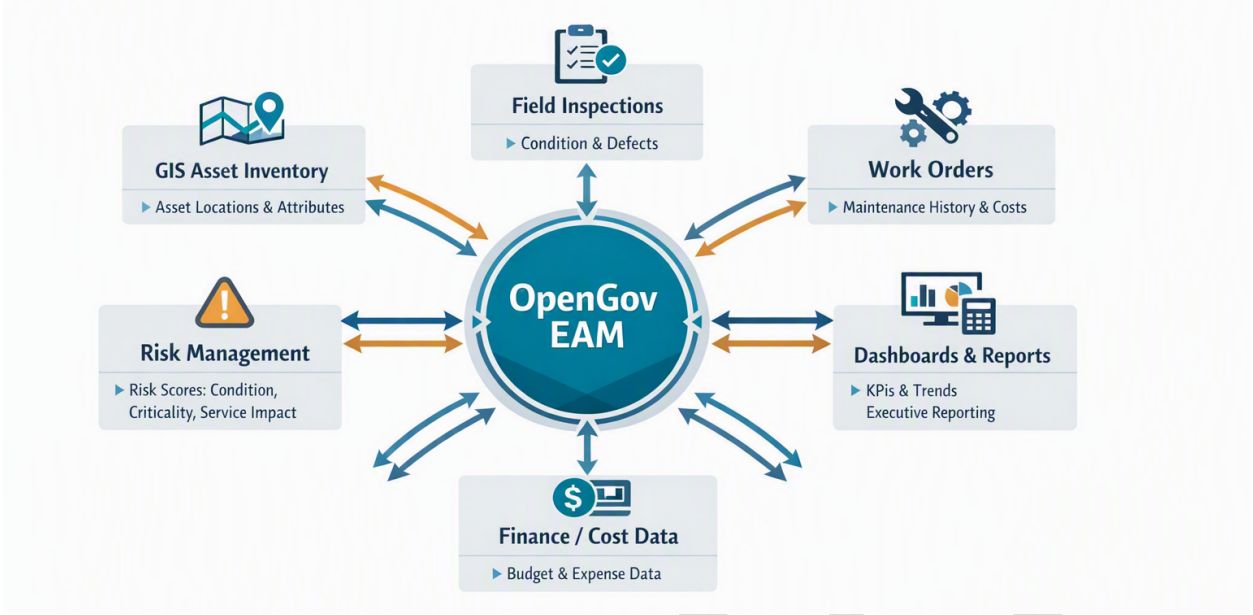


Figure 3-1 Integration of Asset, Work Orders, Risk, and Financial Information through OpenGov EA*M*

3.3 Asset Condition and Performance Monitoring

Asset condition and performance monitoring tracks and evaluates infrastructure condition, operational performance, reliability, risk, cost, and service outcomes on an ongoing basis. It answers two practical questions: Are assets meeting performance expectations? Are maintenance, lifecycle, and capital investment strategies delivering their intended results? Performance measures and targets should derive from established LoS and assess the desired service, risk, operational, and infrastructure outcomes. This connection links City priorities and asset management objectives directly to asset performance and investment decisions. Measures should address the following areas, as applicable:

- Asset condition: current condition, deterioration trends, and remaining useful life (RUL).
- Maintenance effectiveness: preventive and corrective maintenance performance, recurring work, backlogs, and the extent to which interventions extend asset life.
- Reliability: failure frequency, downtime, operational availability, and mean time between failures (MTBF), where applicable.
- Risk exposure: changes in PoF and CoF, and residual risk after treatment.
- Financial performance: lifecycle costs, maintenance expenditures, deferred maintenance, and forecast funding needs.
- Service outcomes: LoS achievement, responsiveness, and customer or community impacts.

Results will be communicated through appropriate dashboards, performance reports, scorecards, and management reviews. Reporting will highlight trends, exceptions, emerging needs, and progress against established targets.

3.3.1 Asset Performance Monitoring and Measurement Framework

Consistent with Executive Directive No. 9, effective asset management requires a common framework for monitoring condition, performance, risk, service delivery, financial, and operational information. This framework supports transparent, evidence-based decisions. It links City priorities and asset management objectives to LoS and measurable performance outcomes, giving StreetsLA a consistent basis for evaluating infrastructure contributions to service commitments and community outcomes. Across the asset lifecycle, it supports performance evaluation, service-gap identification, risk management, lifecycle planning, improvement priorities, and value realization.

A balanced set of monitoring categories supports consistent evaluation across asset classes. Together, these categories address infrastructure condition, service delivery, risk, financial sustainability, information quality, and organizational capability:

- Asset Condition and State of Repair
- Service Delivery and LoS Achievement
- Reliability and Availability
- Risk and Criticality
- Maintenance and Work Management Effectiveness
- Financial Sustainability and Lifecycle Cost Management
- Asset Information and Data Quality
- Organizational Capability and Workforce Readiness

StreetsLA will progressively develop asset-class-specific performance measures and targets within a common Citywide framework for consistent evaluation, reporting, and decisions across the portfolio. The figure below shows how City priorities, asset management objectives, and LoS translate into performance measures, targets, reporting requirements, and improvement actions. Information from OpenGov EAM, GIS, inspections, maintenance activities, financial systems, service requests, and risk assessments will support monitoring, decisions, and continual improvement throughout the asset lifecycle. Supporting asset management frameworks, asset management plans (AMPs), performance management procedures, and implementation roadmaps will establish the following details:

- Performance measures and targets.
- Calculation methods and thresholds.
- Reporting requirements.

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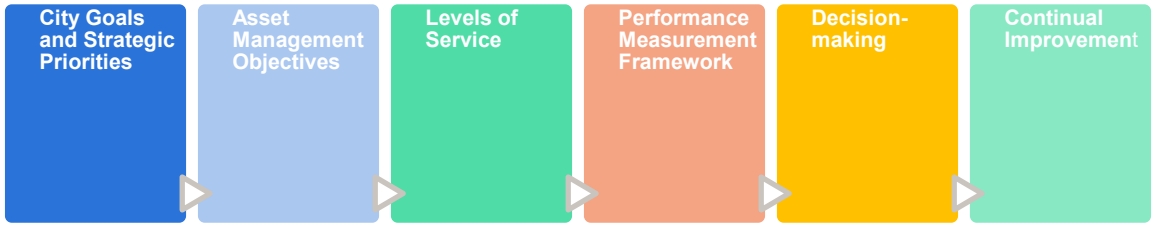


Figure 3-2 Asset Performance Monitoring and Measurement Framework

3.3.2 Monitoring and Reporting Cadence

StreetsLA will establish a structured monitoring and reporting cadence to review performance consistently and support operational, tactical, and strategic decisions. Review frequency will reflect asset criticality, deterioration rates, service importance, regulatory obligations, organizational priorities, and decision needs. Each review level has a distinct focus:

- Operational reviews: day-to-day asset performance, service requests, inspections, work execution, and emerging operational issues.
- Tactical reviews: condition trends, maintenance effectiveness, risk exposure, backlog management, and progress against performance targets.
- Strategic reviews: LoS achievement, infrastructure risk, lifecycle funding needs, long-term asset performance, and progress toward asset management objectives.

The recommended cadence in the figure below connects daily operational tracking with periodic maturity assessments and framework reviews. This hierarchy keeps performance information relevant and actionable while supporting governance oversight, performance evaluation, informed decisions, and continual improvement across the asset management system.



Figure 3-3 Recommended Cadence for Reviewing Asset Performance Information

3.3.3 Asset Classes and Assessment Strategy

The City-wide asset portfolio comprises 73 asset classes, outlined in Appendix A. StreetsLA-managed assets support mobility, accessibility, public safety, environmental sustainability, municipal operations, and community services.

Assessment effort should be proportionate to the asset and the value of the information it provides. Approaches will reflect:

- Asset criticality and CoF.
- Service importance and regulatory requirements.
- Deterioration characteristics and data availability.
- Value of the resulting information.

The supporting ACPM Framework and asset-class-specific plans will define detailed assessment methods and frequencies. The table below lists OpenGov EAM assets operated, maintained, or managed by StreetsLA.

Table 3-1 OpenGov EAM Asset Types

OpenGov EAM Asset Types		
Access Ramp	Fire Hydrant	Parcel
Alley	Guardrail (in process)	Parkway
Alley Sidewalk	Hand Sanitation Stn	Pavement
Automated Public Toilet	Hydration Station	Permit
Back Panel	Info Display Unit	PTT System
Bench	Information Kiosk	Shelter Seating
Bike Lane	Intersection	Side Panel

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OpenGov EAM Asset Types		
BL Sweeping Route	Lighting System	Sidewalk
Bus Pad	Median Group	SLA Rate
Bus Stop	Median Island	Solar Panel
Curb	News Rack	Storm Drain Inlet
Display Panel	News Stand	Street Light
Driveway	OBS	Sweeping Route
E Paper Screen	Transit Shelter	Trash Receptacle
Equipment	UFD Site	

3.3.4 Current State Asset Assessment Strategy

StreetsLA uses different condition assessment approaches across its asset portfolio:

- Transportation, utility, and regulated infrastructure generally use established engineering inspections, condition assessments, and maintenance practices supported by applicable standards, regulatory requirements, and asset-specific programs.
- Facilities, buildings, and other support assets commonly use Facility Condition Ratings, maintenance observations, work order histories, and periodic inspections to identify condition and maintenance needs.
- Recreation and park assets do not currently have a comprehensive, consistent condition assessment program. Information generally comes from routine maintenance, observed deficiencies, service requests, and periodic inspections.

Assessment maturity varies. Some asset classes have structured inspection programs and documented methods; others rely primarily on visual observations, service requests, maintenance records, and reactive inspections. As a result, condition and performance information differs in completeness, consistency, and

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quality across the portfolio. These gaps limit StreetsLA's ability to compare performance consistently, forecast long-term investment needs, and prioritize using risk information.

3.3.5 Future State Asset Condition and Performance Monitoring Strategy

StreetsLA will establish a standardized, risk-based approach to evaluating asset condition, operational performance, reliability, service outcomes, and lifecycle needs across the portfolio. Common requirements will support consistency without imposing identical methods on every asset class. They will cover:

- Assessment principles and rating scales.
- Performance measures and data quality requirements.
- Reporting expectations.

Asset-class assessment methods will reflect differences in function, failure modes, regulatory obligations, and service objectives. Assessment methods and review frequencies will be proportionate to:

- Asset criticality, CoF, and service importance.
- Regulatory requirements and deterioration characteristics.
- Available information and decision-making needs.

Coverage will expand progressively. StreetsLA will identify limitations in current condition and performance information and confirm quality assurance requirements for inspections and assessments. This work will improve information quality, completeness, and consistency across the portfolio. Integrating condition and performance information with maintenance, risk, service, and financial information will support lifecycle planning, renewal forecasting, capital prioritization, and operational decisions.

StreetsLA will progressively establish asset-class-specific LoS, performance measures and targets, dashboards, and reporting processes. Appropriate management and executive reporting will support consistent monitoring, benchmarking, and portfolio-wide performance comparisons. This approach will help identify performance gaps, direct timely interventions, manage infrastructure risk, support defensible investment decisions, and sustain long-term service delivery. As organizational maturity grows, StreetsLA will strengthen its analytical capabilities and use of performance information to support proactive decisions and long-term infrastructure stewardship.

3.4 Continual Improvement

StreetsLA will periodically review ACPM Framework effectiveness. Review frequency will reflect the information and decisions supported, with a comprehensive evaluation every three to five years. Reviews will assess:

- Performance measures and data quality.

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- Assessment methods and reporting arrangements.
- Contribution to asset management decisions.

Improvement opportunities will be prioritized and managed through StreetsLA's established governance and continual improvement processes. Findings will inform future SAMP updates and supporting asset management plans, frameworks, and implementation activities.

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4 Decision-Making Criteria and Governance Structure

Decisions determine how StreetsLA allocates limited resources, prioritizes investments, manages risk, and delivers public services. They are central to effective asset management. Each year, StreetsLA makes decisions across the following areas:

- Maintenance, rehabilitation, asset renewal, and replacement timing.
- Capital investment, staffing, and budget allocation.
- LoS.

These choices directly affect public safety, mobility, infrastructure reliability, environmental stewardship, customer satisfaction, and financial sustainability. The Decision-Making Framework and supporting governance structure establish a consistent, transparent, and repeatable process for evaluating alternatives and selecting actions that provide the greatest value to the City and the communities StreetsLA serves.

The Decision-Making Framework brings asset information, risk assessments, performance measures, LoS objectives, financial constraints, and stakeholder priorities into organizational decisions. Evidence is the foundation. Rather than relying solely on historical spending, subjective judgment, political influences, or reactive responses to failures, the framework promotes objective decisions aligned with SAMP objectives, Executive Directive No. 9, and ISO 55001 principles. Formal decision criteria and governance processes help StreetsLA improve consistency across divisions, strengthen accountability and transparency, and explain the rationale for investment decisions.

Implementation should begin early in the Strategic Asset Management Program, ideally after development of the SAMP, Asset Risk Management Plan, and Asset Performance Management Framework. Once established, the Decision-Making Framework should be integrated into:

- Annual budgeting and CIP development.
- Maintenance planning and capital investment evaluations.
- LoS reviews and organizational governance processes.

4.1 Role of Evidence-Based Decision-Making

Evidence-based decision-making uses objective information, measurable data, analysis, and documented criteria to evaluate alternatives and justify infrastructure investments. Evidence should guide the choice. StreetsLA should not rely solely on opinions, assumptions, historical practices, or individual preferences.

Infrastructure decisions often involve substantial investment and consequences that last for decades. Choices about rehabilitation, replacement, maintenance strategies, and capital improvements affect service delivery, public safety, operating costs, and infrastructure performance. To strengthen decision quality and defensibility, StreetsLA should draw on:

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- Condition assessments, inspection results, and maintenance histories.
- Performance measures and LoS data.
- Lifecycle cost analysis and risk evaluations.

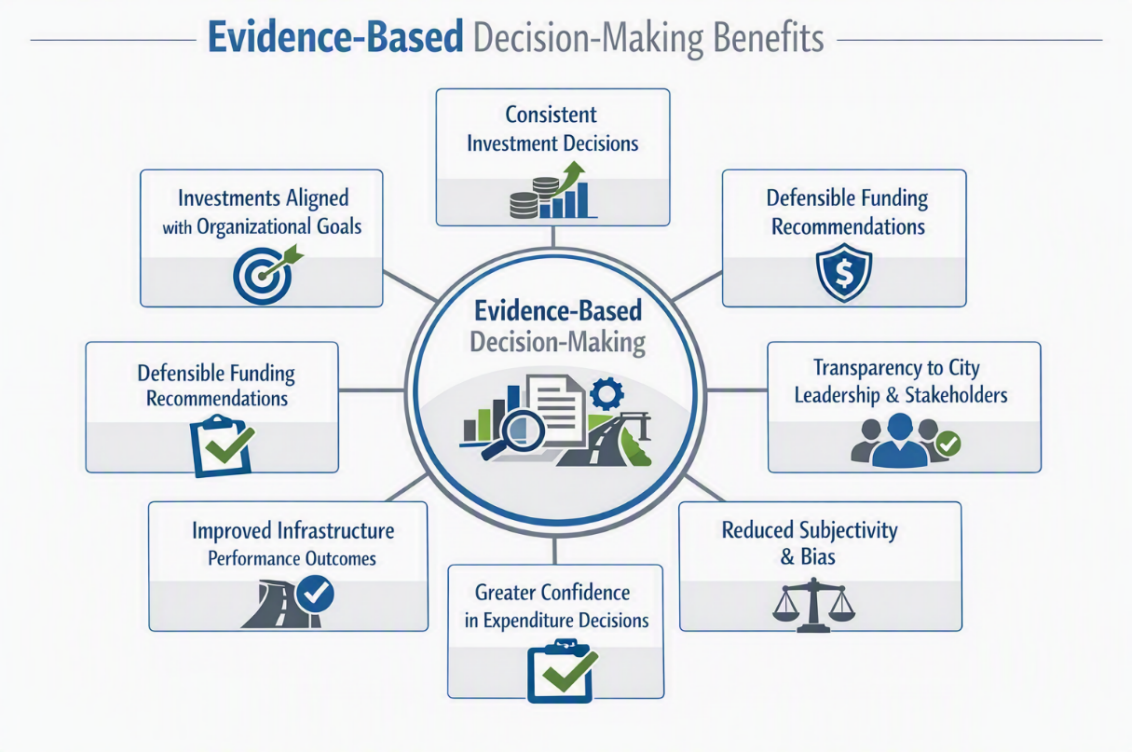


Figure 4-1 Evidence-Based Decision-Making Benefits

Implementation requires standard processes for:

- Collecting and maintaining asset information.
- Defining performance measures and conducting condition assessments.
- Evaluating risks and developing business cases for major investments.

OpenGov EAM, GIS, financial systems, inspections, and performance dashboards should provide key information for these decisions. Apply evidence-based decision-making across all levels of asset management, from daily operations to long-term capital planning.

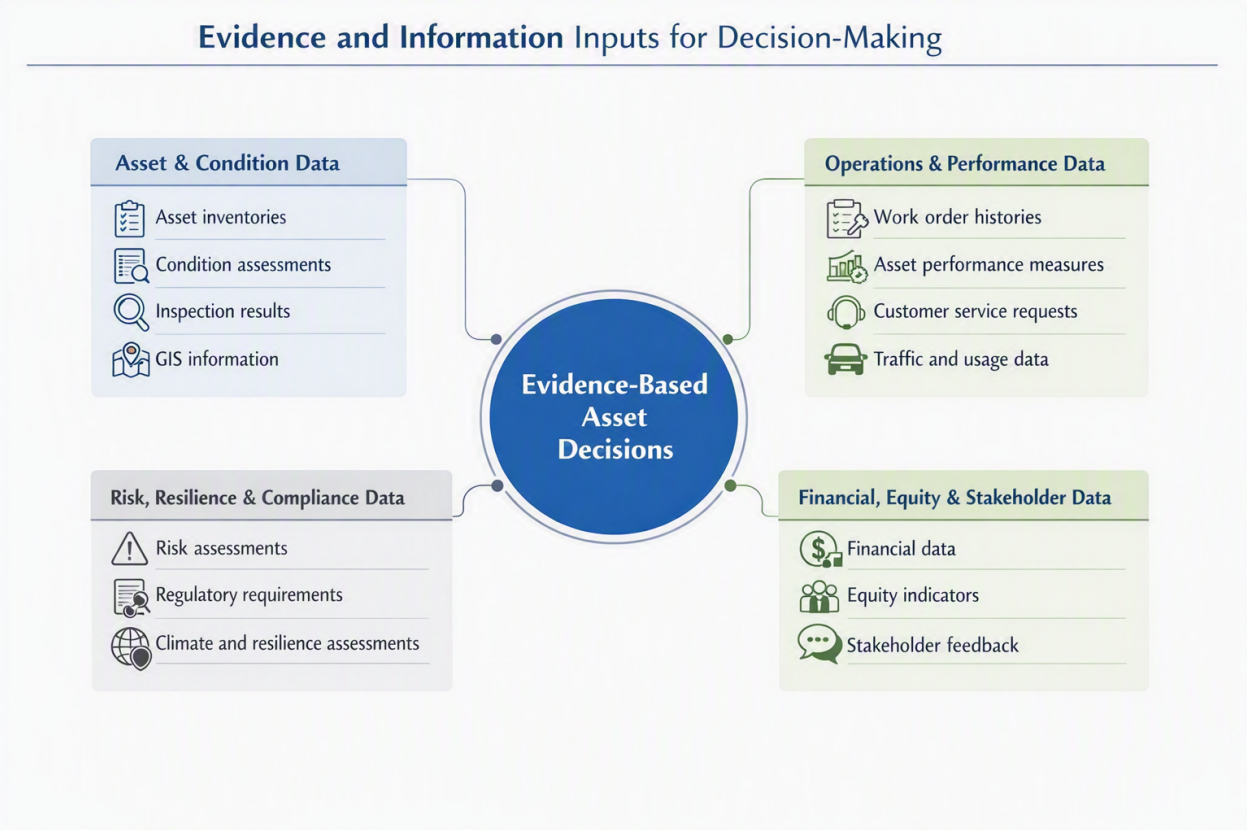


Figure 4-2 Evidence and Information Inputs for Decision-Making

4.2 Decision-Making Principles

Decision-making principles define how StreetsLA evaluates choices. They provide a common foundation for consistent, fair, and transparent decisions aligned with organizational objectives.

StreetsLA's decisions should balance immediate operational needs with long-term infrastructure outcomes. Evaluate service outcomes, risk, cost, and performance together rather than optimizing any one factor in isolation. The guiding principles are:

- Public value and service delivery.
- Risk reduction and lifecycle optimization.
- Transparency and fiscal responsibility.

- Sustainability and continual improvement.

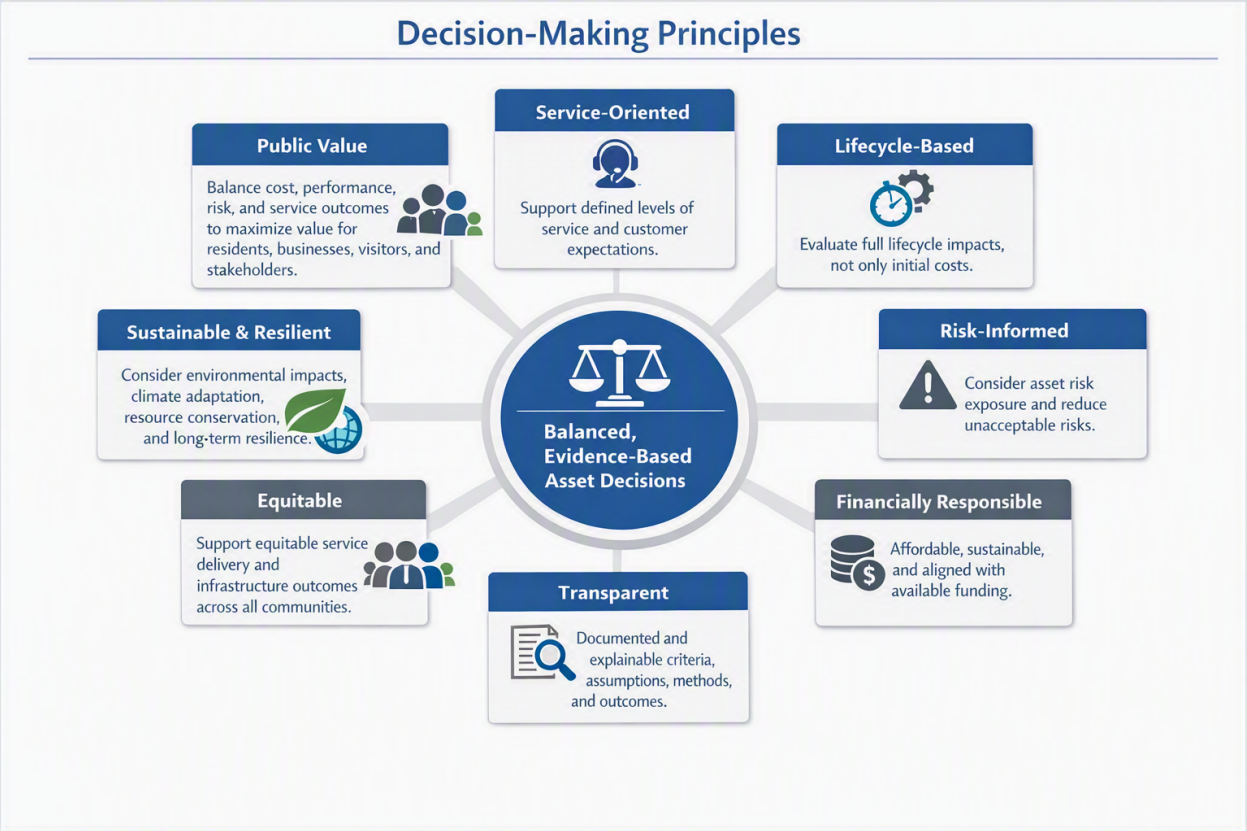


Figure 4-3 Decision-Making Principles

These principles give StreetsLA a common basis for comparing alternatives across asset classes and organizational functions. They reduce subjectivity and improve consistency. They also connect operational activities with strategic objectives.

StreetsLA should document these decision-making principles in asset management policies, governance procedures, and planning guidelines. Apply them when:

- Prioritizing maintenance activities.
- Evaluating capital projects.
- Developing budgets.
- Reviewing LoS.

4.3 Decision Criteria and Value Framework

Decision criteria define the factors StreetsLA uses to evaluate alternatives and prioritize actions. The Value Framework brings these criteria together to compare competing investments and identify the greatest benefits relative to costs, risks, and organizational objectives.

Cost is only one dimension of value. The Value Framework also considers:

- Public safety and service reliability.
- Environmental stewardship, equity, and resilience.
- Financial sustainability and regulatory compliance.
- Customer satisfaction.

Infrastructure decisions rarely serve a single objective. A roadway rehabilitation project, for example, may improve safety and mobility, reduce maintenance costs, and support economic activity at the same time. The Value Framework gives StreetsLA a consistent, transparent way to assess these combined benefits.

Implementation should establish standard evaluation criteria, weighting methods, scoring systems, and project evaluation templates. Apply these tools to:

- CIP prioritization.
- Maintenance planning.
- Renewal forecasting.
- Major project business cases.

The primary evaluation criteria in the following table provides a common basis for comparing asset management alternatives, maintenance needs, and capital investment priorities. They cover safety, service delivery, risk reduction, lifecycle cost, sustainability, compliance, equity, customer experience, resilience, and strategic alignment. Applying them consistently supports transparent, defensible decisions across asset classes, programs, and funding cycles.

Table 4-1 Primary Evaluation Criteria

Criteria	Description
Public Safety	Reduction in safety exposures and protection of roadway users
Service Delivery	Improvement in mobility, reliability, and infrastructure performance
Asset Risk	Reduction in probability and consequence of failures
Lifecycle Cost	Optimization of total ownership cost
Environmental Sustainability	Contribution to environmental goals and climate resilience
Regulatory Compliance	Support for regulatory and legal obligations
Equity	Distribution of benefits across communities

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Criteria	Description
Customer Experience	Improvements in public satisfaction and responsiveness
Resilience	Ability to withstand disruptions and future uncertainties
Strategic Alignment	Support for SAMP and City objectives

The example weighting model below translates the primary evaluation criteria into a repeatable scoring approach for comparing projects and investment needs. Each weight reflects a criterion's relative importance. Together, the weighted criteria provide a transparent basis for ranking projects, documenting decision rationale, and aligning funding recommendations with SAMP objectives and available resources.

Table 4-2 Example Project Prioritization Weighting

Criteria	Weight
Risk Reduction	25%
Public Safety	20%
Service Levels	15%
Lifecycle Cost Optimization	15%
Strategic Alignment	10%
Equity	5%
Sustainability	5%
Customer Impact	5%

Weights should be periodically reviewed and adjusted based on changing organizational priorities.

The following figure summarizes how StreetsLA can evaluate asset management decisions through a balanced value framework that considers safety, service delivery, risk reduction, lifecycle cost, equity, sustainability, resilience, and strategic alignment.

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Figure 4-4 Asset Management Decisions through a Balanced Value Framework

4.3.1 Risk-Based Decision-Making

Risk-based decision-making uses the probability and consequences of asset failure to guide maintenance, operations, and investment decisions. Age and condition alone do not determine priority. The focus is on assets whose failure would have the greatest consequences for:

- Public safety.
- Service delivery and mobility.
- Finances and regulatory compliance.
- Community outcomes.

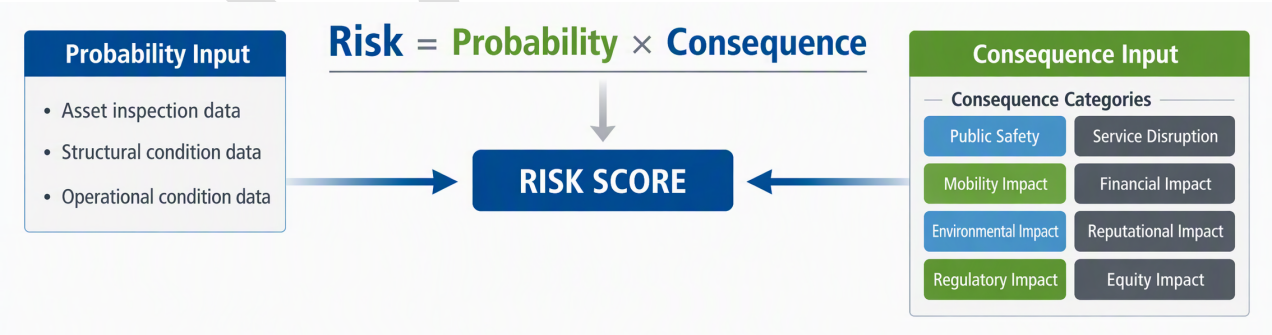


Figure 4-5 Risk Calculation Inputs

Limited resources make this approach essential for StreetsLA. Assets in similar condition may warrant different intervention priorities. For example, a transportation asset serving thousands of daily users may need attention before a less critical asset because its failure would have greater consequences.

StreetsLA should embed risk assessments in routine planning and operations, including:

- Inspection scheduling and maintenance planning.
- Rehabilitation forecasting and renewal planning.
- Capital programming and CIP prioritization.
- Budget development and emergency preparedness.

StreetsLA should maintain risk registers, criticality assessments, and risk scores in OpenGov EAM. Regular reviews should keep this risk information relevant to planning and operational decisions.

The following figure shows how risk assessments inform routine asset management processes. Using risk information directly in planning, operations, and investment decisions helps StreetsLA shift from reactive responses to proactive, transparent decisions focused on value.



Figure 4-6 Integrating Risk Evaluations into Asset Management Decisions

Apply risk-based decision-making whenever assets are evaluated for maintenance, rehabilitation, renewal, replacement, or capital investment.

Risk appetite defines the level of asset-related risk StreetsLA is willing to accept in pursuing its service delivery, financial, operational, and infrastructure management objectives. Clear risk thresholds translate that appetite into consistent responses. They distinguish risks that:

- Can be accepted.
- Require monitoring.
- Need mitigation planning.
- Warrant immediate escalation or intervention.

The following figure presents the recommended risk appetite structure and its tolerance thresholds. This framework supports consistent, transparent risk responses and aligns maintenance, rehabilitation, renewal, and capital investment decisions with service delivery expectations, organizational priorities, available resources, and SAMP objectives.



Figure 4-7 Recommended Risk Appetite Structure

4.3.2 Condition-Based Interventions

Condition-based interventions use actual asset condition to guide maintenance and investment decisions rather than relying on age or fixed schedules alone. Assets do not deteriorate at the same rate. Environmental conditions, usage, maintenance practices, and construction quality all influence deterioration.

This approach helps StreetsLA optimize maintenance resources, avoid premature replacement, and reduce delays in necessary interventions. Assets in good condition can remain in service longer. Deteriorating assets can receive earlier attention before failure occurs.

The following figure shows how condition assessments guide maintenance, rehabilitation, renewal, capital planning, and inspections. Using condition information supports timely interventions and lifecycle planning while directing resources to the greatest condition-based needs. Assessments should help determine when to:

- Perform preventive maintenance.
- Consider rehabilitation.
- Forecast renewal or replacement.
- Schedule future inspections.

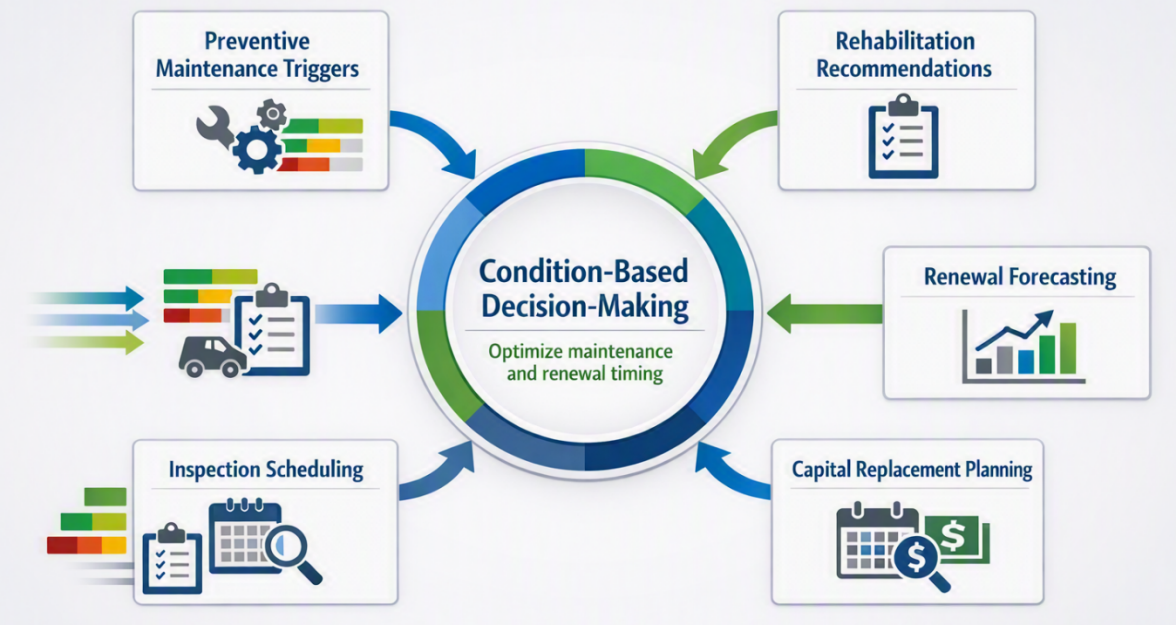


Figure 4-8 Condition-Based Decision Making

Implementation requires consistent condition assessment methods, inspection programs, and condition rating scales, with condition data integrated into OpenGov EAM. Establish condition thresholds that trigger specific maintenance, rehabilitation, or replacement actions.

Apply condition-based interventions continuously through inspection programs, maintenance planning, and capital forecasting.

The following table translates example condition index ranges into recommended actions, from routine monitoring and maintenance to rehabilitation or replacement evaluation. These are initial decision thresholds, not final requirements. Refine them to reflect:

- Asset class.
- LoS expectations.
- Risk exposure.
- Lifecycle costs.
- Available funding.

Table 4-3 Example Condition Triggers

Condition Index	Action
90-100	Routine Monitoring
75-89	Preventive Maintenance
60-74	Corrective Maintenance
40-59	Rehabilitation Evaluation
Below 40	Replacement Evaluation

These thresholds should be refined by asset class.

4.3.3 Incorporating Value-Based Analysis

Value-based analysis compares investment alternatives by the outcomes they deliver, not cost alone. The lowest-cost option does not always provide the greatest long-term benefit.

StreetsLA should give greater consideration to projects that deliver multiple organizational benefits than to projects with limited impact. Evaluate alternatives against:

- Public safety improvements and service reliability.
- Lifecycle costs and risk reduction.
- Resilience and environmental impacts.
- Equity and customer outcomes.

Implementation should center on formal business cases supported by lifecycle cost analysis, benefit-cost analysis, and multi-criteria decision analysis. Incorporate value-based scoring into CIP prioritization and project evaluation.

The following figure illustrates how value-based analysis connects investment choices to outcomes using these criteria. It considers both what an investment costs and the value it delivers to StreetsLA, City leadership, stakeholders, and the communities served. Consistent evaluation strengthens the transparency, defensibility, and alignment of maintenance, renewal, and capital investment decisions.

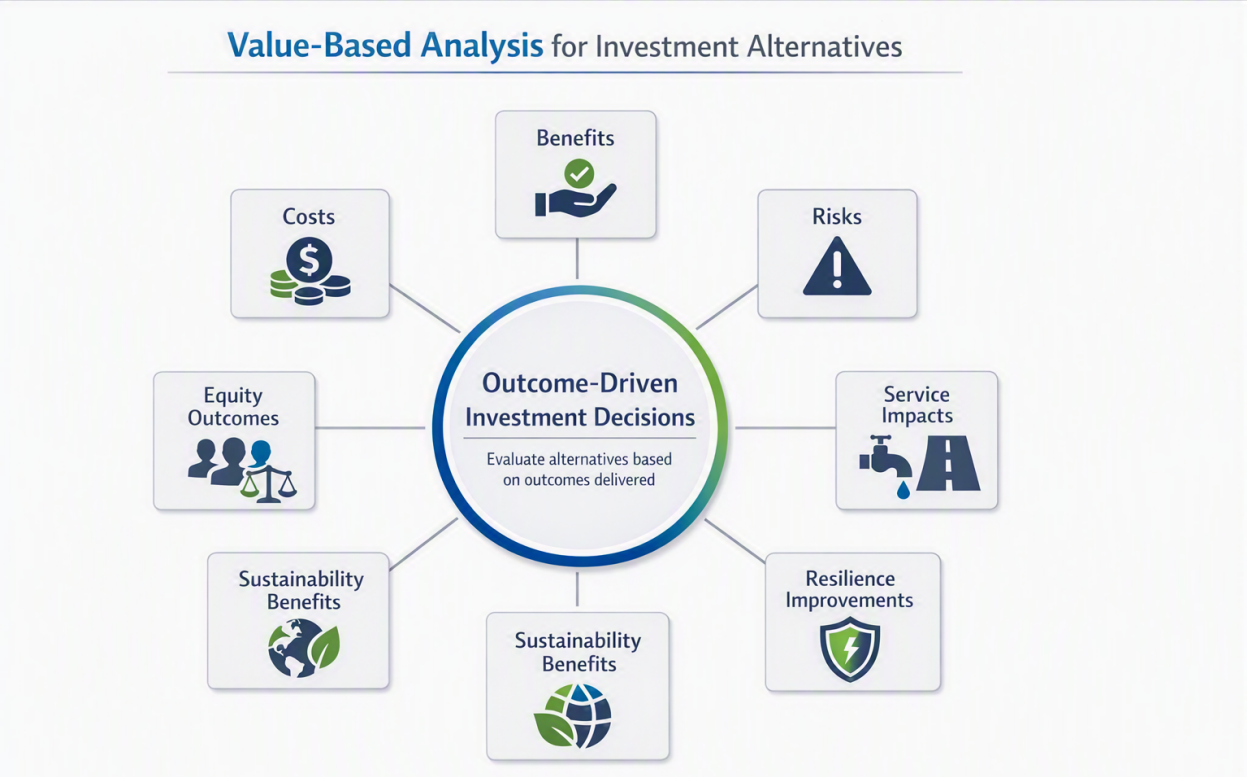


Figure 4-9 Outcome-Driven Investment Decisions

Apply value-based analysis during capital and major maintenance planning, grant applications, and development of long-term investment strategies.

For major capital investments, StreetsLA should use a structured business case that evaluates alternatives beyond initial cost. Use the following complementary methods to identify long-term value, even when the preferred alternative costs more upfront:

- **Lifecycle cost analysis (LCCA):** Compare total ownership costs over the asset's full life, including planning, design, construction, operations, maintenance, renewal, replacement, and disposal.
- **Benefit-cost analysis (BCA):** Quantify expected benefits relative to required investment. Include avoided maintenance costs, reduced risk exposure, improved service reliability, safety benefits, and community outcomes.
- **Multi-criteria decision analysis (MCDA):** Compare benefits that cannot be fully expressed financially. Criteria should include public safety, mobility, equity, sustainability, resilience, customer impact, and strategic alignment.
- **Scenario analysis:** Test alternatives under different assumptions, including funding constraints, accelerated deterioration, climate impacts, changing service demands, and varying maintenance levels.
- **Risk-adjusted evaluation:** Incorporate failure probability and consequences so projects that reduce high-priority risks receive appropriate consideration.

The following figure brings these methods together to support higher-value project prioritization. Combined, they compare total ownership costs with expected benefits, service outcomes, risk reduction, resilience, and organizational priorities. The result is a more transparent and defensible recommendation, especially when higher initial costs provide greater lifecycle performance and public value.

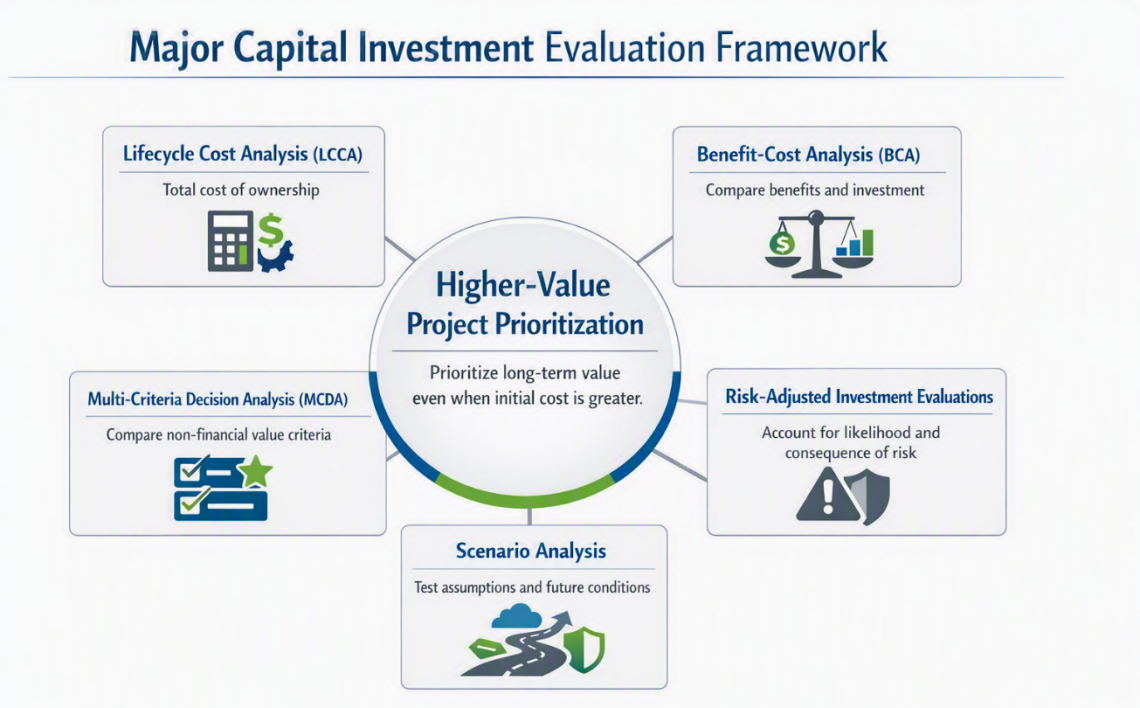


Figure 4-10 Higher-Value Project Prioritization

4.4 Evidence and Information Inputs

Sound decisions depend on accurate, reliable, timely, and relevant information. StreetsLA will use data, business records, field observations, analyses, and stakeholder perspectives to inform decisions throughout infrastructure planning, operations, maintenance, renewal, replacement, and capital investment. Together, they establish what assets exist, where they are located, their condition and performance, the risks they present, and the services they support. They also identify investments needed to sustain or improve performance.

Each decision input offers a distinct perspective on asset performance and investment needs. StreetsLA should draw on:

- **Asset inventory and GIS data:** Define asset locations, characteristics, and ownership.
- **Condition and maintenance records:** Use condition assessments, inspection records, work order histories, and maintenance costs to understand asset health, recurring issues, and maintenance effectiveness.
- **Risk, resilience, and compliance information:** Use risk assessments, climate and resilience assessments, and regulatory requirements to identify potential consequences, vulnerabilities, and compliance obligations.
- **Service and usage data:** Use performance measures, LoS expectations, and traffic and usage data to assess service performance and demand.
- **Financial and community information:** Connect financial data, lifecycle costs, customer service requests, equity indicators, customer feedback, and stakeholder feedback to affordability, public value, and community outcomes.

Decision quality depends on information quality. Incomplete, outdated, inconsistent, or inaccurate data can distort priorities, undermine maintenance efficiency, misdirect capital investment, and weaken confidence in funding recommendations. Reliable information helps StreetsLA compare needs across asset classes, evaluate alternatives objectively, defend recommendations, and communicate infrastructure needs clearly. Documenting the evidence, assumptions, and rationale also strengthens transparency and alignment with organizational objectives.

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The following figure brings together asset characteristics, condition, financial data, risk indicators, service performance, and GIS-based spatial context to show how decision inputs inform infrastructure needs and investment priorities. A formal Data Governance Program should keep these inputs reliable, current, and consistently applied across planning, operations, maintenance, and capital decisions.

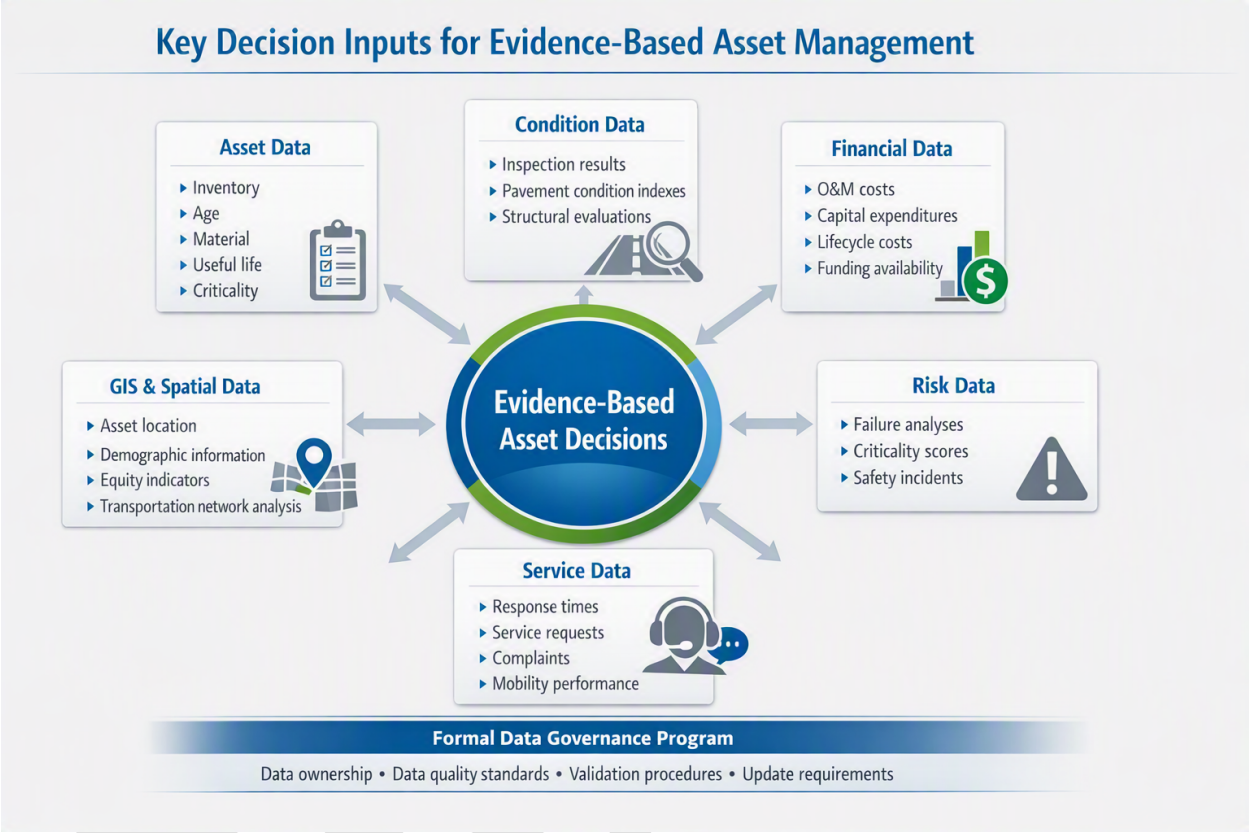


Figure 4-11 Evidence-Based Asset Decision

Implementation should establish data governance standards, improve data quality, and make collection practices consistent across StreetsLA. For each major asset class, define:

- Data ownership and maintenance responsibilities.
- Data quality standards, validation procedures, and quality control expectations.
- Field collection standards and naming conventions.
- Data update requirements.

Integrate OpenGov EAM, GIS, financial systems, inspection technologies, and reporting tools wherever feasible. Information should flow efficiently across asset inventory, work management, condition assessment, risk management, financial planning, and performance reporting. These connections reduce duplication, improve consistency, and provide a more complete view of infrastructure performance and investment needs.

Maintain decision inputs continuously and validate them regularly. Update records through inspections, completed work orders, service requests, condition assessments, project closeout activities, and system integrations. Periodic reviews should identify:

- Missing records, outdated information, and duplicate assets.
- Inconsistent condition ratings and incomplete maintenance histories.
- Gaps in financial or performance data.

Information management is an ongoing business process, not a one-time collection effort. Sustained attention to data quality strengthens evidence-based decisions, improves confidence in recommendations, and supports a more mature, transparent, and accountable asset management program.

4.5 Capital Investment Decision-Making

Capital investment decisions determine which projects StreetsLA evaluates, prioritizes, selects, funds, and monitors for significant asset renewal, rehabilitation, replacement, expansion, modernization, or improvement. The commitments are long term. They shape asset performance, service reliability, lifecycle costs, risk exposure, and community outcomes for years. A structured capital investment process provides a consistent basis for comparing needs, documenting recommendations, and selecting projects that deliver the greatest overall value to StreetsLA, the City, and the communities served.

Capital investments are among StreetsLA's largest, most visible, and most consequential infrastructure decisions. Needs often exceed available funding. StreetsLA should therefore use objective criteria and documented evaluation methods to identify projects that best support SAMP objectives and City priorities. Balance the following considerations:

- Public safety, mobility, and service delivery.
- Asset condition, risk reduction, and lifecycle cost.
- Resilience, sustainability, and equity.
- Regulatory obligations, stakeholder expectations, and available funding.

Poorly timed or justified investments can increase long-term costs and risk, reduce LoS, delay necessary improvements, and limit gains in infrastructure performance. A disciplined capital investment process directs funding toward projects that address priority needs, deliver measurable public value, reduce unacceptable risks, and support sustainable lifecycle outcomes. It also improves decision traceability by connecting asset data and business case analysis with project selection, funding recommendations, and expected outcomes, strengthening transparency and accountability.

Each major capital project should have a documented business case supported by condition assessments, risk evaluations, LCCA, BCA, MCDA, and LoS evaluations. Include equity and sustainability considerations and use value-based project prioritization. The business case should:

- Define the problem or opportunity and evaluate viable alternatives.
- Identify costs, benefits, risks, and service impacts.
- Demonstrate alignment with organizational objectives.

Review capital investment recommendations through established governance structures. Involve asset owners, engineering, operations, maintenance, finance, planning, executive leadership, and other appropriate stakeholders.

Review capital investment decisions annually during CIP development, budget planning, long-term financial forecasting, and SAMP implementation reviews. Additional reviews should respond to:

- Major infrastructure investments and significant asset renewals.
- Emergency replacements and grant funding opportunities.

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- Material changes in risk exposure.

Combining annual planning with event-driven reviews keeps capital investment decisions disciplined, transparent, and adaptable.

The following figure illustrates the governance review process StreetsLA should use for major capital investments. Its stages are:

- Identify the need and define the problem.
- Assess asset condition and risk, then analyze alternatives.
- Develop the business case, analyze lifecycle costs, and evaluate service impacts.
- Prioritize the portfolio and complete governance review.
- Approve funding and deliver the project.

Evaluate investments collectively through the CIP process, not as isolated requests. This portfolio approach improves transparency, supports consistent comparisons, and identifies the combination of projects that delivers the greatest overall value.



Figure 4-12 Capital Investment Governance Review Process

4.6 Operation and Maintenance (O&M) Decision-Making

O&M decision-making guides the daily and near-term work that sustains asset performance, maintains service delivery, protects public safety, and preserves infrastructure value. It connects daily operations with long-term lifecycle asset management. Key decisions include:

- Set inspection frequencies and schedule preventive and corrective maintenance.
- Prioritize work orders and assign crews and equipment.
- Define service response strategies and operational procedures.
- Determine when maintenance needs warrant rehabilitation, renewal, or capital investment consideration.

Maintenance often offers the most cost-effective way to extend asset life, reduce risk, maintain LoS, and avoid premature replacement. Timing matters. Preventive maintenance can slow deterioration, reduce failure probability, and limit emergency repairs. Corrective maintenance restores function before deficiencies cause greater safety, mobility, or service impacts. Clear criteria and reliable information help StreetsLA improve workforce productivity, reduce reactive work, manage the maintenance backlog, and focus limited resources on the greatest operational and public value.

Use OpenGov EAM as the primary platform to schedule, prioritize, assign, track, and evaluate maintenance work. Base O&M decisions on condition assessments, inspection findings, maintenance histories, risk evaluations, asset criticality, performance measures, LoS objectives, customer service requests, and available capacity. Apply these inputs through:

- Work order priorities that reflect asset condition, risk, service impacts, public safety, regulatory needs, and customer response expectations.
- Preventive maintenance schedules for assets where routine intervention can reduce deterioration or failure risk.
- Condition-based maintenance triggers where inspection results or performance measures indicate a need for targeted action.
- Maintenance history and cost reviews that identify recurring issues, high-cost assets, and candidates for rehabilitation, renewal, or replacement.

O&M decisions are continuous. Routine reviews of work orders, inspection results, performance measures, service requests, asset condition, and maintenance backlog trends should inform the following review cycle:

- Daily and weekly: Support crew scheduling, emergency response, and near-term work prioritization.
- Monthly: Evaluate work order completion rates, recurring maintenance problems, service response performance, and resource utilization.
- Quarterly and annually: Assess whether maintenance strategies reduce risk, improve asset performance, support LoS, and align with budget expectations.

Treating O&M decision-making as an ongoing, data-informed business process strengthens operational reliability and transparency. It also connects maintenance work to broader SAMP objectives.

The following figure brings these O&M decision areas together to support defined LoS targets while minimizing lifecycle costs. It covers preventive maintenance, inspection frequencies, work prioritization, crew assignments, response strategies, emergency maintenance, and operational optimization. OpenGov EAM should provide the work order, inspection, scheduling, prioritization, reporting, and performance information needed for consistent, data-informed decisions that support asset performance, service reliability, workforce efficiency, and responsiveness.

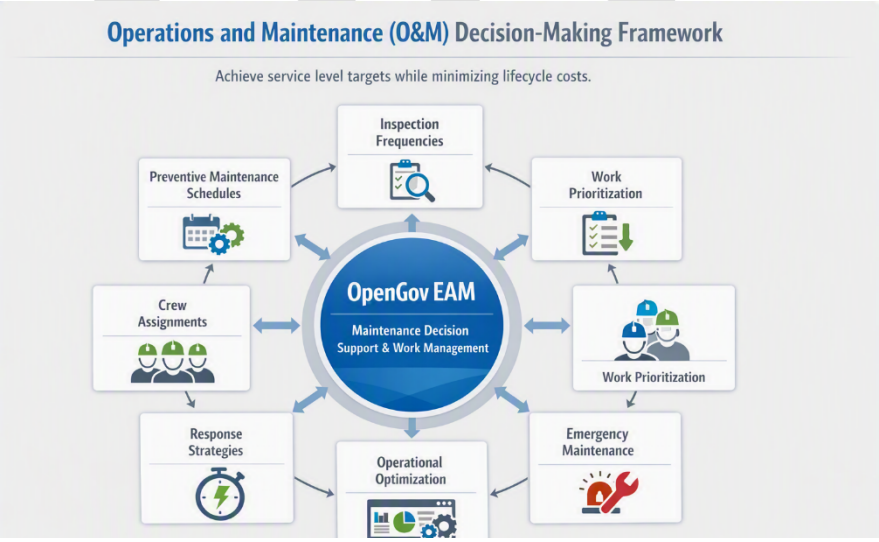


Figure 4-13 Operations and Maintenance Decision Making

4.7 Prioritization and Portfolio Optimization

Prioritization ranks competing infrastructure needs. Portfolio optimization identifies the mix of investments that delivers the greatest overall benefit within available resources. Together, they evaluate asset needs and investments as an interconnected portfolio rather than as isolated requests.Comparing needs across asset classes and service areas helps StreetsLA balance public safety, service reliability, risk reduction, lifecycle cost optimization, equity, sustainability, resilience, and organizational objectives.

Infrastructure needs will consistently exceed StreetsLA's funding, staffing, equipment, and delivery capacity. A formal prioritization process helps prevent reactive or inconsistent decisions that favor individual projects over portfolio outcomes. Portfolio optimization then tests how investment scenarios affect risk exposure, LoS, asset condition, funding needs, and long-term performance. Documenting these tradeoffs makes clear why projects are advanced, deferred, bundled, phased, or reconsidered.

StreetsLA should establish a consistent prioritization method with scoring criteria and weights aligned with SAMP objectives and City priorities. Support it with:

- Risk-based scoring, asset criticality assessments, and the Value Framework.
- LoS evaluations, lifecycle cost analysis, and benefit-cost considerations.
- Equity and sustainability factors and scenario planning tools.

Evaluate candidate projects and investment needs using common decision inputs:

- Asset condition, risk scores, and maintenance history.
- Service impacts and expected benefits.
- Cost estimates and funding constraints.

Use optimization tools or structured scenario analysis to test funding levels, delivery schedules, project bundles, and investment strategies. This comparison should make the tradeoffs of each portfolio option clear to leadership.

Optimize the portfolio annually during budget development, CIP planning, long-term financial forecasting, and SAMP implementation reviews. Reassess it when material changes arise:

- New funding opportunities or emergency infrastructure needs.
- Significant changes in risk exposure or service expectations.
- Updated condition assessment results.

Embedding prioritization and portfolio optimization in routine planning supports disciplined, transparent, and defensible decisions that maximize public value over time.

The following figure summarizes how StreetsLA can compare investment needs across the full asset portfolio. It brings together asset criticality, risk exposure, service impacts, lifecycle costs, funding constraints, equity, and strategic objectives. Annual scenario planning should test these funding and investment alternatives:

- Current funding.
- Constrained budget.
- Accelerated renewal.
- Risk reduction.
- Resilience investment.

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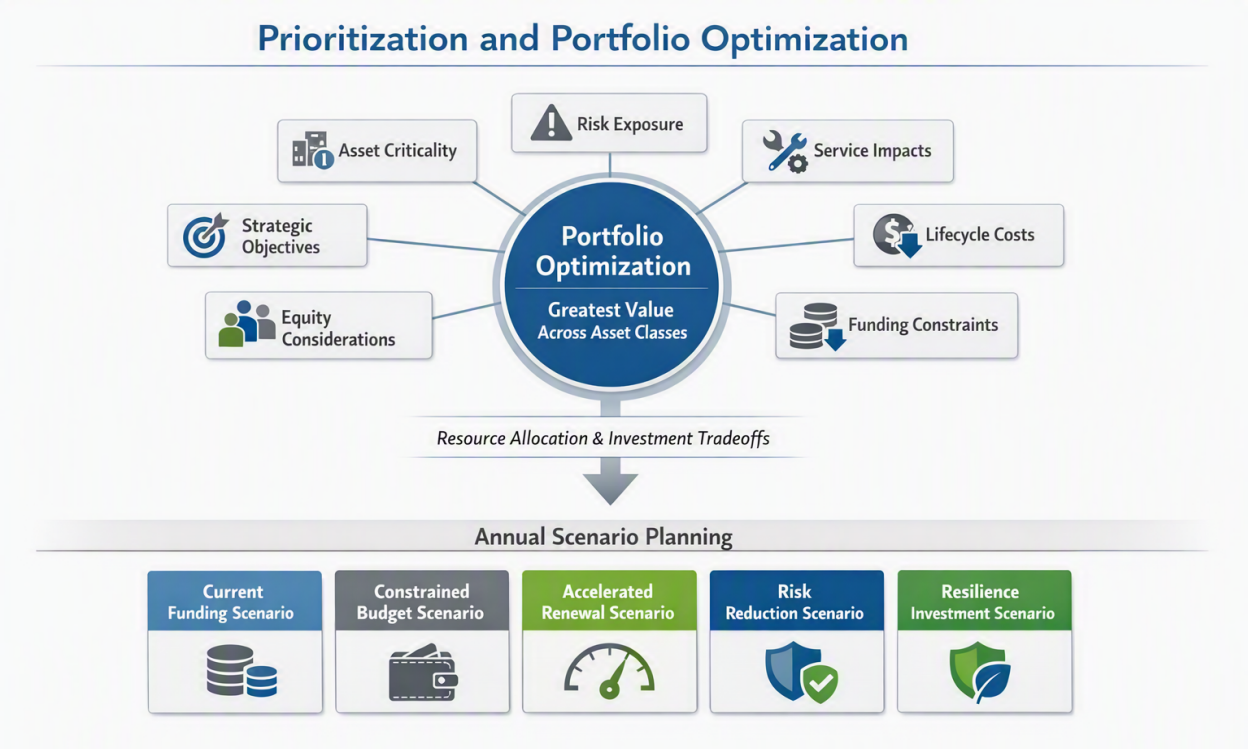


Figure 4-14 Prioritization and Portfolio Optimization

4.8 Governance, Roles, and Accountability

Governance connects evidence and strategic priorities to accountable action. It defines how StreetsLA initiates, reviews, approves, documents, communicates, and monitors asset management decisions. Roles identify who participates; accountability identifies who owns each decision, implements it, and reports on outcomes. Together, they connect asset data, risk information, LoS expectations, financial constraints, and strategic priorities to maintenance, renewal, rehabilitation, replacement, capital investment, and operational performance decisions.

Infrastructure decisions commit public funds, require cross-functional coordination, and balance competing priorities. Their consequences can last for decades, affecting service delivery, public safety, mobility, equity, resilience, and financial sustainability. Without clear governance, decisions can become inconsistent, delayed, duplicative, or overly dependent on individual judgment. Defined accountability reduces ambiguity, improves coordination across divisions, and provides a transparent, defensible record of what was decided and why.

StreetsLA should establish formal governance structures that bring together executive leadership, asset owners, maintenance managers, engineering, finance, planning, information technology, and asset management professionals. Define decision rights, approval thresholds, escalation paths, review cycles, and reporting expectations. Assign clear responsibility for:

- Asset data ownership, risk ownership, and LoS monitoring.
- Project prioritization, budget recommendations, and business case preparation.

- Investment approvals, performance reporting, and continual improvement.

Document decisions in OpenGov EAM, planning records, budget materials, and executive reporting tools so recommendations remain traceable and supported by evidence.

Establish governance during SAMP implementation and embed it in annual budgeting, CIP development, maintenance planning, risk reviews, performance monitoring, and asset management improvement activities. Review the model periodically. Responsibilities should remain clear, processes should support timely action, and accountability mechanisms should deliver intended outcomes. As asset management maturity increases, refine procedures to reflect expanded data capabilities, improved risk models, updated LoS expectations, and changing organizational priorities.

The proposed governance structure in the following table identifies the groups that guide, support, and execute asset management decisions. It coordinates strategic direction, policy oversight, technical analysis, portfolio recommendations, maintenance execution, funding review, data governance, and asset ownership. Defined roles, decision rights, review processes, and reporting responsibilities provide a practical foundation for SAMP implementation and cross-functional collaboration.

Table 4-4 Proposed Asset Management Governance Structure

Governance Group	Primary Responsibilities
Executive Leadership Team	Strategic direction and investment approvals
Asset Management Steering Committee	Oversight of asset management policy and implementation
Asset Management Office	Framework administration, analysis, reporting
Division Directors	Portfolio decision recommendations
Engineering Division	Technical analysis and project development
Maintenance Division	O&M prioritization and execution
Finance Division	Funding analysis and affordability reviews
GIS and Data Management	Data governance and reporting
Asset Owners	Asset performance and risk accountability

Decision Authority Levels

Decision authority defines who recommends, approves, and implements asset management decisions. Responsibilities should reflect each decision's strategic, financial, organizational, and risk implications:

- **Executive Leadership Team:** Direct decisions with the greatest strategic, financial, organizational, or risk implications, including SAMP approval, major capital investment authorization, and acceptance of risks above established tolerance thresholds.
- **Asset Management Steering Committee:** Provide cross-functional oversight of portfolio prioritization, strategic investment recommendations, and recurring performance reviews. Check alignment with SAMP objectives, LoS expectations, risk appetite, funding constraints, and City priorities.
- **Division Directors:** Oversee operational decisions within their areas, including budget recommendations, service-level adjustments, maintenance priorities, and implementation of approved asset management strategies.

Keep all major decisions documented, traceable, and auditable. Decision records should capture:

- Information reviewed and assumptions applied.
- Alternatives considered and approvals obtained.
- The rationale for the final decision.

These records strengthen transparency, accountability, and defensibility. They also preserve institutional knowledge for future reviews, audits, lessons learned, and continual improvement.

The following figure summarizes the distinction between strategic approval, cross-functional review, and operational authority. Clear responsibilities support timely decisions; documented recommendations, approvals, assumptions, alternatives, and outcomes keep those decisions traceable and auditable.

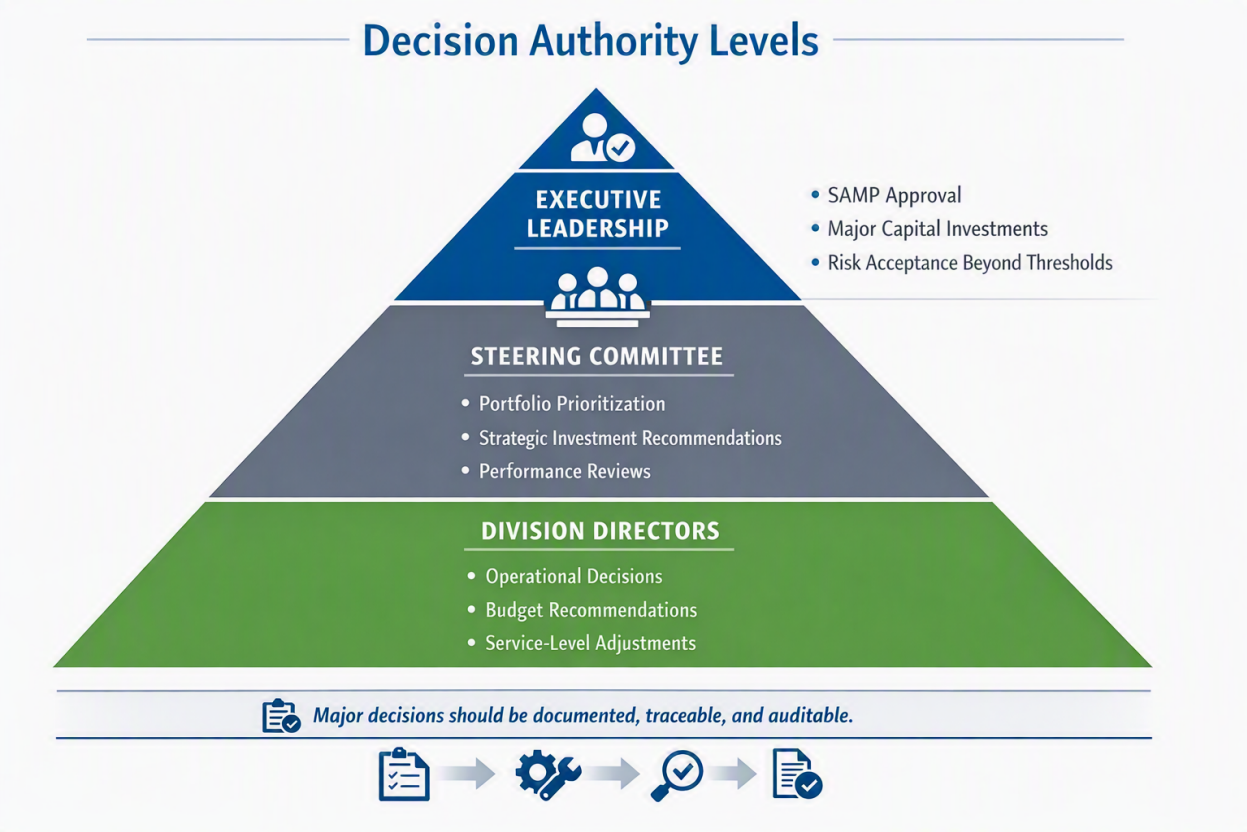


Figure 4-15 Decision Authority Levels

4.8.1 Asset Management Steering Committee

StreetsLA should establish an Asset Management Steering Committee (Steering Committee) to oversee, direct, and coordinate asset management program implementation. As the primary cross-functional forum, it should bring together leadership and representatives from key functional areas to align decisions with StreetsLA priorities, City objectives, LoS expectations, risk appetite, funding constraints, and long-term infrastructure needs. Its responsibilities should include:

- Review portfolio performance and monitor asset risks.
- Approve prioritization methods and review major capital recommendations.

- Resolve cross-department conflicts and endorse annual investment plans.
- Monitor progress against SAMP implementation objectives.

The Steering Committee should meet at least quarterly. Meetings should review performance information, emerging risks, investment priorities, and progress on implementation actions. The committee should also guide decisions that require enterprise-level coordination or escalation.

4.8.2 Decision Escalation and Approval Process

StreetsLA should establish a formal escalation and approval process based on decision complexity, cost, risk exposure, service impact, and strategic significance. Route decisions according to their implications:

- **Routine O&M activities:** Division Managers should generally approve these frequent decisions to support timely operational action.
- **Preventive maintenance programs:** Division Directors should review and approve recurring strategies for alignment with LoS expectations, available resources, and asset performance objectives.
- **Asset renewal projects:** The Steering Committee should review projects within the broader asset portfolio, considering prioritization criteria, risk reduction objectives, and funding constraints.
- **Major CIP investments, changes to LoS, and acceptance of high risks:** Escalate these decisions to Executive Leadership because of their significant financial, policy, organizational, or public-facing implications.

Clear approval authority reduces uncertainty and supports timely decisions. Documenting escalation, review, and approval strengthens accountability and transparency.

The following table summarizes the escalation framework. It distinguishes routine operational decisions from those with broader financial, LoS, portfolio, or risk implications and identifies the appropriate approval authority or review forum. Applying this framework consistently reduces ambiguity and provides a clear record of how significant decisions are reviewed, escalated, and approved.

Table 4-5 Decision Escalation Framework

Decision Type	Approval Authority
Routine O&M Activities	Division Managers
Preventive Maintenance Programs	Division Directors
Asset Renewal Projects	Steering Committee Review
Major CIP Investments	Executive Leadership
Changes to Service Levels	Executive Leadership
Acceptance of High Risks	Executive Leadership

4.9 Assurance and Continual Improvement

Assurance checks that StreetsLA's Decision-Making Framework is applied consistently and delivers intended outcomes. Continual improvement uses the findings to refine it. Assurance validates compliance with approved methods, governance procedures, decision criteria, data standards, risk practices, and approval processes. Continual improvement draws on performance results, audit findings, lessons learned,

user feedback, and changing business needs. Together, they strengthen decision quality, accountability, alignment with organizational objectives, and asset management maturity.

The framework must evolve with StreetsLA. Asset management practices, technologies, regulations, funding conditions, service expectations, asset risks, and organizational priorities all change. Assurance confirms that decisions use approved methods and reliable information; continual improvement adapts those methods when business needs change. This cycle reduces inconsistent decisions, unsupported recommendations, outdated prioritization criteria, and governance processes that no longer reflect how StreetsLA operates.

Implement a structured assurance and continual improvement program using complementary review methods:

- **Audits:** Confirm that decision-making processes are documented, traceable, and consistent with approved procedures.
- **Management and SAMP reviews:** Evaluate whether governance supports timely, effective decisions and alignment with SAMP objectives. Include executive management reviews.
- **KPI evaluations:** Assess improvements in service delivery, risk reduction, lifecycle costs, and broader SAMP outcomes.
- **Lessons-learned workshops and post-project evaluations:** Capture what worked, what did not, and how to improve future maintenance, renewal, rehabilitation, replacement, and capital investment decisions.
- **Risk and data quality reviews:** Evaluate risk management practices and the reliability of decision inputs.
- **Asset management maturity assessments:** Identify gaps and opportunities to advance asset management practices.

Use these reviews to test both process consistency and results. Assess:

- Compliance with approved decision criteria and the accuracy and effectiveness of project prioritization.
- Risk management performance and achievement of defined LoS.
- Investment performance and delivery of expected benefits.
- Data quality and governance effectiveness.

Findings should show whether reliable information supports decisions, priorities align with SAMP objectives, and investments deliver expected benefits. Use this evidence to refine decision criteria, weighting factors, risk thresholds, business case templates, prioritization methods, governance procedures, and continual improvement strategies. The feedback loop should close with practical improvements to how decisions are made and implemented.

Set a regular review cycle, with additional reviews when significant changes occur:

- **Annually:** Conduct assurance activities through Strategic Asset Management Program reviews, budget development, CIP planning, performance reporting, and governance reviews.
- **Quarterly, where warranted:** Review high-priority areas such as risk mitigation progress, project prioritization outcomes, data quality, LoS performance, and OpenGov EAM utilization.
- **Every three to five years:** Comprehensively review the Decision-Making Framework, governance model, prioritization approach, and supporting methods. Review sooner if City priorities, funding

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availability, regulatory requirements, asset conditions, or organizational structure change significantly.

5 Asset Management Roles and Responsibilities

Effective asset management starts with clear accountability. StreetsLA's leadership and operational, technical, financial, and information management functions must work together to deliver value from its assets. Each contributes expertise, information, and resources that shape lifecycle decisions, investment planning, service delivery, risk management, and asset performance. Without defined roles and responsibilities, these activities can become fragmented. Decisions may be inconsistent, and ownership of critical processes and information may be unclear.

A clear governance framework aligns people, processes, and systems with StreetsLA's asset management objectives and supports consistent implementation of the Asset Management Policy and SAMP. StreetsLA will establish a roles and responsibilities matrix using the Responsible, Accountable, Consulted, and Informed (RACI) framework to distinguish four types of participation:

- **Responsible:** Who carries out each asset management activity.
- **Accountable:** Who answers for the outcome.
- **Consulted:** Who provides input during decision-making.
- **Informed:** Who receives updates on resulting actions.

The RACI matrix will strengthen coordination and communication across divisions, reduce duplicated effort, and clarify ownership of asset information, maintenance planning, risk assessment, performance monitoring, capital investment planning, and continual improvement. Documenting these responsibilities also helps StreetsLA identify capability and resource gaps and guide workforce development. Together, the governance framework and RACI matrix provide a sustainable foundation for long-term implementation and continual improvement of asset management practices.

5.1 Purpose

Defined roles and responsibilities establish clear accountability for asset management across StreetsLA. Staff can identify who owns each activity, provides information or technical input, approves decisions, and receives completion updates. This clarity improves coordination and information flow between divisions and teams while reducing duplicated effort. It also connects day-to-day work with SAMP objectives, ISO 55001 expectations, risk management, and long-term infrastructure stewardship. Clear role assignments help identify gaps in skills, capacity, and organizational coverage, informing training, workforce development, process improvements, and future staffing needs.

A shared understanding of these roles strengthens accountability, supports risk identification and mitigation, and provides a coordinated foundation for implementing the asset management program. Coordination must also extend beyond StreetsLA. Many decisions involve City departments and partner agencies responsible for planning, engineering, utilities, transportation, capital project delivery, and regulatory

compliance. Role assignments should therefore address the coordination responsibilities below. Together, these responsibilities support integrated decision-making, reduce organizational silos, align investments, and strengthen infrastructure programs involving multiple agencies and stakeholders.

- Cross-department collaboration.
- Information sharing.
- Project coordination.
- Participation in Citywide asset and infrastructure planning.

5.2 Asset Management Roles and Responsibilities Matrix

StreetsLA should define and communicate asset management roles, responsibilities, decision authority, and accountability at executive, strategic, tactical, and operational levels. Clear decision ownership is essential. The governance structure should align these responsibilities across organizational functions.

Responsibilities should distinguish leadership direction, portfolio accountability, functional support, and work execution:

- **Executive leadership:** Provides direction, approves asset management priorities and objectives, allocates resources, and oversees significant decisions.
- **Asset Owners:** Are accountable for the performance, risk, lifecycle planning, and investment needs of their assigned asset portfolios.
- **Functional support teams:** Provide engineering, maintenance, planning, finance, information management, GIS, data governance, and system administration expertise to support decisions and program delivery.
- **Operational teams:** Execute approved work and provide asset information and field feedback to inform planning, performance evaluation, and continual improvement.

StreetsLA should develop and maintain a RACI matrix to define participation and decision authority for key asset management activities. The matrix should identify who performs each activity, who is accountable for the outcome, and which functions must be consulted or informed.

The RACI matrix should cover all major asset management functions, grouped as follows:

- **Policy and strategy:** Asset Management Policy and SAMP development and updates, and asset management objective setting.
- **Asset information and systems:** Asset inventory management, asset data governance, GIS and OpenGov EAM integration and administration, and OpenGov EAM configuration.
- **Asset assessment and work management:** Condition assessment planning, risk assessment, preventive maintenance strategy, and work planning and management.

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- **Investment and budgeting:** Capital planning, investment prioritization, and budget development.
- **Performance and capability:** Performance reporting, training and competency development, and continual improvement.

Review the RACI matrix whenever organizational structures, systems, processes, or asset management requirements change. Keeping it current helps StreetsLA maintain clear decision pathways, identify accountability gaps, coordinate work across functions, and implement the SAMP consistently.

5.3 Position Description Recommendations for Key Asset Management Roles

Implementing the SAMP starts with clear roles, decision authority, accountability, and competency requirements across leadership, management, technical, operational, financial, and support functions. StreetsLA should assign responsibilities through existing positions, expanded mandates, or dedicated roles, according to its organizational structure and implementation needs.

The role descriptions below support coordinated delivery, clear accountability, consistent decision criteria, and integration of asset management into organizational planning and service delivery. Detailed position descriptions should specify decision authority, required competencies, reporting and escalation responsibilities, and working relationships with other functions. Review assignments periodically and update them when organizational structures, processes, technologies, or asset management requirements change. This approach aligns people, processes, and systems around SAMP implementation.

Asset Management Executive Sponsor

The Asset Management Executive Sponsor (Executive Sponsor) leads and oversees StreetsLA's asset management program. Visible leadership builds an asset management culture and reinforces decisions informed by risk, lifecycle needs, and value. Key responsibilities include:

- Champion the Asset Management Policy and SAMP, approve strategic direction, and align asset management objectives with City priorities and service commitments.
- Authorize appropriate resources and remove organizational barriers.
- Promote organizational alignment and cross-functional coordination.
- Review key performance and risk information.

Asset Management Program Lead

The Asset Management Program Lead (Program Lead) coordinates SAMP implementation, maintenance, and continual improvement. The role also guides ongoing refinement of StreetsLA's asset management practices. Key responsibilities include:

- Translate asset management objectives into coordinated initiatives and maintain the implementation roadmap.

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- Monitor progress and support governance and performance reporting.
- Coordinate input from Asset Owners and functional teams and facilitate cross-functional activities.
- Integrate asset management requirements into planning, operations, maintenance, budgeting, and investment processes.
- Coordinate activities to maintain alignment with applicable ISO 55001 requirements.

Asset Owner

Asset Owners are accountable for lifecycle management of their assigned asset classes. Accountability for asset performance, risk, lifecycle planning, and investment recommendations remains with the Asset Owner, whether work is delivered by internal staff, contractors, or shared-service providers. Key responsibilities include:

- Understand and oversee asset condition, performance, risk, service requirements, maintenance needs, regulatory obligations, renewal priorities, and long-term investment needs.
- Review asset information and identify emerging risks and performance concerns.
- Establish or recommend lifecycle strategies and support maintenance and capital prioritization.
- Use technical, operational, and financial information to recommend intervention, renewal, replacement, or other risk treatments.
- Represent asset portfolio needs in planning and governance processes.

Maintenance and Operations Manager

Maintenance and Operations Managers translate asset management priorities into day-to-day work. They oversee maintenance delivery, work execution, crew planning, preventive maintenance, corrective work, emergency response, and field performance. Key responsibilities include:

- Manage work order execution and support preventive and condition-based maintenance planning.
- Identify recurring asset issues and provide field-based condition feedback.
- Monitor maintenance performance and escalate issues requiring further assessment.
- Support implementation of risk controls and condition-based maintenance strategies.

GIS and Asset Data Steward

GIS and Asset Data Stewards (Data Stewards) maintain the quality, consistency, accessibility, and usability of asset information. They support GIS and OpenGov EAM integration so information can inform condition assessment, risk analysis, work management, performance evaluation, lifecycle planning, and investment prioritization. Key responsibilities include:

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- Maintain asset data standards, hierarchies, and spatial and attribute information.
- Maintain data quality controls and correction workflows.
- Monitor data quality and coordinate resolution of identified deficiencies.
- Maintain relevant information governance requirements.

OpenGov EAM System Administrator

The OpenGov EAM System Administrator (System Administrator) administers and maintains the platform in line with StreetsLA's approved asset management and work management processes. The role works with Asset Owners and operations, maintenance, asset management, and data functions to support reliable information capture, effective workflows, and appropriate reporting. Key responsibilities include:

- Manage system configuration, user access and permissions, and workflows.
- Maintain asset fields, inspection forms, work order templates, dashboards, and reporting tools.
- Coordinate system updates and integrations with GIS and other approved business systems.
- Align system configuration with defined business processes.

Finance and Budget Representative

Finance and Budget Representatives bring financial information and affordability considerations into asset management planning and decisions. Their input helps StreetsLA assess trade-offs and funding constraints, compare investment scenarios, and direct resources toward projects and programs offering the greatest long-term value. Key responsibilities include:

- Support budget development, financial analysis, cost tracking, lifecycle costing, capital programming, and long-term funding assessments.
- Provide financial input to business cases, investment prioritization, and capital improvement planning.
- Evaluate alternative lifecycle and funding scenarios.

Support these role descriptions with an approved RACI matrix or equivalent framework defining responsibilities and decision authority. The framework should identify accountability for key asset management activities and decisions, establish clear decision and escalation pathways, and define working relationships across functions. StreetsLA should also:

- Define competency requirements for each role and assess development needs.
- Provide appropriate training or development.
- Retain evidence of role assignments and completed competency actions to support SAMP implementation and continual improvement.

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6 Communication Management Strategy

Effective communication turns StreetsLA's SAMP into coordinated action. It connects organizational and asset management objectives with day-to-day operations by providing stakeholders with relevant, reliable, and timely information. The Communication Management Strategy defines the principles, governance expectations, and stakeholder engagement approach for sharing, understanding, and using asset management information to inform decisions across StreetsLA.

Clear communication builds a shared understanding of asset management priorities, performance, risks, investment needs, and service delivery objectives. It connects leadership, managers, technical teams, operational staff, partner agencies, elected officials, and external stakeholders. Consistent information flow between strategic planning, program management, project delivery, and operations supports coordinated, evidence-based decisions.

Asset management communication should:

- Connect StreetsLA’s organizational objectives, asset management objectives, and operational activities.
- Coordinate decisions across organizational units and asset portfolios.
- Clarify asset management roles, responsibilities, decision authority, and accountability.
- Provide relevant, reliable information tailored to stakeholder needs and decision-making responsibilities.
- Use consistent asset management terminology and promote shared interpretation and application of information across StreetsLA.
- Support transparent, meaningful engagement with stakeholders affected by StreetsLA's services, programs, projects, and asset management decisions.
- Communicate asset risks, performance outcomes, investment priorities, and service impacts to inform decisions.

6.1 Communication Principles and Strategy

The following principles shall guide StreetsLA’s asset management communication. They support informed decisions, organizational alignment, and effective stakeholder engagement:

- **Clear and Consistent:** Communications shall use clear, accurate, and consistent language to build a shared understanding of asset management objectives, priorities, risks, performance, and investment needs.
- **Relevant and Proportionate:** Content, detail, frequency, and delivery methods shall match the audience’s needs, responsibilities, influence, and interests.
- **Timely and Coordinated:** Communications shall reach stakeholders at appropriate points to support planning, decisions, coordination, and awareness. Messages shall remain aligned across organizational functions and asset portfolios.

- **Accessible and Inclusive:** Communication approaches shall account for differences in technical knowledge, accessibility requirements, language needs, and ability to participate so stakeholders can understand and use the information.
- **Transparent and Evidence-Based:** Communications shall use reliable information and clearly distinguish verified information from assumptions. They shall explain the rationale for significant decisions in accordance with applicable requirements.
- **Two-Way and Responsive:** Communication processes shall provide appropriate opportunities for dialogue, feedback, questions, and clarification. This exchange shall support continual improvement, stakeholder understanding, and informed participation.

6.2 Stakeholder-Based Communication

StreetsLA's stakeholders differ in their influence on asset management decisions, interest in outcomes, and information needs. Stakeholder groups may include:

- Internal stakeholders: Executive leadership, managers, asset owners, program and project teams, engineers, planners, maintenance personnel, field crews, finance, information technology, communications personnel, and other supporting functions.
- External stakeholders: City leadership, elected officials, other City departments, regulatory agencies, utility and transportation partners, contractors, consultants, community organizations, property owners, residents, businesses, and the general public.

StreetsLA will use an influence–interest framework to define communication objectives and appropriate engagement levels. This is a practical planning tool, not a fixed stakeholder classification. The figure below presents the influence–interest matrix using three levels: low, medium, and high.

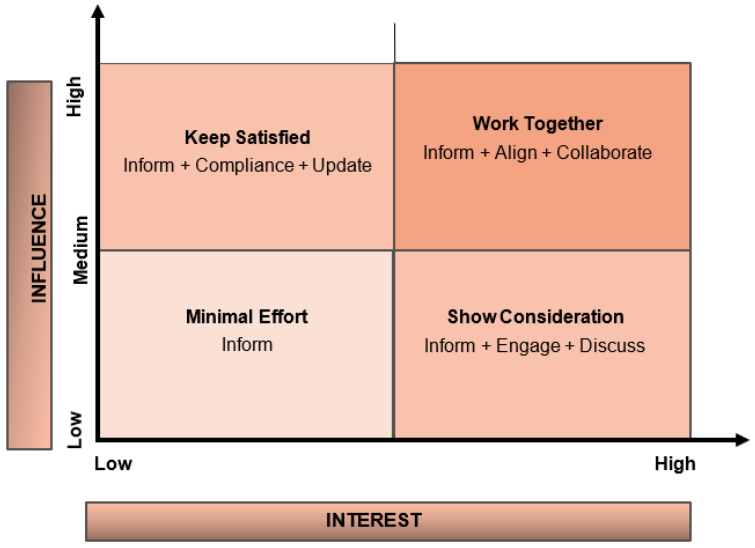


Figure 6-1 Stakeholder Influence–Interest Matrix (Three-Level Framework)

High influence and high interest: Maintain active collaboration, provide decision-relevant information, and create structured opportunities for dialogue.

High influence and lower interest: Provide concise strategic information, highlight matters requiring attention, and maintain sufficient engagement to support timely decisions.

Lower influence and high interest: Provide accessible updates, explain anticipated implications, and establish appropriate mechanisms for questions and feedback.

Lower influence and lower interest: Make essential information available through proportionate and efficient communication methods.

6.3 Communication Methods

StreetsLA may combine internal and external communication methods to suit the audience, purpose, sensitivity, complexity, and intended outcome of each communication. Methods may include:

- Internal methods: Governance meetings, leadership briefings, program coordination meetings, technical workshops, operational discussions, dashboards, reports, guidance documents, training materials, and approved digital collaboration platforms.
- External methods: City websites, public reports, correspondence, project notices, fact sheets, presentations, public meetings, community engagement activities, digital communication platforms, and coordination through appropriate City communication functions.

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7 Organizational Change Management

Organizational Change Management (OCM) provides a structured approach to the people, process, governance, and organizational changes needed to implement and sustain StreetsLA's Asset Management System and SAMP. Technology alone is not enough. New asset information systems, condition assessment programs, and decision-support processes must be supported by committed leadership, clear governance and accountability, workforce engagement, competency development, and consistent adoption of asset management principles across all divisions.

OCM embeds asset management in daily planning, maintenance, capital investment, performance monitoring, and decision-making so improvements can be sustained. StreetsLA's transition to a coordinated, data-driven, risk-informed, and lifecycle-based program will bring more consistent processes, stronger governance, better asset information and performance monitoring, and closer integration with business operations.

This transition strengthens organizational capability, decision quality, and accountability while aligning asset-related activities with service delivery objectives, long-term infrastructure stewardship, and City priorities. StreetsLA's OCM strategy provides a structured roadmap for the transition. It helps employees and leaders understand their roles, responsibilities, and the value asset management delivers to the City, stakeholders, and communities served by StreetsLA.

Implementing the Asset Management System and optimizing OpenGov EAM will introduce new responsibilities, revised workflows, stronger data governance requirements, and changes to established decision-making practices. These changes may create uncertainty, competing priorities, or resistance to new ways of working. StreetsLA will address these challenges through a structured, scalable OCM approach focused on:

- Leadership sponsorship.
- Stakeholder engagement.
- Transparent communication.
- Competency development and targeted training.
- Ongoing performance monitoring.

Organizational adoption requires the same discipline as technical implementation. This approach can reduce implementation risks, strengthen workforce readiness, improve adoption of asset management practices, and bring forward benefits in service delivery, risk management, lifecycle decision-making, and continual improvement.

StreetsLA's OCM efforts build on ongoing initiatives associated with Executive No. 9, OpenGov EAM implementation, governance modernization, asset information improvements, and citywide infrastructure planning reforms. These initiatives provide a foundation for stronger alignment, accountability, collaboration, and asset management capability across the Bureau, supporting implementation of the Asset Management System and SAMP.

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7.1 StreetsLA Change Management Approach

StreetsLA's OCM approach supports implementation, adoption, and long-term sustainment of improvements introduced through the Asset Management System, SAMP, OpenGov EAM initiatives, and related improvement programs. Lasting results require coordinated changes to governance, business processes, data management, technology, roles and responsibilities, and organizational behaviors. OCM provides a framework for managing these changes and embedding improvements in daily operations.

7.2 Change Management Methodologies and Tools

StreetsLA may draw on established OCM methodologies as reference tools for planning, implementation, adoption, and continual improvement. Their concepts and practices can strengthen leadership engagement, workforce readiness, communication, governance, and organizational alignment during change.

No single methodology or proprietary process is mandatory. StreetsLA can select complementary techniques suited to each initiative's scale, complexity, and organizational impact. This flexibility supports diverse asset management initiatives across the Bureau while maintaining its commitment to leadership, competency development, governance, continual improvement, and organizational capability.

7.2.1 Individual Adoption and Workforce Readiness (ADKAR Concepts)

Asset management improvements depend on employees understanding, accepting, and applying new ways of working. The ADKAR model offers a framework for supporting individual adoption through five progressive stages. These concepts can help StreetsLA introduce new asset management processes, governance practices, inspection and condition assessment methods, reporting requirements, OpenGov EAM workflows, risk management procedures, and cross-functional business processes. The stages are:

- **Awareness:** Understand why change is needed.
- **Desire:** Build commitment to the desired future state.
- **Knowledge:** Learn the practices and skills needed to participate.
- **Ability:** Apply new practices in daily work.
- **Reinforcement:** Sustain desired behaviors over time.

7.2.2 Initiative-Level Change Management Planning (Three-Phase Concepts)

Many OCM frameworks organize change into three phases. Terminology varies, but the structure helps StreetsLA coordinate communication, stakeholder engagement, training, readiness assessments, implementation support, performance monitoring, and reinforcement across an initiative's lifecycle. It applies to OpenGov EAM optimization, asset management governance, data governance improvements,

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inspection programs, risk management processes, performance reporting frameworks, and other organizational improvements. The three phases are:

- **Planning and preparation:** Plan proactively before deployment and assess organizational readiness.
- **Implementation and transition:** Provide active support as new processes, systems, or organizational changes are introduced.
- **Long-term sustainment:** Monitor adoption and reinforce new practices to sustain improvements.

7.2.3 Leadership, Project, and Change Alignment (Project Change Triangle Concepts)

The Project Change Triangle (PCT) links leadership sponsorship, project delivery, and organizational adoption. Aligning these components supports StreetsLA's objectives for governance, accountability, leadership commitment, organizational capability, and continual improvement of the Asset Management System. Successful outcomes typically depend on:

- **Leadership and governance:** Effective sponsorship and direction.
- **Project delivery:** Successful delivery of the technical solution.
- **Organizational adoption:** Structured support for adoption and use.

7.3 Monitoring, Sustainment and Operational Ownership

StreetsLA will establish monitoring, sustainment, and operational ownership arrangements to evaluate organizational change, sustain long-term value, and support asset management objectives. Monitoring should be risk-informed, proportionate to the significance of the change, and integrated with existing governance, performance management, and continual improvement processes. It may assess:

- Organizational readiness and process adoption.
- Data quality improvements.
- Achievement of implementation milestones.
- Realization of intended business outcomes.

Use existing evidence where practical. Performance measures, operational metrics, management reports, asset information systems, workforce feedback, and business intelligence tools can help StreetsLA assess whether intended outcomes are being achieved and improvements are becoming part of routine work.

StreetsLA will gather regular feedback throughout implementation and transition to support adoption and identify issues early. Feedback methods may include:

- Supervisor observations, stakeholder discussions, and team meetings.

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- Training evaluations and lessons learned sessions.
- Employee surveys and other structured or informal engagement suited to the initiative.

When monitoring identifies adoption challenges, performance gaps, or implementation risks, StreetsLA should address them through continual improvement. Responses may include:

- Additional training and competency development.
- Clarification of roles and responsibilities.
- Updated procedures and documentation.
- Enhanced communication or increased management support.

Operational owners should embed changes in routine business practices. Where appropriate, they should incorporate relevant processes, responsibilities, performance measures, training requirements, governance activities, and reporting expectations into existing management systems and organizational practices.

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8 Competency Gap Analysis and Development Plan

StreetsLA will establish and maintain a structured approach to identifying, developing, and sustaining the competencies needed to implement the asset management system and achieve SAMP objectives. This approach supports ISO 55001 competence requirements. It will link competency requirements to assigned responsibilities, decision authority, operational processes, information quality, technology use, and improvement priorities. Both individual proficiency and organizational capacity matter, including access to guidance, tools, knowledge transfer, specialist support, and resources. Resulting actions will be incorporated into the Asset Management Capabilities Roadmap and coordinated with this SAMP's governance, roles and responsibilities, OpenGov EAM, and continual improvement provisions.

8.1 Purpose of the Competency Gap Analysis

The competency gap analysis will determine whether StreetsLA has the capabilities to implement, sustain, and continually improve its asset management system. It will compare required capabilities with available knowledge, skills, experience, and organizational support. Competent personnel support consistent, risk-informed, evidence-based decisions aligned with organizational objectives, service requirements, and long-term asset performance. The analysis will identify gaps that could affect:

- Safe, reliable service delivery and compliance.
- Data quality and risk-informed lifecycle decisions.
- Work execution and system adoption.
- Performance reporting and SAMP implementation.

The approach applies to leadership, asset owners, engineering, maintenance and operations, planning, finance, GIS and data personnel, OpenGov EAM administrators, analysts, project managers, and other personnel whose work can affect asset management outcomes.

8.2 Competency Framework

ISO 55000 defines "competence" as the "ability to apply knowledge and skills to achieve intended results." Competency management puts that ability into practice across the asset management system. Requirements should be defined by role or staff group at the proficiency needed to perform assigned responsibilities. A common proficiency scale should distinguish:

- Awareness.
- Working knowledge.
- Practitioner capability.
- Specialist capability.

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Competency requirements should support implementation, operation, governance, and continual improvement of the asset management system. Review them periodically as responsibilities, asset classes, technologies, and business processes evolve. The framework should address the competency areas in the following table and remain aligned with StreetsLA's asset management objectives, lifecycle requirements, risk management approach, and One Infrastructure philosophy.

Table 8-1 Competency Areas and Strategic Requirements

Competency Area	Strategic Requirement
Asset Management System and Strategic Alignment	Understanding and application of the Asset Management Policy, SAMP, organizational objectives, value framework, levels of service, lifecycle planning principles, and alignment with City priorities.
Governance, Accountability, And Decision-Making	Understanding and application of assigned responsibilities, decision authority, escalation pathways, accountability requirements, and governance processes necessary to support transparent and effective asset management decision-making.
Asset Lifecycle Management	Understanding and application of lifecycle management principles across planning, acquisition, design, construction, commissioning, operations, maintenance, rehabilitation, replacement, disposal, and handover activities.
Asset Information and Technology	Creation, validation, maintenance, governance, interpretation, and use of asset information, GIS data, OpenGov EAM information, performance data, condition information, work management records, and reporting systems.
Work Management and Service Delivery	Understanding and application of work planning, prioritization, scheduling, dependency management, funding validation requirements, operational procedures, and service delivery commitments.
Risk, Criticality, Condition, Performance, And Lifecycle Decision-Making	Application of approved methods for risk assessment, asset criticality, condition evaluation, performance monitoring, lifecycle planning, and prioritization. Performance measurement frameworks, KPI development, trend analysis, reliability assessment, failure mode evaluation, predictive analytics, performance forecasting, and use of performance information to support operational and investment decisions.
Financial And Investment Planning	Connection of asset needs, lifecycle requirements, service outcomes, risk exposure, funding constraints, business-case development, investment planning, and long-term affordability considerations. Capital investment prioritization, benefit-cost analysis, portfolio optimization, project scoring methodologies, funding allocation strategies, and long-term infrastructure investment planning.
Cross-Functional Coordination and One Infrastructure Planning	Understanding of interdependencies among asset systems, City departments, external agencies, and service providers. Ability to support integrated planning, coordinated investment decisions, and consideration of network-wide impacts.
Asset-Class and Operational Competencies	Understanding of asset-specific requirements where specialized operational, regulatory, technical, safety, or performance considerations apply. Examples may include facilities, asphalt plants, accessibility infrastructure, active transportation assets, fleet and equipment, or other specialized asset classes.
Asset Condition Assessment and Inspection Management	Development and application of condition assessment methodologies, inspection programs, condition rating systems, asset health monitoring practices, quality assurance procedures, and condition data interpretation to support risk-informed lifecycle decisions.
Change, Communication, And Continual Improvement	Adoption of revised processes, communication, knowledge transfer, organizational learning, identification of improvement opportunities, and sustained implementation of asset management practices. Workforce planning, succession planning, knowledge transfer, competency forecasting, and organizational capacity management
Climate Resilience and Sustainability	Understanding climate-related risks, resilience planning, hazard mitigation, sustainability objectives, environmental performance considerations, and incorporation of resilience principles into lifecycle planning and investment decisions.
Contract and Service Provider Management	Procurement support, contractor oversight, service-level monitoring, performance management, contract administration, and management of outsourced lifecycle activities.

Competency Area	Strategic Requirement
Regulatory and Compliance Management	Understanding and application of legal, regulatory, environmental, accessibility, safety, and policy requirements affecting asset management activities and infrastructure service delivery

8.3 Assessment and Prioritization

Use assessment evidence proportionate to the role and activity. Document required proficiency, current evidence, the competency gap, its potential effect on asset management outcomes, and the recommended development or capacity response. Also assess workload, resource availability, specialist expertise, succession risks, and whether existing roles can sustain asset management responsibilities. Prioritize gaps by role or activity criticality, safety and compliance, service delivery and decision quality, information and system dependencies, implementation timing, task frequency, and the consequences of insufficient competence. Record priority gaps in a competency improvement register with an accountable owner, response, target date, resources, status, and completion evidence. Evidence sources may include:

- Role reviews, interviews, workshops, and surveys.
- Observation and reviews of work products and procedures.
- Data quality results and system-use evidence.
- Assurance findings and supervisor validation.

8.4 Competency Development Actions

Match each response to the underlying cause and significance of the competency or organizational capability gap. Training may help, but it should not be the default when the issue is unclear accountability, inadequate capacity or governance, unavailable tools, incomplete procedures, ineffective workflows, poor data quality, or insufficient specialist support.

Competency development initiatives may include:

- Organization-wide awareness of the Asset Management Policy, SAMP, ISO 55001 principles, levels of service, and asset management objectives.
- Role-based instruction in lifecycle management, risk-informed decision-making, prioritization, work management, asset information governance, investment planning, and performance management.
- Practical learning in OpenGov EAM, GIS, asset information management, reporting, and decision-support processes.
- Onboarding, refresher learning, job aids, procedure guidance, governance documentation, and decision-support templates.
- Cross-functional workshops to strengthen collaboration among planning, engineering, operations, maintenance, finance, GIS, and asset management functions.

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- Mentoring, coaching, peer review, communities of practice, and supervised application of asset management processes.
- Competency development in lifecycle governance, asset handover, asset data stewardship, and risk-informed decision-making.
- Knowledge transfer, succession planning, recruitment, specialist support, revised responsibilities, or additional resources where training alone cannot close the capability gap.

8.5 Training and Workforce Development

Align training and workforce development with assessed competency requirements and asset management system implementation. Match training to assigned responsibilities. Delivery may use awareness sessions, role-based workshops, hands-on system training, coaching, job aids, procedures, onboarding materials, communities of practice, and refresher training. Topics may include:

- Asset management and ISO 55001 awareness, StreetsLA policy, and SAMP requirements.
- Risk and criticality assessment, lifecycle planning, and capital prioritization.
- Data standards, condition assessment, preventive maintenance, work management, and performance reporting.
- Role-specific OpenGov EAM workflows.

Evaluate training effectiveness using evidence suited to the competency: completion records, practical demonstrations, supervisor verification, work-product reviews, workflow compliance, data quality results, or fewer recurring errors. Attendance alone does not demonstrate competence.

8.6 Staffing and Role Recommendations

The competency gap analysis may identify roles that need clarification, expansion, or designation to support implementation and long-term program sustainability. Where training or knowledge transfer cannot close a gap, determine whether to clarify or redistribute responsibilities, revise position descriptions, use cross-functional assignments or external services, or assign additional resources. Keep role definitions aligned with the SAMP's governance structure, RACI matrix, and position descriptions. Depending on assessment findings and organizational needs, StreetsLA may designate responsibilities for:

- Asset Management Program Lead.
- Asset Data Steward.
- OpenGov EAM System Administrator.
- Asset Class Owner.
- Performance Reporting Lead.

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- Risk and Reliability Coordinator.
- Condition Assessment Coordinator.

8.7 Monitoring and Performance Management

Review the competency framework and workforce development initiatives as part of asset management system implementation and continual improvement. Incorporate competency and organizational capability information into the Asset Management Capabilities Roadmap to support workforce planning, capability development, succession planning, and continual improvement. Monitor progress through established governance and performance reviews, aligning improvements with organizational objectives, asset management priorities, service needs, and risk management requirements. Reassess requirements when material changes affect:

- Organizational responsibilities, governance, or business processes.
- Asset classes, information requirements, or asset management objectives.
- OpenGov EAM functionality, regulatory obligations, or other factors affecting competency needs.

Monitoring should assess whether StreetsLA maintains the competencies and organizational capabilities to apply approved practices, make informed decisions, maintain reliable asset information, perform assigned responsibilities, and achieve asset management objectives. Management and the asset management governance body should periodically review assessment results, workforce development initiatives, and capability improvement actions to identify emerging risks, resource needs, organizational constraints, and improvement opportunities. Use the findings to update competency requirements, development priorities, and capability improvement plans in line with asset management objectives, evolving responsibilities, technology requirements, and system maturity. Reviews should examine whether:

- Competency improvement actions are implemented and critical capability gaps are addressed.
- Knowledge transfer objectives are achieved.
- Asset management practices are applied consistently across the organization.

Integrate competency management into the broader asset management system review so workforce capability continues to support asset management objectives and organizational maturity over time.

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9 Financial and Funding Strategies

9.1 Financial and Organizational Alignment

StreetsLA manages some of the City of Los Angeles' most extensive and heavily used asset classes, including asphalt and concrete roadways, sidewalks, curb ramps, street trees, medians, alleys, tunnels, and other public right-of-way infrastructure. The City of Los Angeles 2026 CIP identifies roadway condition, sidewalk accessibility, and curb ramp improvements among the City's highest investment priorities. Maintaining these assets requires balanced investment in capital renewal, preventive maintenance, operations, and workforce capacity. StreetsLA's stewardship responsibilities align with City objectives for safety, accessibility, mobility, equity, resilience, sustainability, and service reliability.

9.1.1 Existing Financial Decision-Making

StreetsLA's financial decisions are driven primarily by annual budget allocations, special fund availability, grant eligibility, regulatory obligations, public safety priorities, and asset condition. Risk, levels of service, and asset condition data, including pavement assessments and documented maintenance needs, provide an increasingly important basis for prioritizing infrastructure investments. Funding restrictions and regulatory mandates often constrain decisions, emphasizing reactive maintenance, compliance expenditures, and immediate service needs. Projects and programs are evaluated against asset condition, risk, service impacts, project readiness, and funding opportunities.

9.1.2 Current Funding Strategy

StreetsLA combines General Fund appropriations, dedicated transportation revenues, special funds, permit revenues, and state and federal grants. This diversified model seeks to leverage external funding while directing dedicated transportation revenues toward maintenance, rehabilitation, and renewal. Challenges remain: aging infrastructure, maintenance backlogs, inflation, and rising service expectations. Funding availability, regulatory requirements, and eligibility restrictions influence project timing and scope, limiting optimal lifecycle interventions across the portfolio. StreetsLA must balance preventive maintenance, rehabilitation, renewal, compliance, and operational needs within available funding. Major funding sources include:

- Transportation sales tax allocations, gas tax revenues, and roadway maintenance programs.
- Sidewalk and accessibility funding and stormwater-related funds.
- Permit fees and competitive infrastructure grants.

9.1.3 Revenue Development Strategy

StreetsLA should pursue predictable, sustainable revenue streams for long-term infrastructure management. Asset information maintained in enterprise systems can inform investment planning, strengthen business cases, and support external funding applications. Aligning revenue development with

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asset management planning can help address future infrastructure needs, strengthen resilience, and meet the long-term service expectations of residents, businesses, and visitors. Key opportunities include:

- Modernizing permit fees and expanding cost-recovery programs.
- Enhancing revenues from streetscape and public realm initiatives.
- Pursuing additional state and federal infrastructure grants.
- Supporting Citywide efforts to establish dedicated infrastructure funding mechanisms.

9.2 Financial Planning, Funding, and Reserves

Financial planning, funding strategies, and reserve management must work together to sustain StreetsLA's asset portfolio. Evaluate investment needs against affordability, available funding, lifecycle requirements, acceptable risk, and desired levels of service. Financial planning must align with asset management objectives, anticipated infrastructure needs, service requirements, and City priorities. Coordinating investment and reserve decisions can strengthen financial sustainability, long-term service delivery, and infrastructure stewardship.

9.2.1 Long Term Financial Planning

StreetsLA will align long-term financial planning with asset management objectives and projected infrastructure investment needs across multiple planning horizons. Plans will address full lifecycle requirements, including operations, maintenance, rehabilitation, renewal, replacement, and other future obligations. Asset information, infrastructure forecasts, and service requirements will inform funding needs and investment planning. Consistent with City capital planning processes, StreetsLA will seek to balance near-term operational needs with sustaining assets in a state of good repair. Funding forecasts, capital programs, maintenance strategies, and financial projections will support more predictable, transparent, and accountable investment decisions.

9.2.2 Funding Gap Management

Infrastructure needs may exceed available funding. The resulting funding gaps can accelerate deterioration, increase service risks, and expand deferred maintenance liabilities. StreetsLA will incorporate funding gap analysis into asset management planning to quantify investment shortfalls, evaluate impacts, and inform decisions about levels of service, performance expectations, and investment priorities. Analysis will consider infrastructure needs, regulatory obligations, safety requirements, and community expectations. Where funding is constrained, resources will be directed toward investments offering the greatest value for public safety, operational performance, compliance, and long-term service delivery. Funding gap reporting will also strengthen business cases and future funding advocacy.

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9.2.3 Sustainable Financial Reserves Strategy

Financial reserves support infrastructure sustainability and service continuity. StreetsLA will work with the City to establish and maintain reserve strategies for planned and unplanned expenditures, reducing financial uncertainty and improving investment stability. Reserves should support renewal and replacement, emergency response, asset failures, and future capital obligations that annual operating budgets cannot accommodate. Targets should reflect asset criticality, infrastructure age, historical spending, and anticipated investment needs. Sustainable reserves can strengthen financial resilience, reduce funding volatility, and improve long-term capital planning certainty.

9.2.4 Reserve and Future Financial Governance

Financial governance connects funding and reserve decisions with StreetsLA's long-term asset management objectives. StreetsLA will align its practices with the City's Capital Infrastructure Program, Executive Directive No. 9, and evolving capital planning governance processes. These practices will integrate asset management planning, capital planning, budgeting, and reserve management. Investment and reserve decisions should reflect established policies, funding priorities, service objectives, lifecycle needs, and available asset information. Clear governance supports infrastructure investments that are planned, funded, and managed for long-term sustainability and responsible stewardship.

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10 Review, Acceptance, and Update Cycle

The SAMP is a living document. It should be reviewed, formally accepted, maintained, and updated as StreetsLA's asset management program matures. Its underlying assumptions, priorities, data, technologies, governance, funding, asset risks, staffing capacity, regulatory requirements, and industry practices will change. Without regular review, the SAMP may lose relevance to business needs and become less useful for decision-making, OpenGov EAM configuration, risk management, capital planning, and continual improvement. StreetsLA should establish a formal review and update cycle with:

- Assigned responsibility for SAMP maintenance.
- A defined review process, documented acceptance criteria, and update triggers.
- Integration with governance, budgeting, performance reporting, and asset management maturity reviews.

10.1 Review and Acceptance

StreetsLA should complete a structured review and formally accept the draft SAMP before using it to guide implementation. The review should involve executive leadership, asset owners, maintenance and operations representatives, engineering, finance, GIS, data management, OpenGov EAM administrators, and other key stakeholders. Establish a timeframe for comments, then consolidate, evaluate, resolve, and document them. The project team should revise the draft, confirm that comments have been addressed, and support acceptance through the appropriate governance or leadership approval process. This process establishes agreed-upon direction and a defensible basis for implementation. Review criteria should confirm that the SAMP:

- Reflects StreetsLA's operational priorities and aligns with the approved project approach.
- Supports the Asset Management Policy and addresses SAMP objectives.
- Incorporates applicable ISO 55001 principles and Executive Directive No. 9 expectations.

10.2 Recommended Update Cycle

Review the SAMP annually and update it comprehensively every three to five years, or sooner when significant changes warrant revision. Coordinate annual reviews with budget development, CIP planning, performance reporting, maturity assessments, and SAMP implementation tracking. This cadence connects the plan to routine business cycles, incorporates lessons learned and progress since the prior version, and keeps the SAMP responsive to changing conditions. The review scope should distinguish:

- **Annual review:** Confirm alignment with current objectives, budget priorities, asset condition information, risk profile, OpenGov EAM configuration, governance structure, and implementation progress.

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- **Comprehensive update every three to five years:** Reassess objectives, governance, decision criteria, risk management practices, capability improvement priorities, technology alignment, and performance measures.

Monitor interim update triggers through asset management governance and evaluate any material change affecting the SAMP's direction, content, or implementation. Determine whether a targeted amendment, section-specific update, or comprehensive revision is needed. Document the trigger, affected sections, recommended response, responsible parties, and approval pathway. This process keeps the SAMP current between scheduled updates and supports responsive, transparent, and accountable asset management. Potential triggers include:

- Revisions to the Asset Management Policy or major changes in City or StreetsLA strategic priorities.
- Significant OpenGov EAM configuration changes.
- Completion of a maturity reassessment or lessons learned from implementation.
- Major shifts in funding or capital program direction.
- Updated risk or condition data.
- New regulatory requirements or organizational restructuring.

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Appendix A City-wide Asset Classes

Asset Class	Summary Description
Asphalt Roadways	City-owned asphalt roadway surfaces used for vehicle, transit, freight, bicycle, and emergency movement. These assets require resurfacing, rehabilitation, and reconstruction to maintain safe mobility and acceptable pavement condition.
Concrete Roadways	Roadway segments constructed with concrete pavement. These assets support transportation movement and require maintenance or rehabilitation where cracking, settlement, slab failure, or surface deterioration affects safety and serviceability.
Street Furniture / STAP	Public right-of-way amenities such as transit shelters, benches, trash-related amenities, and other streetscape furnishings that support transit users, pedestrians, and the public realm.
Street Trees	Trees located along city streets and within the public right-of-way. They provide shade, urban cooling, stormwater benefits, streetscape character, and environmental value, while requiring trimming, maintenance, replacement, and risk management.
Parkways	Landscaped or planted areas between the curb and sidewalk or adjacent to the roadway. These areas contribute to streetscape quality, pedestrian comfort, infiltration, and urban greening.
Improved Medians (Landscaped)	Landscaped roadway medians that provide separation between travel lanes, support traffic operations, contribute to public realm quality, and may include vegetation or irrigation features requiring maintenance.
Unimproved Medians	Hardscaped or non-landscaped medians that separate roadway movements and support traffic management but may have limited landscape or aesthetic features.
Sidewalks	Pedestrian pathways within the public right-of-way that support walkability, accessibility, mobility, and access to homes, businesses, transit, and public facilities. Sidewalks require inspection and repair to address uplift, cracking, settlement, and ADA-related barriers.
Curb Ramps	Ramps at intersections and crossings that provide accessible transitions between sidewalks and roadways. These assets are essential for ADA compliance, pedestrian safety, and accessible mobility.
Curb and Gutter	Edge-of-roadway infrastructure defines the boundary between pavement and sidewalk/parkway areas and supports drainage conveyance along streets.
Public Stairways	Stairway facilities within the public right-of-way that provide pedestrian connections where topography limits standard sidewalk or roadway access. They require structural, safety, and accessibility-related maintenance.
Alleys	Publicly maintained rear-access routes that support local access, deliveries, utilities, waste collection, drainage, and circulation behind properties.
Tunnels	Vehicular and/or pedestrian tunnel infrastructure supporting transportation movement through constrained locations. These assets require specialized maintenance, safety monitoring, lighting, drainage, ventilation, and structural upkeep.
Fixed Street Bathrooms	Permanent public restroom facilities located within the public realm. They support public health, sanitation, and service access, and require ongoing cleaning, repair, security, and maintenance.
Public Trash Receptacles	Public litter collection units, including automated and conventional trash receptacles
Wastewater Conveyance Systems	Sewer pipes, pump stations, interceptors, and related infrastructure conveying wastewater to treatment facilities.
Streetlights	Street lighting infrastructure including poles, luminaires, circuits, foundations, conduits, and electrical components.
Colocations	Telecommunications infrastructure mounted on street lighting assets, including antennas, radios, and small-cell equipment.
Arts, Architectural and Landmark Lighting	Specialized lighting systems used for public art, architectural features, landmarks, and civic facilities.
Vehicle Chargers	Electric vehicle charging infrastructure integrated with street lighting systems
Bridges	Transportation structures spanning barriers and supporting mobility networks.

Asset Class	Summary Description
Retaining Walls / Hillside Stabilization	Retaining structures, soil nail systems, bulkheads, and slope stabilization infrastructure
Bicycle Facilities	Bicycle paths, bicycle lanes, bicycle parking facilities, racks, corrals, and related infrastructure.
Traffic Signals	Signal poles, controllers, cabinets, pedestrian signals, detection systems, and associated traffic control equipment.
Traffic & Parking Signage	Regulatory, warning, guide, parking, bicycle, and pedestrian signs.
Painted Curbs	Curb markings and associated regulatory color-coded curb controls.
Parking Facilities, Meters & Pay Stations	On-street and off-street parking infrastructure including meters, pay stations, garages, lots, and occupancy systems.
Roadway Striping and Crosswalks	Pavement markings, centerlines, crosswalks, legends, and roadway symbols
Traffic Calming and Barrier Devices	Speed humps, bollards, barriers, pedestrian protection devices, and speed feedback sign
Recreation Centers	Community centers, gyms, senior facilities, youth centers, and recreation buildings
City Pools	Aquatic centers, swimming pools, splash pads, bathhouses, and supporting pool infrastructure.
Greenspace & Playgrounds	Parks, playgrounds, picnic areas, and outdoor recreation amenities.
Park Trees	Trees that are located within park properties and recreational areas.
Athletic Spaces (Hardscaped)	Courts and hard-surfaced recreation facilities such as basketball and tennis courts.
Athletic Spaces (Landscaped)	Natural turf athletic fields and sports facilities.
Golf Courses	Golf facilities and associated operational infrastructure.
Park Restrooms	Public restroom facilities located within parks.
RAP Roadways & Sidewalks	Internal roadway and pedestrian networks within park properties.
Park Hiking Trails	Recreational trails and associated trail amenities.
Yards & Shops	Maintenance yards, fleet facilities, operational shops, and support facilities.
City-Owned Residential	Residential properties owned and managed by the City.
Homeless Initiatives	Shelter, supportive housing, and temporary housing facilities.
Libraries	Public library buildings and supporting facilities.
Cultural Spaces	Theaters, museums, youth centers, and cultural facilities.
Municipal Spaces (City Halls, District Council Offices)	Civic facilities providing public-facing government services, administration, and community engagement functions.
Office Buildings	Administrative office facilities supporting municipal operations and staff functions.
Police Stations	Public safety facilities supporting law enforcement operations, emergency response, and community policing services.
Fire Stations	Emergency response facilities housing firefighting personnel, apparatus, and support equipment.
Animal Service Facilities	Facilities used for animal care, sheltering, adoption, enforcement, and veterinary services.
Parking Structures	Multi-level parking facilities supporting vehicle storage and access.
Airports	Aviation facilities including runways, terminals, support infrastructure, and associated operational assets.
Port Facilities	Marine transportation and cargo-handling assets supporting port operations and commerce.
Transit Facilities	Transportation support facilities used for public transit operations, maintenance, and customer service.
Fleet Facilities	Vehicle maintenance, fueling, storage, and fleet support infrastructure.
Emergency Operations Facilities	Facilities supporting emergency management, disaster response, and operational continuity.
Public Health Facilities	Buildings and infrastructure supporting health services, inspections, and community health programs.

Asset Class	Summary Description
Communications Facilities	Infrastructure supporting telecommunications, radio networks, and operational communications systems.
Data Centers & Technology Infrastructure	Information technology facilities supporting digital services, data storage, and network operations.
Water Supply Facilities	Infrastructure for water collection, storage, treatment, and distribution.
Water Transmission & Distribution Systems	Pipelines and associated assets conveying potable water throughout the service area.
Wastewater Treatment Facilities	Facilities used to process and treat wastewater prior to discharge or reuse.
Solid Waste Facilities	Infrastructure supporting waste collection, processing, recycling, and disposal services.
Energy Generation Facilities	Facilities producing electrical or renewable energy for municipal use.
Electrical Distribution Infrastructure	Electrical systems delivering power to municipal facilities and infrastructure.
Renewable Energy Assets	Solar, wind, battery storage, and other sustainable energy infrastructure.
Urban Forestry Assets	Large-scale urban forest resources supporting environmental, social, and climate resilience objectives.
Open Space & Natural Areas	Natural lands, conservation areas, and environmental resources managed by the City.
Coastal & Waterfront Assets	Coastal protection, waterfront access, and shoreline management infrastructure.
Environmental Management Assets	Facilities and infrastructure supporting environmental monitoring, compliance, and sustainability programs.
Special Purpose Facilities	Unique municipal facilities that do not fit within other asset class categories.
Historic & Heritage Assets	Heritage buildings, structures, and culturally significant assets requiring preservation.
Miscellaneous City-Owned Assets	Other municipal assets supporting service delivery that are not categorized elsewhere.

Appendix B Asset Management Roles and Responsibilities Matrix

Appendix B: Asset Management Roles and Responsibilities Matrix

AM Function / Activity	AM Executive Sponsor(s)	AM Program Lead(s)	Asset Owner(s) / Manager(s)	O&M Managers	GIS & Asset Data Stewards	EAM System Admin(s)	Finance & Budget Representatives
Governance & Strategy — Approve Asset Management Policy, SAMP, and major AM strategies	A	R	C	C	C	C	C
Governance & Strategy — Establish LOS objectives and organizational risk tolerance	A	R	R	C	C	I	C
Governance & Strategy — Provide governance oversight and champion AM culture	A	R	C	C	I	I	C
Governance & Strategy — Align AM policy with organizational, stakeholder, and regulatory requirements	A	R	C	C	C	C	C
SAMP & Program Management — Develop and maintain the SAMP	A	R	C	C	C	C	C
SAMP & Program Management — Define AM strategic objectives, outcomes, and implementation priorities	A	R	C	C	C	C	C
SAMP & Program Management — Coordinate AM initiatives across assets and departments	I	A/R	R	R	R	R	C
SAMP & Program Management — Establish AM governance, change management, and communications	A	R	C	C	C	C	I
Capability & Improvement — Establish AM competencies, training, and organizational adoption	I	A/R	C	C	C	R	I

AM Function / Activity	AM Executive Sponsor(s)	AM Program Lead(s)	Asset Owner(s) / Manager(s)	O&M Managers	GIS & Asset Data Stewards	EAM System Admin(s)	Finance & Budget Representatives
Capability & Improvement — Monitor AM performance, compliance, risks, and continuous improvement	I	A/R	R	R	R	R	C
Lifecycle Planning — Develop asset management plans and asset-specific strategies	I	C	A/R	C	C	C	C
Lifecycle Planning — Define asset-level service levels, performance objectives, and KPIs	I	C	A/R	C	C	C	C
Lifecycle Planning — Prioritize programs and projects using condition, risk, and lifecycle cost	A	C	R	R	C	I	R
Lifecycle Planning — Identify funding, resource, and workforce requirements	I	C	A/R	R	I	I	R
Lifecycle Planning — Develop contingency and emergency response plans	I	C	A	R	C	I	C
Lifecycle Delivery — Manage operations, maintenance, rehabilitation, renewal, and disposal	I	I	A	R	C	C	C
Lifecycle Delivery — Prioritize and execute maintenance and rehabilitation work programs	I	I	A	R	C	C	I
Lifecycle Delivery — Assess asset condition and performance	I	C	A	R	R	C	I
Lifecycle Delivery — Identify optimization and service-life extension opportunities	I	C	A	R	C	C	C
Asset Data — Establish asset data standards, definitions, business rules, and information requirements	I	C	A	C	R	C	I

AM Function / Activity	AM Executive Sponsor(s)	AM Program Lead(s)	Asset Owner(s) / Manager(s)	O&M Managers	GIS & Asset Data Stewards	EAM System Admin(s)	Finance & Budget Representatives
Asset Data — Define condition assessment methodologies	I	C	A	R	R	C	I
Asset Data — Maintain data quality, integrity, and stewardship practices	I	C	A	R	R	C	I
Asset Data — Perform data quality audits and monitor compliance with standards	I	C	A	C	R	C	I
Asset Data — Analyze asset information and produce reports, dashboards, and performance metrics	I	C	A	C	R	R	C
EAM System — Administer and configure OpenGov EAM	I	C	C	C	C	A/R	I
EAM System — Define and validate functional and technical requirements	I	C	A	R	R	R	C
EAM System — Manage integrations supporting work, condition, and performance reporting	I	C	C	C	R	A/R	C
EAM System — Monitor system health, performance, usability, workflows, PM, and work order lifecycle	I	I	C	R	C	A/R	I
EAM System — Support user training, adoption, and system enhancements	I	A	C	R	C	R	I
Finance & Investment — Develop long-term funding and financial plans	A	C	R	C	I	I	R

AM Function / Activity	AM Executive Sponsor(s)	AM Program Lead(s)	Asset Owner(s) / Manager(s)	O&M Managers	GIS & Asset Data Stewards	EAM System Admin(s)	Finance & Budget Representatives
Finance & Investment — Evaluate lifecycle costs, funding requirements, and investment scenarios	A	C	R	C	C	I	R
Finance & Investment — Approve asset renewal and capital investment priorities	A	R	R	C	C	I	R
Finance & Investment — Monitor funding alignment with SAMP objectives and service goals	I	A	C	I	I	I	R
Risk & Performance — Monitor asset performance and risk exposure	I	C	A/R	R	R	C	C
Risk & Performance — Recommend corrective actions and lifecycle investment priorities	I	C	A/R	R	C	C	R
Risk & Performance — Develop performance measures tied to financial outcomes	I	A	R	C	C	C	R

Stantec

Stantec is a global leader in sustainable engineering, architecture, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

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