Progress Report on Management Action Plans in response to the Audit of Streetcar Overhead Assets

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Background

The Auditor General Office conducted an audit of the Toronto Transit Commission's Streetcar Overhead assets and offered 20 recommendations towards strengthening the maintenance and repair program to minimize asset failures and service delays.

The TTC's management response to the 20 recommendations contained the action plans and timelines for addressing the Auditor General's concerns.

In this presentation, we will review the status of the management action plans.

Summary of Recommendations

The audit report outlined opportunities for the TTC to strengthen its streetcar overhead maintenance and repair program by:

A. Minimizing asset failures through effective preventative inspection, corrective maintenance and investigations into emergency maintenance incidents.

B. Performing and documenting preventative inspections in a consistent manner.

C. Strengthening corrective maintenance and repairs.

D. Leveraging technology to improve streetcar overhead operations.

E. Enhancing data collection and performance reporting.

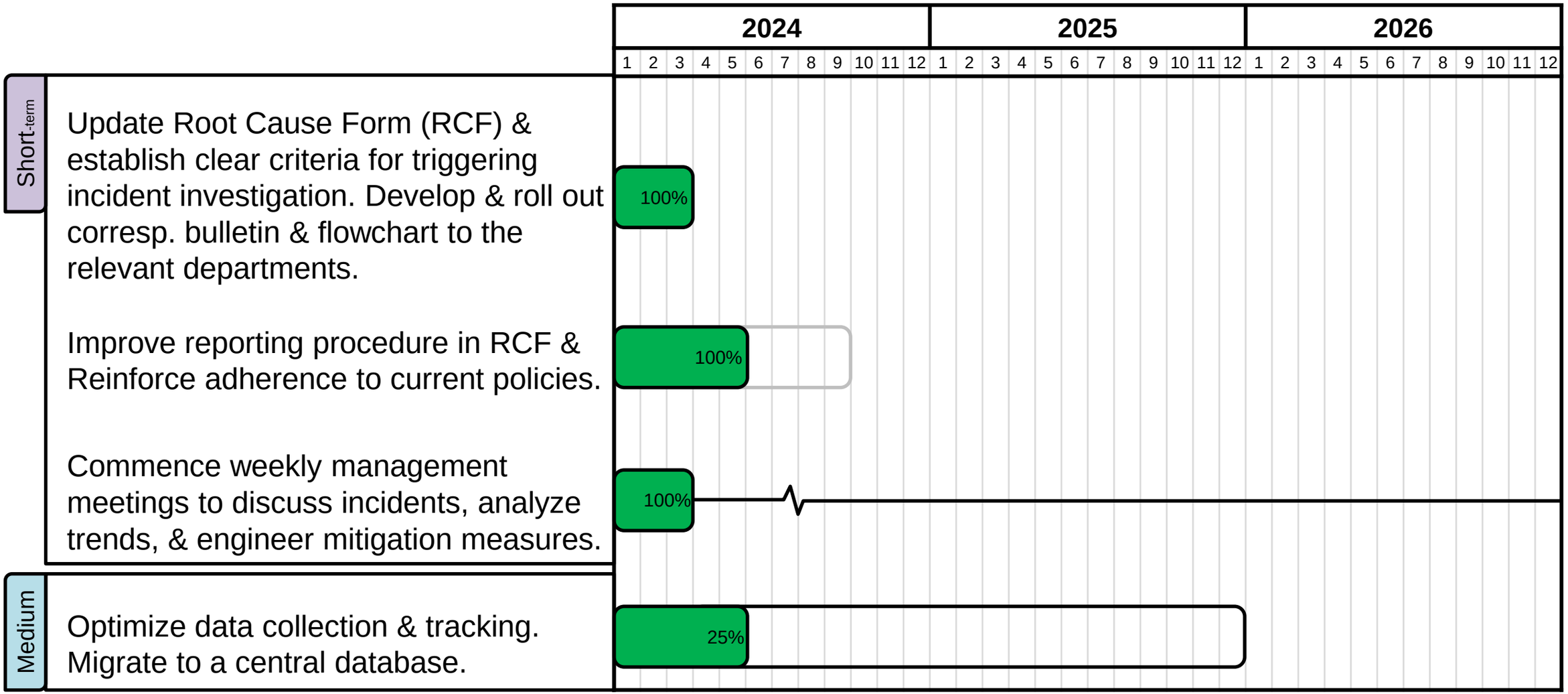
A. Minimizing Asset Failures – Progress Report

Minimizing asset failures through effective preventative inspection, corrective maintenance and investigations into emergency maintenance incidents. (Ref. Recommendations 1 and 2)

i. Root Cause Form has been updated with clear indications on which situations require Incident Investigation.

ii. Recurring weekly meetings have been scheduled with all relevant stakeholders to discuss data collection and correction, trends analysis, switch incidents, and mitigations for future incidents. Meetings commenced April 18, 2024.

A. Minimizing Asset Failures - Timeline



B. Consistent Preventative Inspections – Progress Report

Performing and documenting preventative inspections in a consistent manner. (Ref. Recommendations 3, 4, 5, 6, 7, 8, 10, 11, 13 and 14)

i. The Preventative Maintenance Schedule (PM) has been updated to include all of the specified assets (intersections, cell switches, etc.) that are required to be inspected.

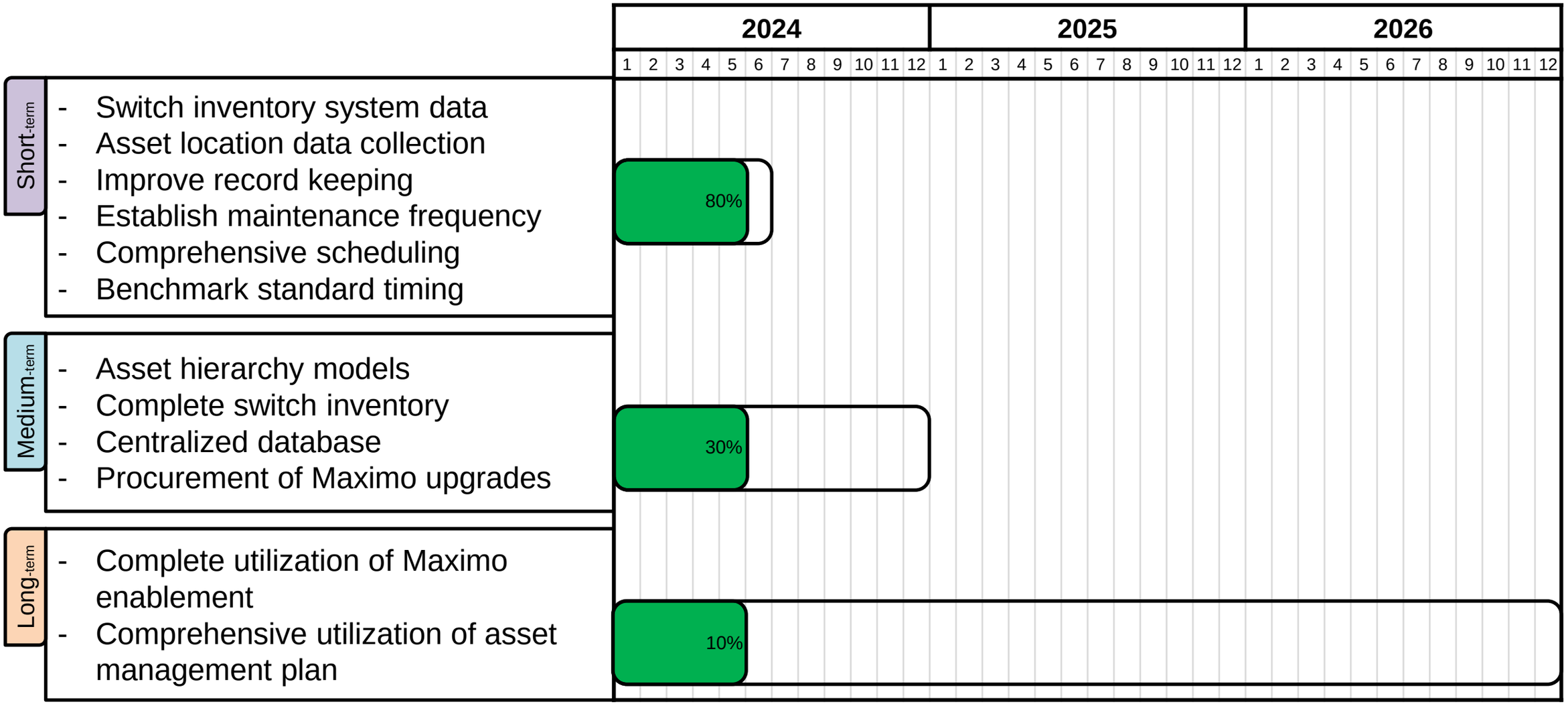
i. Overall inspection targets have been reviewed and verified.

ii. Standardized time expectations (planned shifts/hours) have been recorded for each asset, which will be compared to the actual time required to complete a preventative maintenance task.

iii. We have assessed the frequency and calenderized the asset inspections.

iv. A flowchart has been created to outline the PM and corrective maintenance (CM) creation process. The flowchart indicates how maintenance teams address incomplete PM.

B. Consistent Preventative Inspections – Timeline



C. Corrective Maintenance & Repairs – Progress Report

Strengthening corrective maintenance and repairs. (Ref. Recommendation 12)

i. All CMs are tracked in the Maintenance Schedule with open/closed status. This provides better visibility and tracking and closes the gap between PM and CM. This also provides the framework for better root cause analysis.

ii. A flowchart has been created to outline the PM and CM creation process, specifying how to address an incomplete PM.

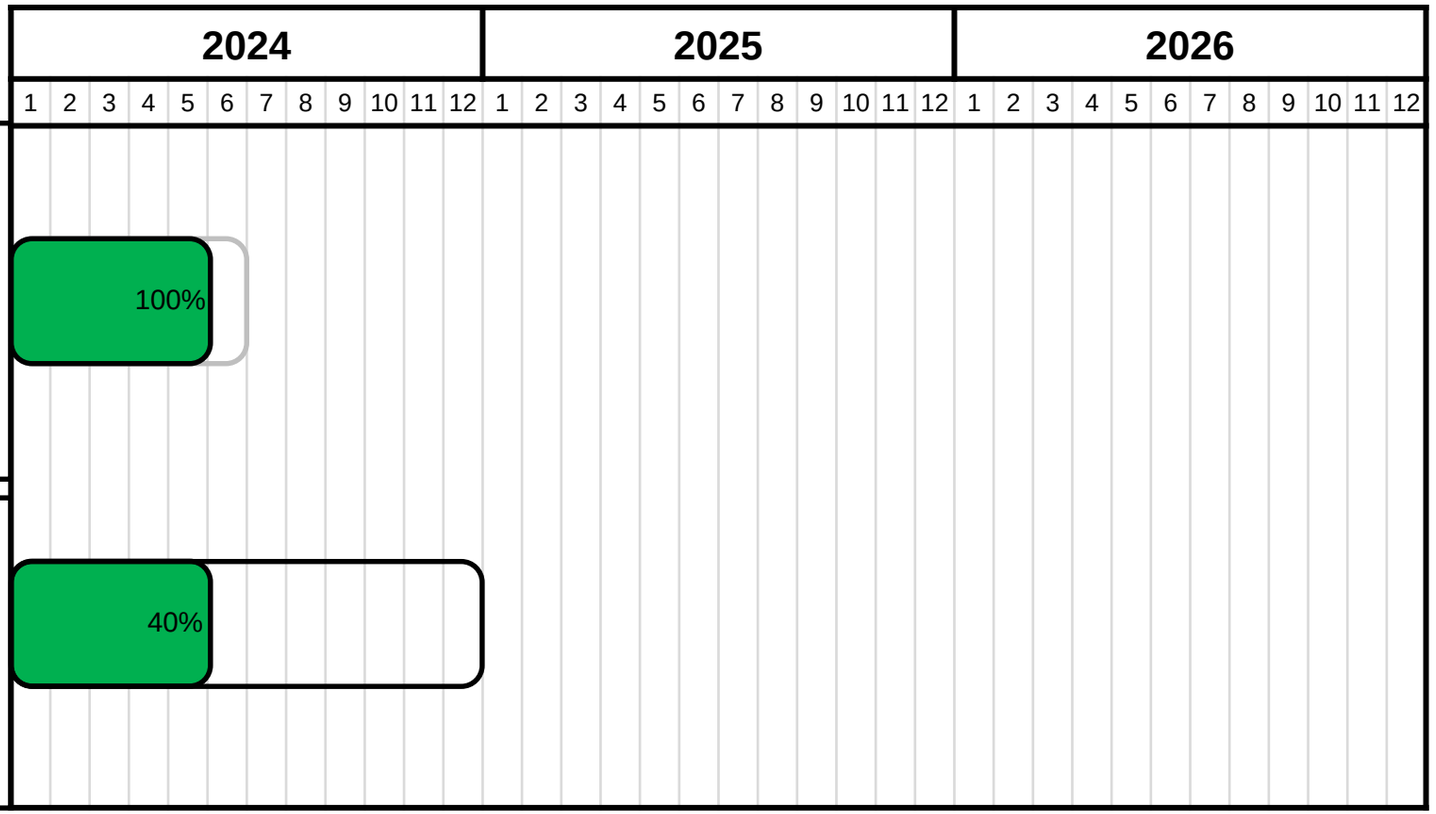
C. Corrective Maintenance & Repairs – Timeline

Short-term

- Establish one source for tracking preventative (PM) and corrective maintenance (CM)
- Create a flowchart to outline the PM and CM creation process

Medium-term

- Update inspection forms and conduct audits of inspection sheets
- Utilizing the new Maximo database for tracking and scheduling work orders



D. Leveraging Technology – Progress Report

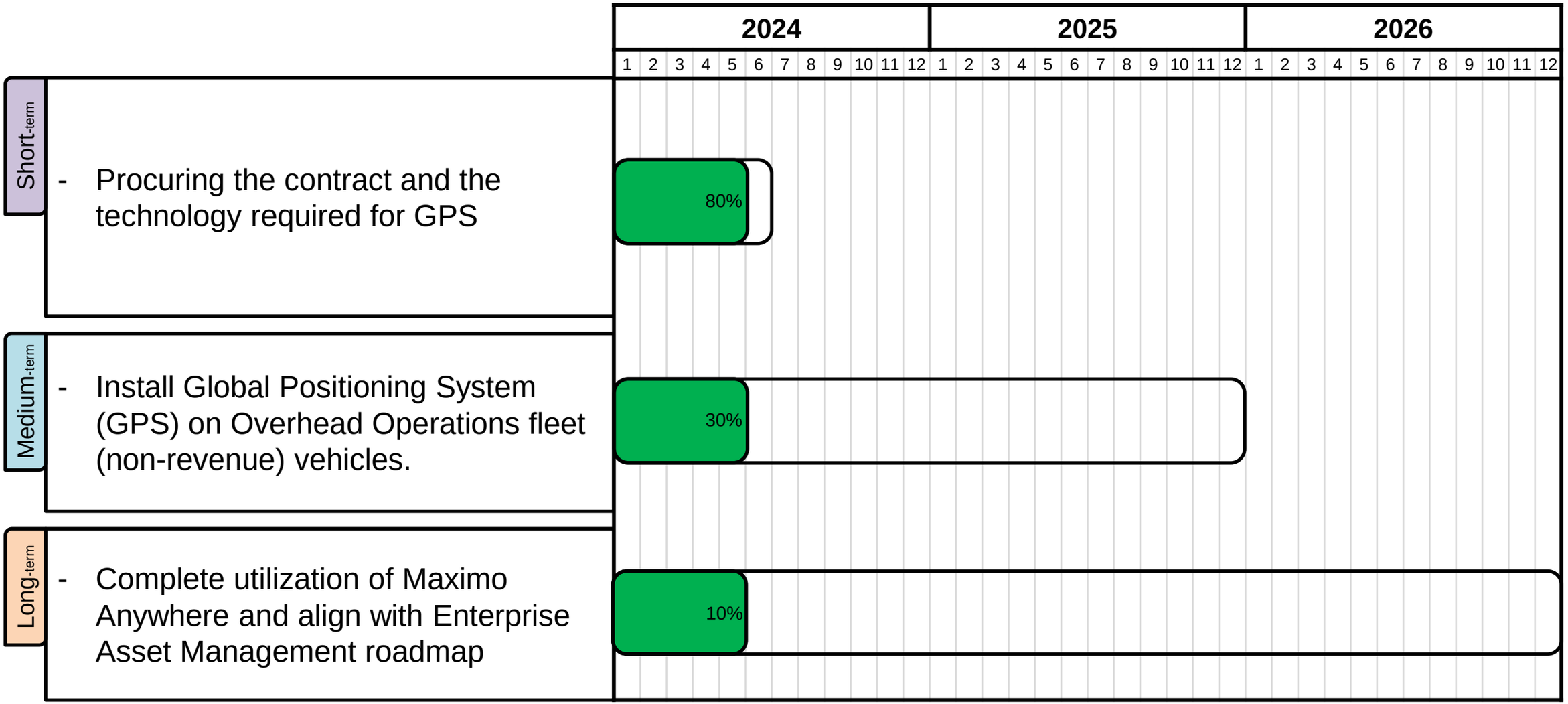
Leveraging technology to improve streetcar overhead operations. (Ref. Recommendations 9, 15, 16, 17, 18 and 19)

i. The Information Technology (IT) team working alongside the Overhead Section will establish Asset Locations/Hierarchy/Family within Maximo. Working toward uploading Asset Templates, creating PMs and Job Plans, automatic generation of work orders and assignment.

ii. Maximo Anywhere within Overhead Section will be implemented once the initial framework is set up.

iii. Planning to enable Global Positioning System (GPS) on Overhead Operations fleet (non-revenue) vehicles.

D. Leveraging Technology – Timeline



E. Enhancing Data Collection & Performance Reporting – Progress Report

Enhancing data collection and performance reporting. (Ref. Recommendation 20)

i. Key Performance Indicators (KPIs) are being reviewed each month within Streetcar Infrastructure (SCI) and continuous improvements are being reflected in the KPI file. Long-term goals are clearly defined. Appropriate, outcome-focused KPIs, and targets will be implemented on an ongoing basis.

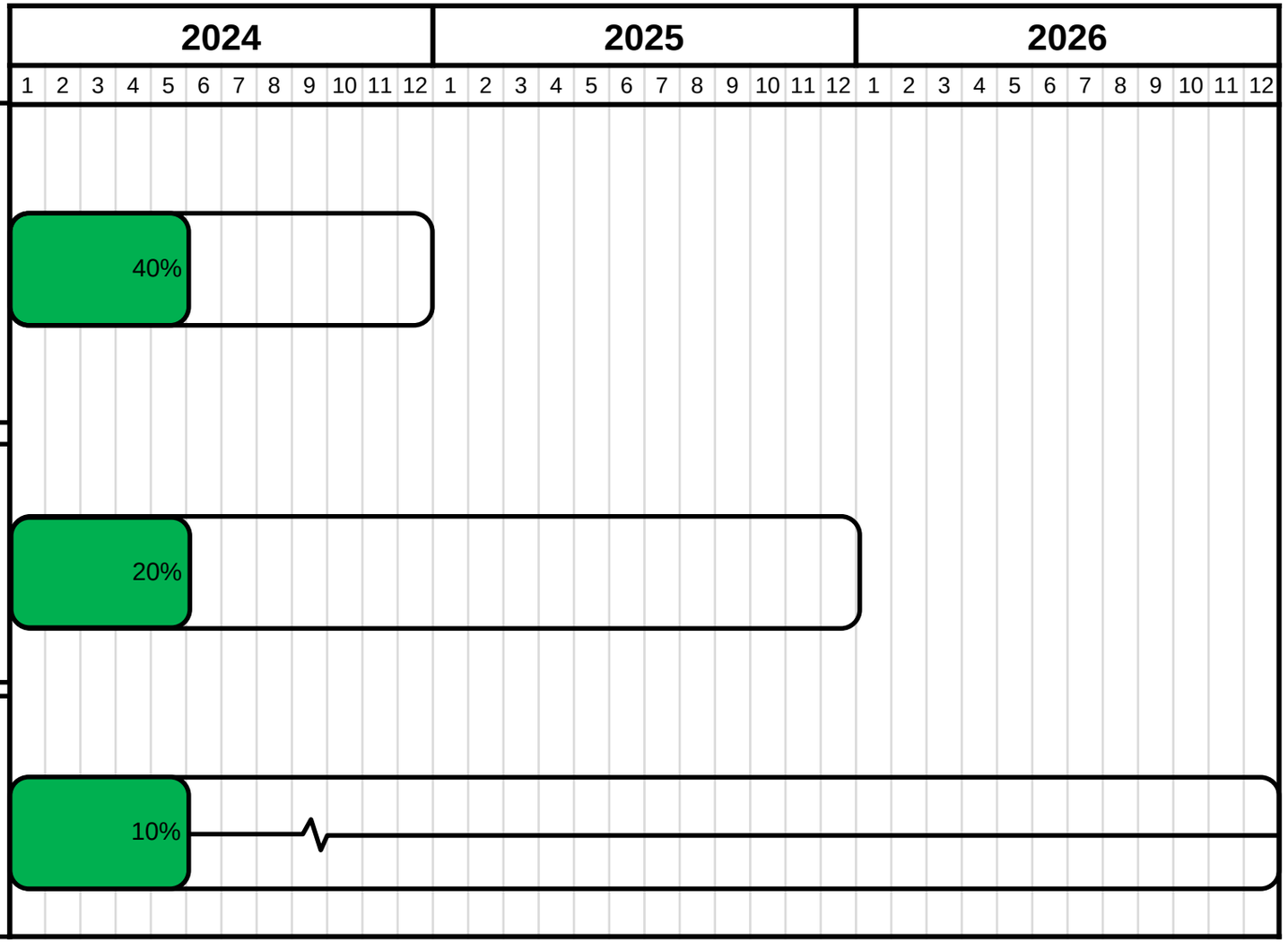
E. Enhancing Data Collection & Performance Reporting – Progress Timeline

Short-term

- Key Performance Indicators (KPIs) are being reviewed each month within Streetcar Infrastructure (SCI) and continuous improvements are being reflected in the KPI file
- Pilot EAM to drive future KPIs (OCS)

Medium-term

- Establishing outcome-focused KPIs
- Ensure performance targets are clearly defined.
- Creating strategies to achieve these targets

Long-term

- Leveraging technology to retain and verify accuracy for KPI reporting, continuous oversight, and decision making