

Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy

Summary

This strategy guides the management of TransGrid's existing Motor Vehicle and Mobile Plant assets.

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Executive Summary

This Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy has been prepared to support TransGrid's recommendations for capital and operating expenditure in relation to motor vehicles and mobile plant for the regulatory control periods from 2014-2023 and to provide evidence to the AER that the expenditure has been thoroughly assessed and deemed efficient and prudent to support TransGrid's objectives.

TransGrid maintains a fleet of motor vehicles and mobile plant to primarily support the maintenance and project activities of the organisation.

This document has been updated for the regulatory period from FY19 to FY23 including the forecast for FY17 and FY18,

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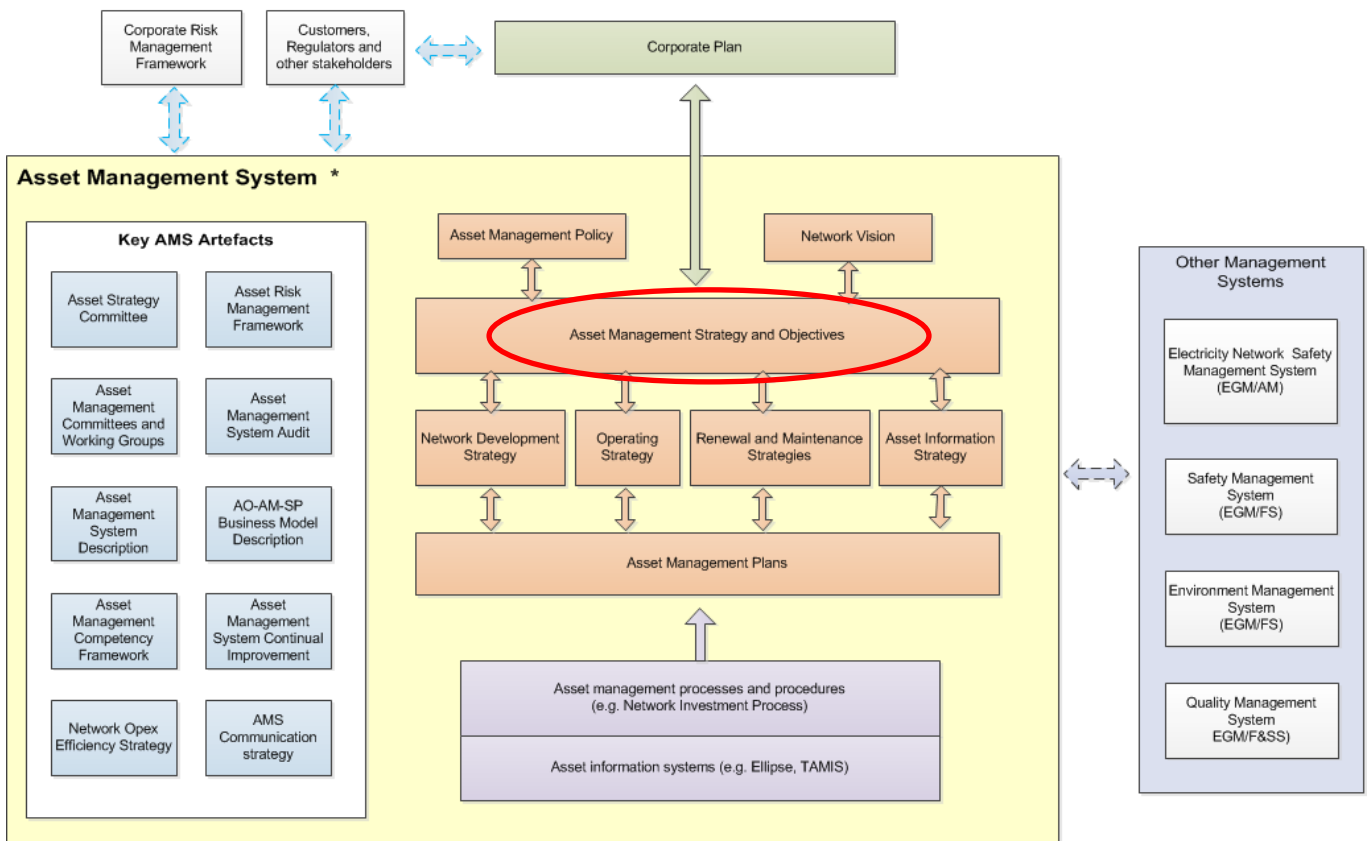
1. Purpose

This document defines the renewal, disposal, and maintenance strategies for TransGrid’s Motor Vehicle and Mobile Plant fleet. In doing this it applies the overarching asset management strategy and objectives, and relevant Lifecycle Strategies.

2. Positioning within the Asset Management Framework

The *Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy* document is one of several that comprise the Asset Management Strategies within TransGrid’s Asset Management Framework. This document sits below in the Asset Management Strategy and Objectives document as shown in Figure 1.

Figure 1: Asset Management System Document Hierarchy



* Scope of the Asset Management System covers all physical assets

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3. Definitions

Table 1: Definitions

Term	Definition
Motor Vehicle	A car, van or utility etc. capable of being registered and driven on public roads in accordance with the NSW Motor Traffic Act.
Mobile Plant	Is plant, truck, equipment or vehicle attachment (e.g. crane, winch, tractor, trailer, truck etc., either registered or unregistered), which is capable of being driven or towed.
Contract Officer (CO)	A TransGrid employee who has entered into an individual Employment Agreement (contract) with TransGrid.
Contract Officer (CO) Vehicle – 100% private use motor vehicle	A motor vehicle that is allocated to an employee appointed under an individual employment contract that are used exclusively for private purpose.
Contract Officer (CO) Vehicle – Business / Private use motor vehicle	A motor vehicle that is allocated to an employee appointed under an individual employment contract with a proportion of use for business purpose.
Preferred Supplier Agreement	An agreement with a motor vehicle manufacturer or dealership for the supply of agreed makes and models of vehicles that meet TransGrid's transport needs
Business Use motor vehicle	A motor vehicle that is used exclusively for business purposes in support of organisational objectives. They may be allocated to an employee or assigned to a pool fleet.

4. Asset Management Strategy 'Line of Sight'

4.1 Motor Vehicle and Mobile Plant Procurement

To minimise capital costs, TransGrid strive for a sole or dual motor vehicle supply arrangement, which typically results in agreed discounts off recommended retail pricing and volume rebates up to 5 year period (3 years with a 2 year option). To establish, amend or extend any such supply agreement the Procurement team in conjunction with the Fleet team engage with vehicle manufactures and/or dealerships who can supply the required makes and models of vehicles that meet TransGrid's transport needs and agree best pricing in accordance with TransGrid's purchasing business rules. Required preferred supplier agreement(s) are established with the manufacturer(s) or dealership(s) for overall expected volume to achieve best possible discounts and realise rebates in an agreed manner.

Motor vehicles are generally procured from vehicle manufacturer(s), through local dealerships, who TransGrid hold a supply agreement with, however motor vehicles may be purchased from other vehicle manufacturers where there is a genuine business need to do so. Where a supply agreement isn't in place then motor vehicles will only be purchased from vehicle manufactures that provide TransGrid with a national price discount or better off their recommended retail price. Where a national discount is not offered, motor vehicles will be purchased in accordance with TransGrid's purchasing business rules.

The procurement of a motor vehicle with a purchase value of less than or equal to \$100,000 is exempt from TransGrid's purchasing business rules to minimise administration effort, subject to:

1. A preferred supplier agreement is in place with the vehicle manufacturer or dealership, or
2. The vehicle manufacturer provides TransGrid with National Price discounts or better for procurement of a vehicle not listed in the preferred supplier agreement(s).

Mobile plant, large specialised motor vehicles, motor vehicles not exempted as above or with a capital value greater than \$100,000 and all vehicle operation, maintenance and support services are purchased in accordance with TransGrid's purchasing business rules which include competitive tendering.

Motor vehicles and mobile plant are selected in accordance with procedure "Control and Use of Motor Vehicles and Mobile Plant":

Business Use Vehicle

Business use vehicle requirements are selected based on the following criteria:

- Suitability – selection on the basis of the vehicle's ability to perform the intended duties;

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- Safety – selection on the relative safety characteristics for comparable suitable vehicles;
- Economics – selection of the least whole of life cost vehicle with comparable suitability and safety weighted equally with environmental impact;
- Environment – selection of the vehicle with least environmental impact with comparable suitability and safety, weighted equally with Economics; and
- Standardisation – selection of a vehicle which is in keeping with others used for similar tasks.

Senior Contracted Officer (SCO) Vehicle – 100% Private Use

100% Private Use vehicles are selected based on economic and environment criteria as per Business Use vehicles, but are restricted to vehicles that have attained a 5 Star ANCAP Rating.

Senior Contracted Officer (SCO) Vehicle – Business/Private Use

Business/Private Use vehicles with associated accessories and options are based on economic, environment and suitability as per Business Use vehicles, but are restricted to vehicles that have attained a 5 Star ANCAP Rating.

5. Key Performance Indicators

TransGrid measures the effectiveness of the Renewal and Maintenance strategy against three main objectives:

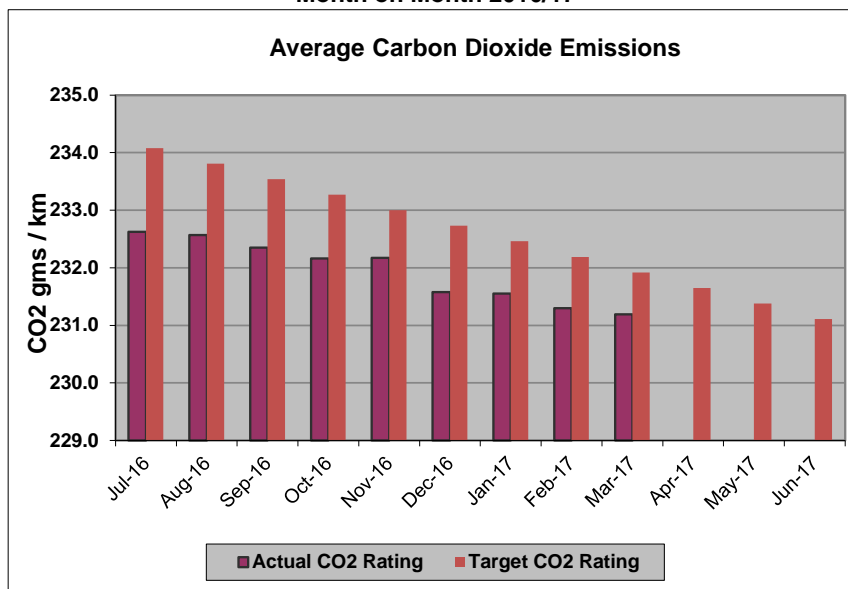
- Financial;
- Environment; and
- Safety

Financial – There are two key performance indicators used; Budget versus Actual – target of +/- 5% and Rebate Income (additional discounts over and above National Fleet discounts) – Target >\$100,000 per annum.

Environment – TransGrid is focused on reducing CO2 emissions produced by its motor vehicle and mobile plant items. The target is a 0.27 reduction in the average CO2 emission rating 0.27 month on month as shown in Figure 2.

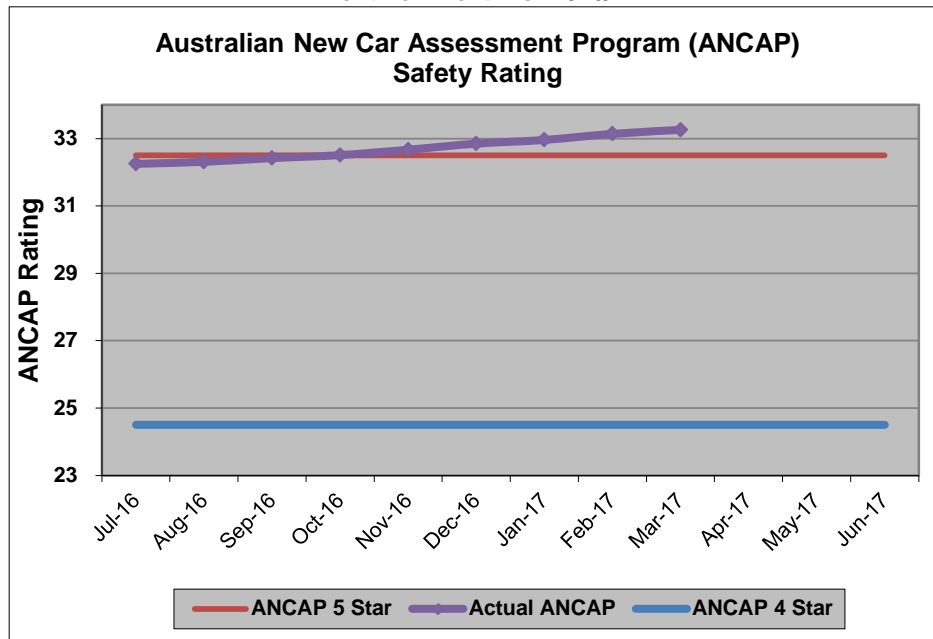
Safety – The safety of motor vehicles sold in Australia undergo crash testing by an independent body who allocate the vehicle a star safety rating between 0 and 5. TransGrid purchasing policy continues to require all motor vehicles to have a safety rating of 5 stars. TransGrid measures the average safety rating of the motor vehicle fleet with the goal to improve the overall fleet rating month on month as shown in Figure 3.

**Figure 2: Average Motor Vehicle Emissions (CO2 grams/km)
Month on Month 2016/17**



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Figure 3: Average ANCAP Safety Rating for Active Motor Vehicle Month on Month for 2016/17



6. Motor Vehicle and Mobile Plant Assets Overview

6.1 Scope of Assets

The following assets are considered within the scope of this strategy:

- Motor vehicles and mobile plant owned and operated by TransGrid

The following assets are considered outside the scope of this strategy:

- Motor vehicles leased by an employee under a Novated Lease Agreement.

6.2 Asset Base

TransGrid primarily operate motor vehicles and mobile plant within the Field Services business unit to maintain the network and deliver capital works projects. These vehicles are mainly used to:

- Inspect transmission lines and easements;
- Maintain transmission lines and associated structures;
- Maintain substations and associated equipment;
- Maintain communications infrastructure; and
- Transport plant and equipment associated with capital projects and maintenance activities, and construct work associated with capital projects.

Table 2 shows the breakup of the fleet by business unit and vehicle category as at Jul-16 where fixed plant items such as loading cranes have been included as miscellaneous plant:

Table 2: Fleet Breakup by Business Unit as at Jul-16.

Vehicle Category	Works Delivery					Other BU's	Contract Vehicles		Total
	Const'n Services	Field Support	Health & Safety	Maint	Training, Log. and Property		Business /Private	100% Private	
Heavy Trailer	0	0	0	16	0	0	0	0	16
Light Com (LCV)	11	0	0	68	11	2	0	0	89

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Light Trailer	9	0	0	235	9	0	0	0	255
Misc. Plant	4	0	0	160	24	0	0	0	188
Off Road LCV	45	0	9	259	35	5	20	7	380
Prime Mover	0	0	0	6	0	0	0	0	6
Rigid Truck	4	0	0	40	4	0	0	0	48
Sedan	0	0	0	0	4	1	12	4	21
Special Vehicle	0	0	0	7	0	0	0	0	7
Station Wagon	1	0	0	1	11	0	13	3	29
Grand Total	74	0	9	792	97	8	45	14	1039

TransGrid dispose of motor vehicles and mobile plant at the end of their economic lives, which is determined by age and usage and varies by vehicle type as shown in Table 3. The nominal lifespan will continue to be monitored as necessary.

Table 3: Nominal Lifespan of Motor Vehicles and Mobile Plant.

Vehicle Type	Age (Months)	Usage Limit (Kilometres)
SCO Business Motor Vehicles	36	60,000
Passenger Motor Vehicle	36	100,000
Light Duty Utility 2WD	36	110,000
Light Duty Commercial	48	140,000
Heavy Duty Commercial	60	175,000
Light Truck (GVM < 10T)	96*	200,000
Heavy Truck (GVM > 16T)	120*	250,000
Mobile Plant (Lifting)	120*	Not Applicable
Mobile Plant (Non Lifting)	240*	Not Applicable
Trailer (Non Plant)	240*	Not Applicable

* Note: - Mobile plant is subjected to an annual review at end of its economic life to determine if the asset is replaced or retained.

6.3 Anticipated Changes to the Asset Base

It is expected that the fleet size, motor vehicle and mobile plant types and fleet makeup will not materially change during the 2019-23 regulatory control periods. However new technologies should result in improved safety, reliability and lower emissions.

7. Motor Vehicle and Mobile Plant Assets Review

All strategic initiatives with respect to TransGrid's Motor Vehicle and Mobile Plant assets are outlined in this section, including the renewal, disposal and maintenance initiatives.

7.1 Emerging Issues

There are currently no known emerging issues.

7.2 Renewal Initiatives

TransGrid deems it operationally efficient to own and operate motor vehicles and mobile plant that are used to service and maintain the critical infrastructure that makes up the NSW transmission network and produces a service that is of vital importance to the people of NSW and to the wider National Electricity Market.

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TransGrid is focused on continuous improvement and cost minimisation and as such adopt a number of processes to assist in operating an efficient fleet:

Vehicle Standardisation

In 2011 TransGrid adopted a vehicle standardisation model for business motor vehicles. This model has delivered the following benefits:

- Reduced capital cost through volume purchase discounts;
- Reduced operating cost through improved manufacturer support; and
- Continuous improvement through a structured periodic review process.

Pool Vehicles, Short Term Hire of Motor Vehicles and Mobile Plant

To ensure TransGrid fleet size is maintained at an optimum level, TransGrid own and operate a pool vehicle fleet that is used by employees who require the short term use of a motor vehicle for purpose of conducting TransGrid business.

The pool vehicle fleet utilisation is benchmarked against industry standards to ensure the pool vehicle fleet size and vehicle mix is configured to best meet the overall needs of the business.

The pool vehicle fleet is supplemented from time to time by the external hire of motor vehicles. To control costs, TransGrid utilise the services of preferred external service providers in which pricing has been contractually agreed for a period of two years.

Where it is deemed uneconomic to own a specialised mobile plant item or an additional mobile plant item is required for short term use, TransGrid will utilise the services of an external hire company to provide the mobile plant item.

TransGrid's Replacement Policy for Mobile Plant

The Fleet team, which is part of the Works Delivery business unit, reviews the Capex budget for mobile plant each year. During this process the Fleet Manager reviews all trucks and heavy plant and discusses with end users the business expectations and proposed usage for each item. The organisational benefits and risks involved in extending or shortening the life of the item are then weighed and the budget adjusted accordingly.

In June 2013, TransGrid completed a fleet review to identify any opportunities to deliver an improvement in the efficient operation of its fleet of motor vehicles and mobile plant. The fleet review focused on five key areas:

- Mobile plant fleet size and configuration;
- Motor vehicle fleet size and usage including business vehicles being used to travel between home and work;
- Toll road usage;
- Pool vehicle fleet control, utilisation, size and configuration; and
- Contract Officer motor vehicle cost recovery.

As a result of the fleet review a number of proposals were recommended that would deliver operational and capital cost reductions. The recommended changes included:

- Adoption of a data capture tool for mobile plant usage to improve evaluation and assessment of utilisation;
- Implementation of a formal review process to minimise trips in business motor vehicles between an employee's home and normal place of work;
- Rationalisation of surplus trailers;
- Consolidation, centralisation and rationalisation of pool vehicles;
- Adoption of business only use policy for toll road usage; and
- Increase in Contract Officer motor vehicle replacement parameter from 24 months/40,000kms to 36 months/60,000kms.

7.3 Maintenance Initiatives

Maintenance of motor vehicles and mobile plant is the responsibility of the Business Unit operating the vehicles, which are maintained in accordance with procedure "Maintenance of Motor Vehicles and Mobile Plant":

Motor Vehicle

An external service provider supervises the maintenance of light vehicles through a repair authorisation process. Prior to any work being carried out the external provider will verify the work being required in accordance with manufacturer specifications and ensure costs are minimised by actively pursuing warranty claims and eliminating over servicing.

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On a periodic basis, motor vehicles that are overdue for servicing are identified and communicated to the vehicle custodian to ensure vehicles are maintained to manufacturer specification and minimise the risk of major mechanical failure.

Mobile Plant

Mobile plant is maintained in accordance with manufacturer specifications and routine inspections are carried out to meet the requirements of relevant Australian Standards:

- Pre-Operation Inspections are completed by the operator before the initial operation of the plant in a work shift to satisfy the operator that the item is free from defects and safe to use.
- Routine Inspections are carried out in accordance with manufacturer recommendations and/or AS2550 at intervals not exceeding 3 months for all Cranes, Crane Boreers, Truck loading Cranes, Forklifts and Elevating Work Platforms.
- Period Inspections are carried out in accordance with manufacturer recommendations and/or AS2550 at intervals not exceeding 12 months by an external service provider for all Cranes, Crane Boreers, Truck loading Cranes, Forklifts and Elevating Work Platforms.
- Major Inspections are carried out in accordance with AS2550 at a 10 year interval by an external service provider for all Cranes, Crane Boreers, Truck loading Cranes and Elevating Work Platforms. Typically, these assets are replaced prior to reaching the age of 10 years to avoid the high costs associated with such inspections.

7.4 Disposal Initiatives

When a motor vehicle is replaced or becomes surplus to needs it continues to be disposed of by way of NSW State Contracted auction houses despite the change in ownership. When an item of mobile plant is to be disposed of, an assessment of the economic merits of disposal by tender or disposal through auction houses is carried out.

When motor vehicles or mobile plant are auctioned, delegated officers determine the reserve price taking into account the residual price published by an independent specialist organisation with consideration given to the condition of the vehicle.

Disposal values taken from results achieved during an 18 month period from Jan-15 to Jun-16 indicate the following returns can be expected:

Table 4: Estimated Disposal Income from the Disposal of Replaced Motor Vehicles and mobile Plant.

Vehicle Group	FY17	FY18	FY19	FY20	FY21	FY22	FY23	TOTAL
Mobile Plant	959	525	975	1150	1094	379	600	5,682
Business Motor Vehicles	3513	2947	2840	3736	2775	3028	3162	22,001
TOTAL (\$,000)	4,472	3,472	3,815	4,886	3,870	3,407	3,762	¹27,684

8. Forecast Expenditure

Since 2009, TransGrid's fleet has increased by approximately 2.2% year on year from 972 units to 1063 in 2013, with the growth mainly resulting from an increase in business use motor vehicles.

As at 1 October 2012 TransGrid fleet consisted of 1059 motor vehicles (520) and mobile plant items (539). In 2013, TransGrid carried out a fleet review that identified fifteen (15) trailers and five (5) motor vehicles as being surplus to business requirements, which were disposed and not replaced.

The fleet size is 1039 at June 2016 and will not materially change during the 2019-23 revenue reset period.

Table 5 shows the capital budget for motor vehicles and mobile plant for FY16/17 to FY22/23 and excludes 100% private use vehicles as all costs are recovered from employees, but include "Other" mobile plant items.

Table 5: Projected Capital Requirements for Motor Vehicles and Mobile Plant.

Vehicle Group	FY17	FY18	FY19	FY20	FY21	FY22	FY23	TOTAL
Mobile Plant	2,994	2,260	4,437	3,738	4,160	1,490	2,060	21,139
Business Motor	8,321	7,050	6,529	8,936	6,532	7,321	7,368	52,057

¹ Disposal returns are based on the assumption that the nominal lifespan of motor vehicle and mobile plant remains unchanged.

Vehicles								
TOTAL (\$,000)	11,315	9,310	10,966	12,673	10,693	8,811	9,428	73,196

Note: The figures shown in Table 5 are based on Jun-16 dollars and are converted to Jun-18 dollars prior to being inputted into CAM.

9. Asset management capability

The Fleet Team consists of technical personnel with extensive engineering and fleet experience. The Fleet team operate within the guidelines of TransGrid's purchasing policies and motor vehicle procedures which are regularly reviewed and stored on "the wire".

The Fleet Team utilises fleet industry data to develop the replacement strategy and collaborate with the business to optimise the life of the fleet items.

10. Implementing the Strategies

The Fleet Manager is responsible for preparation of the renewal, maintenance and disposal strategy and the Works Delivery business unit are responsible for delivering the renewal, maintenance and disposal initiatives.

10.1 Monitoring and review

Implementation of the Motor Vehicle and Mobile Plant Renewal and Maintenance Strategy is monitored and reviewed by the Fleet Manager annually.

11. Roles and Responsibilities to Manage this Asset Strategy

The roles and responsibilities of those responsible for the management of this asset strategy are as follows:

- The Manager, Field Support, Works Delivery is responsible for the approval of this strategy and any variation.
- The Manager, Procurement and Facilities, Corporate Services is responsible for endorsement of this strategy and governance of the procurement activities under this strategy and any variation.
- The Fleet Manager is responsible for the development and regular review of this strategy. The document will be reviewed biannually and as significant changes to investment needs become apparent.

12. Change history

Revision no	Approved by	Amendment
1	Sunny Bhasin	Capital Expenditure and Disposal income forecasts for the period FY17 to FY23 has been updated.
2	Kersha Levi	Motor vehicle procurement strategy added and endorsed by Manager Procurement and Facilities.

13. References

The following documents shall be considered elements of this strategy and are attached for reference. Note, the issue status of attached documents is current only at the time of publication of this document and readers shall verify with reference to "the wire" as to the current amendment status.

- Control and Use of Motor Vehicles and Mobile Plant – this procedure defines the processes for the acquisition and disposal of motor vehicles and mobile plant;
- Maintenance of Motor Vehicles and Mobile Plant – this procedure defines the maintenance practices; and

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- Senior Contract Officer Employment Guidelines – this procedure provides executive and senior management with guidance regarding employment conditions and practices for Senior Contract Officers. It details the Senior Contract Officer Motor Vehicle Policy.

14. Attachments

Attachment 1 – Control and Use of Motor Vehicles and Mobile Plant Procedure

Attachment 2 – Maintenance of Motor Vehicle and Mobile Plant Procedure

Attachment 3 – Senior Contract Officer Employment Guidelines

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