Forecast Expenditure Summary

Fleet

2015 to 2020

Contents

1. Introduction

Ergon Energy is responsible for electricity distribution to regional Queensland. Critical to service delivery is the operation of Ergon Energy's Fleet assets. As an enabler to business operations, Fleet assets are directly linked to Network Assets Management, the Work Plan, the Resource Plan, Team Composition and Structure, Tasks Undertaken / Work Practices and Head Count. The assets are utilised by the business to undertake construction / maintenance activities and to enable support services to core functions (Customer Service).

To enable this, Ergon Energy requires access to a considerable and diverse set of Fleet assets. These include both Motor Vehicles and Other Plant and Equipment.

The Fleet capital expenditure category aligns with the following Australian Energy Regulator (AER) expenditure category taken from Ergon Energy's Regulatory Information Notice (RIN):

- Non-Network assets – Motor Vehicles
- Non-Network assets – Other Plant and Equipment.

The Motor Vehicles category is used for assets such as passenger cars, light commercial vehicles, heavy commercial vehicles, elevating work platforms (HCV) and crane borer plant (HCV).

The Other Plant and Equipment category is used for plant and equipment such as forklifts, trailers, trenchers, vehicle loading cranes, all-terrain vehicles etc.

The strategic aim of Ergon Energy's Fleet capital program is to provide a fleet of motor vehicles and other plant and equipment that support the effective delivery of the works programs with consideration to the size of the workforce, type of work and expanse of network the fleet supports whilst ensuring safety and cost effectiveness.

1.1 Purpose

The purpose of this document is to:

- outline the expenditure we require in the Fleet category to support the required logistics capability
- explain recent trends in expenditure and outcomes for Fleet compared to forecasts and the circumstances that will drive investment in the next regulatory control period 2015-20
- outline the approach to forecasting Fleet including the inputs, assumptions and methodology that underlie the expenditure forecasts
- explain and validate the outcomes in 2015-20 by applying the forecasting approach
- summarise the outcomes for customers in the next period.

1.2 Summary of expenditure

Ergon Energy's proposed annual forecast capital expenditure requirements for the regulatory control period 2015-20 are illustrated in Table 1.

Table 1: Forecast capital expenditure, 2015-20

	2015-16	2016-17	2017-18	2018-19	2019-20
Non Network Motor Vehicles	$35,082,000 (354 vehicles)	$36,497,000 (364 vehicles)	$36,992,000 (367 vehicles)	$37,862,000 (369 vehicles)	$37,097,000 (366 vehicles)
Non Network Other Plant & Equipment	$3,570,000 (81 assets)	$3,240,000 (80 assets)	$3,335,000 (77 assets)	$3,077,000 (82 assets)	$3,297,000 (84 assets)
Accident Write Off Replacement	$750,000	$750,000	$750,000	$750,000	$750,000
Total	**$39,402,000**	**$40,487,000**	**$41,077,000**	**$41,689,000**	**$41,144,000**

This forecast is for the Scheduled Replacements of assets that are utilised for both Standard Control Services and Alternative Control Services.

As will be explained in the following sections, the main factors that affect the capital expenditure on fleet are:

- the forecast demand for vehicles
- the appropriateness of the current fleet composition
- the remaining life in the current fleet
- the method used to provide access to fleet assets, that is, either purchase or some other arrangement.

Taking account of these drivers, Ergon Energy also manages cash flow to reduce the peaks and troughs in annual expenditure (ranging from $26 million to $78 million) and manages supplier demand and workflow during the regulatory control period and into future regulatory control periods.

1.3 Customer outcomes

Building, maintaining and operating our distribution network is a significant undertaking. The logistics capability required of Ergon Energy is significant and vehicles and other plant and equipment are a vital contributor toward this capability. The varied composition of the fleet is indicative of the broad range of tasks that are carried out in support of the network. A major challenge in the management of the fleet is ensuring that the capability provided by the fleet assets evolves with the changing demands of the network.

As with most categories of capital expenditure, the outcome is driven by two main factors:

- the number of units required
- the cost per unit.

1.3.1 Outcomes for customers and meeting or managing the demand for services

Ergon Energy is responsible for the lifecycle management of a considerable asset, the electricity network and provision of the associated Standard Control Services. To enable this, Ergon Energy requires access to a considerable and diverse set of Fleet assets. These include both vehicles and plant and equipment.

As with most categories of capital expenditure, the outcome is driven by two main factors: the number of units required and the cost per unit. Ergon Energy has been active in managing the size of the fleet as the drivers of demand changed and this has resulted in a reduction in fleet numbers.

However, the customer and community engagement program undertaken by Ergon Energy has shown the principal customer expectations for both regional and remote Queensland is reliability of supply and maintaining a localised presence. To ensure that we can service these customer expectations, in support of our hub and spoke model we have positioned fleet assets to ensure responsive and operationally efficient service provision that meets relevant safety, compliance and environmental requirements as well as supporting Ergon Energy staff in servicing our customers.

The importance of maintaining a local presence and the ability to respond promptly was highlighted by feedback from our online stakeholder survey, and through other regional stakeholder engagement, as well as during our response to major storm events, include Cyclone Yasi. This feedback was also supported by the customer research commissioned through independent research specialists, Colmar Brunton, to help us explore our customers' willingness to pay for different areas of our service. In this research our customers indicated that Ergon Energy's investment priorities should be maintaining the reliability of supply, with strong support given to maintaining local depots and sufficient disaster capability response. Less than half of the research respondents supported decreasing the current number of depots, even when offered a significant 5% decrease in their bill. Maintaining a local presence is seen as being important to our communities from a local employment perspective, and the location of our fleet vehicles is aligned with this requirement as well.

Our supporting documents *0A.01.02 – Journey to the Best Possible Price* and *0A.01.01 – How Ergon Energy Compares* contain material that outlines the overall efficiency and prudency of Ergon Energy's forecasting approach and the outcomes achieved, and also contain significant detail around the use and limitations of benchmarking as a partial indicator of the efficiency of a distributor.

2. Current period outcomes

In the current regulatory control period, Ergon Energy has achieved expenditure below that originally forecast, and that allowed by the AER in its 2010-15 Distribution Determination (refer to Table 2). Fleet expenditure is an operational enabler, and the reduction in expenditure is in response to a reduction in demand (Full Time Equivalent) generated by the reduction in our operating and capital expenditure programs. This prudent response to the reduction in capital expenditure was achieved through two main initiatives:

- reducing the numbers of some fleet assets in response to the reduced demand
- judicious extension of the operating life of certain fleet assets.

Table 2: Actuals and estimates vs. AER allowed allowance, 2010-15

	2010-11 Actual	2011-12 Actual	2012-13 Actual	2013-14 Actual	2014-15 Budget
Allocation	$31,400,000	$31,628,977	$34,300,000	$35,500,000	$39,400,000
Budget (recut)	$31,400,000	$31,628,977	$31,600,000	$33,000,000	$33,863,000
Actual / Forecast	$33,367,648	$32,561,681	$32,712,832	$27,072,410	$33,863,000
Difference between spend and allowance	$1,967,648	$932,704	-$1,587,168	-$8,427,590	-$5,537,000

As an enabler of the capital and operating programs both of which are subject to numerous dynamic external factors, forecasting fleet expenditure will always be difficult given the nature of this spend category. What can be noted from the table above is that continued application of sound business management principles and practices has resulted in savings against the 10/15 Regulatory Funding Allocation.

In addition to reducing expenditure through fleet size reduction and judicious life extension there have also been two significant reviews to evaluate prudence and efficiency in fleet management:

- Ergon Energy's Strategic Procurement Group undertook a review of sourcing efficiency (Strategic Procurement Fleet Sourcing Project)
- UMS Group Management Consultants (UMS Group Benchmarking and Best Practice Report) undertook a broad fleet management review including benchmarking.

The Strategic Procurement Fleet Sourcing Project review determined *"Leasing provides no potential financial benefit for the Ergon's Fleet and therefore the current ownership model should be maintained".* The forecast for the next regulatory control period has been developed with this recommendation a key basis.

Observations that UMS Group have made include:

- Ergon Energy customer density (customers per square kilometre) is 0.4, whereas that of the peer group ranges between 1.1 and 755
- Ergon Energy vehicle density (vehicles per square kilometre business coverage) is 0.0016, whereas that of the peer group ranges between 0.0041 and 1.63.
- Of the peer group, two (Eskom and Country Energy) approach the geographic footprint of Ergon Energy in terms of area covered.

Analysis using a Composite Variable Unit (CVU, i.e. considering the combined effect of service area, line km, customer numbers and number of employees) shows that Ergon Energy is overall operating slightly better than industry average (-0.4% below average) and has reduced our overall number of vehicles between 2007 and 2012 both on an equivalent basis and normalised over CVU. This benchmarking has been considered in development of the Fleet capital expenditure forecast.

To assist Ergon Energy in ensuring that we do not retain assets that are under-utilised or inappropriate, the business has developed Annualised Use Targets for each major category of Fleet assets and reports on these quarterly. This reporting has proven effective and is utilised by our Customer Delivery groups to review performance and refine asset requirements. This reporting has also been utilised in developing the Fleet capital expenditure forecast to identify further opportunities to reduce asset numbers.

SG Fleet (Fleet Maintenance Administration Service Provider to Ergon Energy) also provides six monthly external benchmarking against its customer base consisting of Essential Energy, Energex, Powerlink, SA Power and Ergon Energy. This benchmarking is more operationally focused, comparing fleet category operating expenditure between the entities. The benchmarking enables each entity to take insights from similar entities and apply them in their business. These benchmarking results are included in the Fleet Asset Management Annual Reviews with performance being summarised as follows:

	Usage	Expense
EWP	Similar	Below
Borer	Similar	Below
Heavy Commercial Vehicle (HCV)	Similar	Above
Light Commercial Vehicle (LCV)	Above	Similar

3. Forecast expenditure requirements

There are three main factors that must be considered in the process of forecasting fleet capital expenditure. These are:

- the number of assets required in the fleet over the upcoming regulatory control period,
- the retirement point for each fleet asset
- the cost to provide new fleet assets.

Each of these three attributes has a number of drivers that are considered by Ergon Energy in the development of forecasts.

3.1 Forecasting approach

Ergon Energy's fleet is comprised of different asset categories. These asset categories each represent a stock of assets that undergo the same lifecycle – that is, they are purchased, they age and then they are retired. This forecast is based on replacing assets at Optimum Replacement Point (ORP) and adjusted to manage cash flow to address the peaks and troughs in capital expenditure created by changed business demand and market capacity.

The assets made available through the capital expenditure on fleet are in most cases standard items that are required in the construction, operation and maintenance of the network. The alignment between assets (the capability provided) and the tasks that they enable (the capability required) is well understood.

The approach to forecasting Fleet capital expenditure consists of the following main steps:

- Determine the capability that must be delivered using Fleet assets – the demand for Fleet assets.
- Determine (over the regulatory control period) the ability of the current Fleet assets to meet the required level of demand – the supply of Fleet assets.
- Undertake a gap analysis to determine the new assets required for the fleet, this includes:
  - determining the optimum fleet mix over the period
  - taking account of the age-based retirements over the period.
- Determine the required number of acquisitions.
- Determine the cost and phasing of acquisitions.

3.1.2 Inputs and assumptions

The inputs and assumptions for Ergon Energy's fleet capital expenditure forecast can be placed into three categories – those influencing the supply of assets, those influencing the demand for assets and those influencing the cost of assets. Each of these inputs and assumptions are outlined below.

Supply:

- current asset base
- optimal replacement age
- accident rate.

Demand:

- employee numbers
- requirement for additional/reduced assets.

Cost of assets:

- current cost of assets
- procurement type.

Supply inputs/assumptions

	Optimal replacement age (years)
2WD/Passenger	4
4WD	4
LR Truck	6
MR Truck	8
HR Truck	10
Crane Borer	10
MEWP	10
Trailer	10
ATV	10
Forklift	10
Loading Crane	10
Trencher	10

Financial assumptions

	Assumption
CPI rate	0% (the forecast is expressed in FY14 dollars)
Asset procurement type	Purchase – supply of assets is via contracted arrangements established by Ergon Energy or government arrangements that Ergon Energy can access.

Cost assumptions

Asset type	Cost
2WD Commercial	$50,000
2WD Commercial Redeployed	$5,000
4WD Commercial Light	$55,000
4WD Commercial Light Service Truck	$85,000
4WD Commercial Redeployed	$5,000
All Terrain Vehicle	$40,000
Attached -VLC Knuckle Boom	$60,000

Asset type	Cost
Attached -VLC Single Boom	$20,000
EWP - Insulated	$380,000
EWP - Scissor Lift	$100,000
EWP - Self Propelled	$110,000
Forklift	$70,000
Light Plant -Compressor	$30,000
Light Plant -Trencher/Loader	$65,000
Light Rigid - Bus	$50,000
Passenger Vehicle	$31,000
Plant - Crane Borer	$350,000
Plant - Winch	$180,000
Trailers - Box-Single	$18,000
Trailers - Box-Tandem	$20,000
Trailers - Cable	$25,000
Trailers - Equipment	$25,000
Trailers - Plant	$180,000
Trailers - Plant Transport	$18,000
Trailers - Self Loading Cable	$180,000
Trailers - Tipper	$22,000
Trucks - Heavy Rigid >22t GVM (Service Body)	$210,000
Trucks - Heavy Rigid >22t GVM (Mobile Plant)	$170,000
Trucks - Light Rigid	$150,000
Trucks - Medium Rigid 8t to 16t GVM (Service Body)	$220,000
Trucks - Medium Rigid 8t to 16t GVM (Mobile Plant)	$145,000

The forecast for the Fleet category is based upon four main assumptions. These are:

- the ratio of fleet assets to operational personnel remains the same as current
- the age based retirement point remains the same for each asset type
- fleet assets will continue to be purchased, rather than leased
- the cost to provide new assets remains the same.

3.1.3 Outcomes and validation of the forecasting method

Outcomes

The provision of Fleet as well as Other Plant and Equipment is to enable the operational staff to efficiently and effectively build, maintain, operate and support the network.

Validation of the forecast methodology and inputs

The assets made available through the capital expenditure on fleet are in most cases standard items that are required in the construction, operation and maintenance of the network. The alignment between assets (the capability provided) and the tasks that they enable (the capability required) is well understood.

The variables that are material to the forecast are:

- the number of each type of asset required in the upcoming regulatory control period
- the point at which fleet assets are retired
- the cost to provide access to the asset in the upcoming regulatory control period.

Ergon Energy has validated all three of these elements of the forecast using independent benchmarking and analysis.

Fleet composition

During the current regulatory control period, Ergon Energy undertook an initiative to ensure that the size and composition of the fleet was appropriately matched to the drivers of demand, including the size of the workforce and the demands from the network capital and operating expenditure programs. This initiative resulted in a reduction in the number of assets in the fleet.

As part of providing responsible stewardship of the fleet assets, Ergon Energy believes that appropriately applied benchmarking can provide valuable input. As such, Ergon Energy engaged UMS Group to assist in determining whether the Ergon Energy fleet is appropriate in size and composition given the demand for capability. To this end, UMS Group produced the *UMS Group Benchmarking and Best Practice Report*. This study, conducted with a group of 25 peer utilities, found that Ergon Energy had an appropriate fleet and confirmed the appropriateness of the ongoing review into fleet numbers.

> "Fleet size and mix – The quantified analysis based on benchmarking in this study does not warrant a major reduction in number of fleet assets operated within Ergon. However, further review into operational requirements of some fleet asset classes (e.g. Crane Borers and [Vehicle Loading Cranes] VLCs) may identify opportunities to further rationalise the size of these asset classes"

Based on the benchmarking work carried out to date and the current fleet composition, Ergon Energy has determined the ratio of Fleet assets as well as Other Plant and Equipment to the relevant group of operational personnel. As such, Ergon Energy is, given a forecast of operations personnel, able to determine a prudent number and mix of fleet assets in support of key tasking. Further, as has been demonstrated in the current regulatory control period, Ergon Energy is also able to alter the composition of the fleet (downward as was the case in this instance) given changes in demand.

Retirement point

Choosing the correct retirement point for fleet assets is crucial for both prudence and efficiency. Typically, there is a minimum economic life required to adequately pay back the initial capital

outlay; retiring assets before this point is inefficient. As fleet assets age they can (depending upon the asset) wear out; this attracts greater demand for maintenance spend and if left unaddressed can lead to asset failure. Retiring assets too late can be both inefficient and imprudent.

The point at which overall lifecycle expenditure (per unit of measure, say age/use) is lowest is termed the ORP. This is the point at which retiring an asset from the fleet is both prudent and efficient, and is an optimal trade-off between capital and operating expenditure. Ergon Energy commissioned UMS Group to determine the degree to which the Ergon Energy aged (time based) replacement policy aligned with the calculated ORP. UMS Group undertook the analysis for the following asset types:

- Passenger vehicles
- Light commercial vehicles
- Cab chassis trucks
- Attached plant (Mobile Elevated Working Platforms, Crane Borer Plant and Vehicle Loading Cranes)
- Light plant (Trailers, Trenchers and Forklifts).

In each of these cases, UMS Group concluded that the aged replacement cycles utilised at Ergon Energy are similar to the calculated ORP (refer to *07.06.03 – UMS Group Benchmarking and Best Practice Report*).

Specifically relating to Mobile Elevating Work Platforms and Crane Borer Plant (both which require 10 year inspections) Ergon Energy completed an net present value (NPV) assessment to determine the most cost effective retirement point for these assets. The outcome of the NPV assessment is that Ergon Energy will retain our current retirement point (ORP) of 10 years for these assets, to eliminate the necessity of undertaking excess expenditure and risk in undertaking 10 year inspections. A side benefit of this strategy is the potential of higher resale dependent on industry demand (i.e. for contractors to utilise for short term projects) (refer to *07.06.11 – NPV Tool for Business Case CBP* and *07.06.12 – NPV Tool for Business Case MEWP*).

During the next regulatory control period it will be necessary to actively manage Fleet capital expenditure cash flow to eliminate the significant highs and lows in planned expenditure. Forecast annual capital expenditure is based on the replacement of assets at ORP and the current age, and for the regulatory control period 2015-20 range from a minimum of $28 million to a maximum of $78 million. To minimise these extremes it will be necessary to replace selected assets outside of ORP.

For example, to illustrate the ideal process, a business operates 100 Passenger Vehicles which have an ORP of 4yrs; thus the forecast is to replace 25 passenger vehicles per annum. Should the age profile of Passenger Vehicles not be 25 vehicles in each age bracket (1, 2, 3 and 4 years), it is necessary to extend or reduce the replacement points of specific vehicles to achieve the desired age profile which in turn leads to consistent capital expenditure.

Cost to provide

There are two main methods of providing fleet assets, purchase and lease. Funding options for the fleet assets were considered as part of the Strategic Procurement Group Fleet Sourcing Project. This investigation concluded that it is most cost-effective to self fund the fleet assets (refer to *07.06.10 – Buy vs Lease Recommendation* and *07.06.04 – Strategic Procurement Group – Fleet Sourcing Project*).

"It was unanimously agreed at the meeting that there is no potential benefit in leasing Ergon's fleet and therefore the current ownership model should be maintained"

To ensure value for money, the supply of fleet assets is via contracted arrangements established by Ergon Energy or government arrangements that Ergon Energy can access.

Validation of expenditure forecasts

To validate the Fleet forecast, two approaches were taken:

- Dynamic Systems Model
- RepEx Model.

Dynamic Systems Approach

An external review of the forecast using a dynamic systems approach (refer to *07.06.07 – Forecasting Fleet Capex using a dynamic systems approach*) validated the Fleet forecast for the next regulatory control period.

The dynamic systems approach modelled each asset category as its assets flow throughout their respective lifecycle. Using the dynamic systems approach, the supply of assets can be influenced by a number of factors such as the optimal replacement age, the phase out rate of assets once this optimal age has been reached and the accident rate for each asset type. These factors were included within the dynamics systems approach forecasting model.

RepEx Model

For validation purposes, the RepEx model was calibrated using the same fleet age profile and unit costs as were used for the forecast. The replacement life was calibrated to the normal distribution, with mean equal to the optimum replacement age of each asset, and the standard deviation equal to the square root of the mean (as per AER recommendations). The model was also configured to perform recursive replacement calculations and to set the first year of forecast to the year after the most recent installation date in the age profile.

The forecasts produced by the AER's RepEx model for the next regulatory control period are listed in Table 3 below.

Table 3: RepEX model forecasts, 2015-20

	2015-16 Forecast	2016-17 Forecast	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast
Motor Vehicles	$35,221,000	$36,808,000	$37,259,000	$37,170,000	$36,961,000
Other Fleet Assets	$2,579,000	$3,030,000	$3,344,000	$3,489,000	$3,475,000
Total	**$37,800,000**	**$39,838,000**	**$40,603,000**	**$40,659,000**	**$40,436,000**

Validation against AER Expenditure Guidelines

The capital expenditure forecast is close to the results produced using the AER's RepEx model, as can be seen in below.

Table 4: Comparison of forecasts, 2015-20

	2015-16 Forecast	2016-17 Forecast	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast	Total
Ergon Energy forecast	$39,402,000	$40,487,000	$41,077,000	$41,689,000	$41,144,000	**$203,799,000**
RepEx	$37,800,000	$39,838,000	$40,603,000	$40,659,000	$40,436,000	**$199,336,000**

The difference in the totals for the regulatory control period is 2.2% which is well within what can be reasonably expected for two different models. We note that the Ergon Energy forecast includes $750,000 per year to account for replacements due to accidents where the vehicle is written off. The RepEx model does not explicitly account for accidents as it describes asset lifetimes using a bell curve which assumes that lifetimes are clustered around the mean, whereas accidents can affect vehicles at any age. If the RepEx forecast is adjusted by $750,000 per year to account for accidents, this brings the total to $203,087,000, which is within 0.35% of Ergon Energy's forecast.

4. Summary and conclusion

Ergon Energy has forecast our fleet expenditure in the categories of Motor Vehicles and Other Plant and Equipment based on forecast demand, appropriateness of the current fleet composition and the remaining life in the current fleet. Ergon Energy also manages the cash flow by phasing acquisitions to reduce the peaks and troughs in annual expenditure and to manage demand and workflow during the regulatory period and into future regulatory control periods.

In the current regulatory control period, Ergon Energy has achieved expenditure below that originally forecast, and that allowed by the AER, in response to a reduction in demand generated by the reduction in our operating and capital expenditure programs impacting Customer Service FTE numbers. This expenditure was achieved through reducing the numbers of some fleet assets and judicious extension of the operating life of certain fleet assets.

In a benchmarking study by UMS it was observed that Ergon Energy has the lowest customer density and vehicle density among the peer group, and only two peers approach the geographical footprint of Ergon Energy in terms of area covered. Analysis using a Composite Variable Unit shows that Ergon Energy is overall operating slightly lower than industry average and has reduced our number of vehicles between 2007 and 2012 both on an equivalent basis and normalised over CVU.

Ergon Energy has also developed Annualised Use Targets for each major category of Fleet assets, reported on a quarterly basis, to ensure that we do not retain assets that are under-utilised or inappropriate and to develop the Fleet capital expenditure forecast to identify further opportunity to reduce asset numbers.

The fleet expenditure forecast has been developed using an approach, which models assets throughout their lifecycle and the costs incurred from replacing assets with different age profiles. The model takes into account the number of assets required based on the workforce demand, the retirement point for each fleet asset, and the cost of providing new fleet assets. In the model, vehicles enter the system when they are purchased, then age until they either are destroyed in an accident or reach the retirement point; vehicles that have reached the retirement point are replaced as required.

The variables that are material to the forecast are:

- the number of each type of asset required in the upcoming regulatory control period
- the point at which fleet assets are retired
- the cost to provide access to the asset in the upcoming regulatory control period.

Ergon Energy has validated all three of these elements of the forecast using independent benchmarking and analysis.

The fleet size has been reduced following an initiative undertaken by Ergon Energy to ensure that the size and composition of the fleet was appropriately matched to the drivers of demand. Ergon Energy also engaged UMS to conduct a study with a group of 25 peer utilities, which found that Ergon Energy had an appropriate fleet and confirmed the appropriateness of the ongoing review into fleet numbers. Based on this benchmarking work, Ergon Energy has determined the prudent number and mix of fleet assets based on forecast of the number of operations personnel.

To validate the estimates of the retirement point for fleet assets, Ergon Energy commissioned UMS to determine the degree to which the Ergon Energy aged replacement policy aligned with the calculated ORP – the point at which overall lifecycle expenditure per unit of measure is lowest.

UMS undertook the analysis for five groups of asset types and found that in each case the aged replacement cycles utilised at Ergon Energy are similar to the calculated ORP.

Further, the cost of providing fleet assets was determined by comparing the two main methods of provision: purchase and lease. Our Efficiency and Effectiveness Review concluded that it is most cost-effective to self fund the fleet assets.

Finally, the forecasts have been validated against the AER's RepEx model, with the models agreeing to within 2.2% on a raw basis or to within 0.35% after taking into account the differing treatments of accident write-offs.

5. Supporting documentation

The following documents support this attachment:

Document name	Reference	File name
Meeting Rule Requirements for Expenditure Forecasts	06.01.05	Meeting the Rules requirements
Fleet Asset Management Strategic Plan	07.06.01	Fleet Management Strategic Plan
2012-13 Fleet Asset Management Annual Review	07.06.02	Fleet 2012-13 Annual Review
UMS Group Benchmarking and Best Practice Report	07.06.03	UMS Ergon Fleet Jan 2013
Strategic Procurement Group – Fleet Sourcing Project	07.06.04 and 07.06.05	SS Process SMB Meet 2
Motor Vehicle Use Standard	07.06.06	Motor Vehicle Use (Standards)
Forecasting Fleet Capex using a dynamic systems approach	07.06.07	Forecasting Fleet Capex using a dynamic systems approach
15 Year AER Plan (Jan 14)	07.06.08	15 Year AER Plan (Jan 14)
Full Listing Ellipse 17 Dec 13	07.06.09	Full Listing Ellipse 17 Dec 13
Buy vs Lease Recommendation	07.06.10	Buy vs Lease Recommendation
NPV Tool for Business Case CBP	07.06.11	NPV Tool for Business Case CBP
NPV Tool for Business Case MEWP	07.06.12	NPV Tool for Business Case MEWP