Title	Cost and recommend plant, equipment, or vehicle options for infrastructure works		
Level	5	Credits	15

Purpose	People credited with this unit standard are able to: assess plant, equipment, or vehicle against intended uses; assess and record cost of plant, equipment, or vehicle operation; assess and record cost of plant, equipment, or vehicle ownership; assess and record cost of plant, equipment, or vehicle lease or hire; and recommend purchase, lease, or hire of plant, equipment, or vehicle for infrastructure works.
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Classification	Infrastructure Works > Infrastructure Works Management
Available grade	Achieved

#### **Guidance Information**

- 1 Assessment against this unit standard must take place in a workplace environment. Assessment parameters will depend on company and site-specific equipment, procedures, and practices. Practices must reflect industry best practice and comply with legislative requirements.
- 2 Evidence is required of recommending options for acquiring at least one vehicle or item of plant or equipment valued at \$10,000 or more.
- 3 Plant hire rates may be determined from current editions of the *Blue Book Plant Hire Rates*, available from Civil Contractors NZ at <u>https://civilcontractors.co.nz/resources/industry-information/order-resources/</u>.
- 4 Details pertaining to individual vehicles and items of plant and equipment may be determined from manufacturer's instructions.
- 5 Definitions

*Company requirements* include the policy, procedures, and methodologies of the company. They include legislative and regulatory requirements which may apply across the company or to a specific site. Requirements are documented in the company's health and safety plans, traffic management plans, contract work programmes, quality assurance programmes, policies, and procedural documents. *Equipment* may include generator, compressor, pavement breaker, handheld compactor, and spraying, mowing, harvesting, and planting equipment. *Plant* may include machines for earthmoving, lifting, and transporting. *Vehicle* may be for on-road or off-road use.

# Outcomes and performance criteria

# Outcome 1

Assess plant, equipment, or vehicle against intended uses.

#### **Performance criteria**

- 1.1 Assessment identifies intended use of plant, equipment, or vehicle in accordance with company requirements.
- 1.2 Assessment identifies potential operating conditions.
  - Range may include but is not limited to altitude, climate, terrain, ground conditions.
- 1.3 Assessment identifies factors influencing operation costs.
  - Range may include but is not limited to timescale utilisation, workload, capacity, load requirements, logistics, age and mechanical condition of plant.

## Outcome 2

Assess and record cost of plant, equipment, or vehicle operation.

#### **Performance criteria**

- 2.1 Operating costs are assessed for specified use and recorded in accordance with company requirements.
  - Range may include fuel consumption, daily cost and hourly cost of plant operation, road user charges, time licences, registration for the plant, repairs and maintenance, transport, ground-engaging gear.

## Outcome 3

Assess and record cost of plant, equipment, or vehicle ownership.

## Performance criteria

- 3.1 Cost of plant, equipment, or vehicle ownership is assessed for specified use and recorded in accordance with company requirements.
  - Range may include but is not limited to projected utilisation, variety of tasks, required performance, auxiliary equipment, depreciation, insurance, financing costs, residual value, daily or hourly cost of ownership, storage cost, supplier's price, terms of sale, level of service, warranty, trade-in, after-sales service, track record, exchange rate, purchase agreement, service agreement, delivery details, conditions agreed to between parties.

# Outcome 4

Assess and record cost of plant, equipment, or vehicle lease or hire.

# Performance criteria

- 4.1 Cost of plant, equipment, or vehicle lease or hire is assessed for specified use and recorded in accordance with company requirements.
  - Range may include but is not limited to projected utilisation, variety of tasks, required performance, auxiliary equipment, insurance, storage cost, terms of lease or hire, level of service, track record, hire or lease agreement, service agreement and delivery details, special conditions agreed to between parties, wet hire rate, dry hire rate.

# Outcome 5

Recommend purchase, lease, or hire of plant, equipment, or vehicle for infrastructure works.

## **Performance criteria**

5.1 Cost of ownership is compared with cost to hire or lease and a recommendation to management is prepared in accordance with company requirements.

Range business case, prioritisation, fit to budget.

Planned review date	31 December 2024
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## Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 July 1996	31 December 2012
Revision	2	9 March 1999	31 December 2012
Review	3	30 May 2000	31 December 2012
Review	4	25 September 2006	31 December 2012
Review	5	18 March 2011	31 December 2020
Review	6	24 January 2019	31 December 2020
Review	7	27 June 2019	N/A

Consent and Moderation Requirements (CMR) reference	0101	
This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.		

# Comments on this unit standard

Please contact Connexis - Infrastructure Industry Training Organisation <u>qualifications@connexis.org.nz</u> if you wish to suggest changes to the content of this unit standard.