## **TRAN**

# **Transport**

# DRAFT WAITAKI DISTRICT PLAN



#### **Transport**

#### Introduction

The Transport Chapter contains provisions that deal with on-site transport facilities and the effects of high trip generating use and development. Activities that generate high volumes of traffic may have significant adverse effects on the transport network and its users as well as adversely affect the amenity of adjacent land use activities. As such, high trip generating activities warrant case by case assessment. Land use and development can adversely affect the safety and efficiency of the transport network and people's health and well-being if on-site transport facilities (vehicle access, parking, manoeuvring and loading facilities) are inappropriately designed and linked to the transport network.

The transport network itself is defined as infrastructure under the RMA. The rules for the operation, maintenance and repair, upgrading and development of the transport network are located in the Infrastructure Chapter, as required by the New Zealand National Planning Standards.

#### Notes:

- The use, repair, operation and maintenance of the transport network by the transport network operators (Waitaki District Council, Otago and Canterbury Regional Councils, Waka Kotahi NZ Transport Agency and KiwiRail) is managed by the Infrastructure Chapter.
- 2. All new roads and vehicle access points that intersect a State Highway require the approval of Waka Kotahi NZ Transport Agency, under the Government Roading Powers Act 1989.

#### Objectives

#### TRAN-O1 On-site transport facilities and access

Use and development has safe and effective transport facilities provided on-site, and site access, which does not compromise the safety and efficiency of the transport network.

#### TRAN-O2 High trip generating use and development

The safety and efficiency of the transport network is not compromised by inappropriate use and development that generates high numbers of vehicle trips.

#### **Policies**

#### TRAN-P1 High trip generating use and development

Provide for high vehicle trip generator activities where it can be demonstrated that any adverse effects on the transport network will be minimised, having regard to:

- 1. the extent to which it integrates and co-ordinates with the transport network, including proposed or planned transport network infrastructure and service improvements; and
- 2. the location of the proposed activity and the purpose of the zone it is located in; and
- 3. the transport network capacity, level of service, form and function; and
- 4. the effect of the proposed activity on the transport network and any road and its users, amenity values and character; and
- 5. the effect of the proposed activity on the character and amenity values of the surrounding area; and
- 6. the provision for all users, including, but not limited to, pedestrian, cyclist, public transport users, freight and motorists; and
- 7. any alternative access and/or routes available; and
- 8. any traffic management and travel planning mechanisms; and
- 9. the staging of the activity; and
- 10. any improvements proposed to the transport network; and
- 11. any reverse sensitivity effects from adjacent sensitive activities; and
- 12. any cumulative adverse effects; and
- 13. any positive effects.

#### TRAN-P2 Appropriate on-site transport facilities

Enable on-site transport facilities where these:

- 1. meet industry standards; and
- 2. are of a location and design that provides for:

- a) public health and safety; and
- b) the safe and efficient use of the site; and
- c) the safe and efficient functioning of the transport network; and
- d) the reasonable loading and access demands generated by the use of the site; and
- 3. promote the uptake and use of the active transport network.

#### TRAN-P3 Potentially appropriate on-site transport facilities

Only allow for on-site transport facilities that do not meet industry standards where it can be demonstrated, as relevant, that:

- 1. the design is in response to site and/or topographical constraints; and
- 2. the design will integrate and coordinate with the transport network, including proposed transport network improvements; and
- 3. the safe, efficient and effective functioning of the transport network, in particular the State Highway or rail networks, will not be compromised; and
- 4. the activities have safe and effective access for firefighting purposes; and
- the projected demand for any loading spaces or cycle spaces can be demonstrated to be lower than that required, or can be accommodated by shared or reciprocal arrangements; and
- 6. public health and safety will not be compromised.

#### TRAN-P4 Vehicle crossings

Provide for safe and efficient connections between the transport network and on-site transport facilities by requiring connections to roads to address:

- 1. the classification, characteristics and operating speed of the road and the number and types of vehicles accessing the site; and
- 2. opportunities to share and minimise the number of connections; and
- 3. public health and safety, including the safe functioning of the transport network and the safety of pedestrians and cyclists; and
- 4. site or topography constraints, including reduced visibility.

#### TRAN-P5 Multi-modal and active transport

Encourage activities to incorporate opportunities for mutli-modal and active transport, including cycle parking and end of trip facilities.

#### Rules

Note: For certain activities, a resource consent may be required by rules in more than one chapter in the District Plan. Unless expressly stated otherwise by a rule, resource consent is required under each of those rules. The steps to determine the status of an activity are set out in the General Approach Chapter.

#### **PERMITTED ACTIVITIES**

TRAN-R1	Vehicle crossings onto roads	
All zones	Activity status: Permitted  Where: PER-1 TRAN-S13, TRAN-S14, TRAN-S15, TRAN-S16, and TRAN-S17 are complied with.	Activity status when compliance is not achieved: Restricted Discretionary  Where: RDIS-1 Compliance is not achieved with PER-1
		Matters of discretion are restricted to:  1. the matters of discretion of any infringed standard.

All zones  Activity status: Permitted  Where: PER-1 TRAN-S1 and TRAN-S2 are complied with.  Activity status when compliance is not achieved: Restricted Discretionary  Where: RDIS-1 Compliance is not achieved with PER-1	TRAN-R2	Site access for activities without any on-site vehicle parking or loading spaces	
TRAN-S1 and TRAN-S2 are complied RDIS-1	All zones		•
·		PER-1	Where:
with. Compliance is not achieved with PER-1		TRAN-S1 and TRAN-S2 are complied	RDIS-1
		with.	Compliance is not achieved with PER-1
Matters of discretion are restricted to:			Matters of discretion are restricted to:
1. the matters of discretion of any infringed standard.			•

TRAN-R3	Vehicle access for activities with on-site vehicle parking or loading spaces, or where a vehicle access is provided to and within the site for movement of vehicles from the legal road.	
All zones	Activity status: Permitted  Where: PER-1 TRAN-S2, TRAN-S3 and TRAN-S6 are complied with.	Activity status when compliance is not achieved: Restricted Discretionary  Where: RDIS-1 Compliance is not achieved with PER-1

#### Matters of discretion are restricted to:

1. the matters of discretion of any infringed standard.

#### TRAN-R4

Activities with on-site parking or loading spaces where a vehicle access is provided to the site from a legal road.

#### All zones

**Activity status: Permitted** 

### Where:

PER-1

TRAN-S4, TRAN-S5, TRAN-S6, TRAN-S7, TRAN-S8, TRAN-S9, TRAN-S10, TRAN-S11 and TRAN-S12 are complied with.

Activity status when compliance is not achieved: Restricted Discretionary

#### Where:

RDIS-1

Compliance is not achieved with PER-1

#### Matters of discretion are restricted to:

1. the matters of discretion of any infringed standard.

#### TRAN-R5 Bicycle facilities for all activities

#### All zones

**Activity status: Permitted** 

#### Where:

PER-1

TRAN-S12 is complied with.

Activity status when compliance is not achieved: Restricted Discretionary

#### Where:

RDIS-1

Compliance is not achieved with PER-1

#### Matters of discretion are restricted to:

1. the matters of discretion of any infringed standard.

#### **TRAN-R6** Vehicle trip generating activities

#### All zones

**Activity status: Permitted** 

Where: PER-1

The thresholds set out in Table 3 – High Trip Generator Thresholds are not exceeded.

Activity status when compliance is not achieved: Restricted Discretionary

#### Where:

RDIS-1

Compliance is not achieved with PER-1

#### Matters of discretion are restricted to:

1. the matters in TRAN-P1.

Note: Section 88 Information Requirements for Applications:

Pursuant to s88 of the RMA any application for activities made under this provision must provide, in addition to the standard information requirements, an integrated transport assessment.

Table 3 – High trip generator thresholds

Activity	Threshold for National (SH1), Arterial, Primary Collector, and Secondary Collector	Threshold for Access Road (including access low volume)
Residential activity:		
	20 residential units enabled by any residential development or subdivision	20 residential units enabled by any residential development or subdivision
Care facilities:		
Hospital and healthcare activity	500m² GFA	150m² GFA
Commercial activity:		
Commercial/retail service activity unless otherwise stated:	1,000m² GFA	300m <sup>2</sup> GFA
Drive through activities, including service stations	All drive through activities	All drive through activities
Entertainment and hospitality activity	500m <sup>2</sup> GFA	150m² GFA
Motor vehicle repair and servicing	500m <sup>2</sup> GFA	150m² GFA
Motor vehicle sales	3,000m <sup>2</sup> site area	1,000m² site area
Veterinary clinics	500m <sup>2</sup> GFA	150m² GFA
Visitor accommodation	50 beds	20 beds
Community facility, sport or recreation activity:		
	A design occupancy of 200 persons on site at any one time	A design occupancy of 100 persons on the site at any one time
Educational facilities:		
Childcare services	30 children	10 children
Primary and secondary schools	150 students	50 students
Tertiary education services	250 FTE students	100 FTE students
Emergency service facilitie	s:	

	Any emergency services facility	Any emergency services facility
Industrial activities:		
Industrial activity unless otherwise stated:	5,000m <sup>2</sup> site area	1,500m² site area
Warehousing, storage and lock up facilities	2,000m² GFA	600m² GFA
Any combination of activities:		
Other combinations	Lowest threshold of individual component activity	Lowest threshold of individual component activity
Any other activity:		
	500 vehicle trips per day	200 vehicle trips per day

#### **TRAN STANDARDS**

#### TRAN-S1 Pedestrian and cycling access

- 1. The site must:
  - a) have a direct legal road frontage width of at least 1.8m; or
  - b) have pedestrian and cycling access provided to the site from legal road with a:
    - i. minimum legal width of 1.8m;
    - ii. minimum formed width of 1.5m;
    - iii. maximum average gradient of 5%;and
    - iv. maximum gradient of 8% for any length as long as it does not exceed 9m.

#### Matters of discretion are restricted to:

- 1. the safe, efficient and effective functioning of the access, including the safety of pedestrians and cyclists; and
- 2. site and topographical constraints; and
- 3. the suitability of any alternative design options.

#### TRAN-S2 Firefighting access

- Any access to a site located in an area where no fully reticulated water supply system is available, or having a length greater than 75 metres when connected to a road that has a fully reticulated water supply system including hydrants, must be designed to accommodate a fire appliance design vehicle of at least 2.5 metres wide and 13 metres long and with a minimum gross mass of 25 tonne including:
  - a) a gradient of not more than 16%; and
  - b) a minimum clear passageway and/or vehicle crossing of at least 3.5 metres width at the site entrance, internal entrances and between buildings; and
  - c) a minimum formed carriageway width of 4 metres; and
  - d) a height clearance of at least 4 metres;
  - e) a design that is free of obstacles that could hinder access for emergency service vehicles.

- the safe, efficient and effective functioning of the vehicle access, including firefighting access; and
- 2. the ability to provide an adequate and reliable firefighting water supply; and
- 3. site and topographical constraints.

# TRAN-S3 Service lanes, private ways, private roads, pedestrian accessways and walkways

Service lanes, private ways, private roads, pedestrian accessways and walkways must be designed and constructed in accordance with NZS 4404:2010 Land Development and Subdivision Infrastructure; except where Table 4 – Minimum legal widths and formation requirements for private ways/vehicle access lots replaces the formation requirements of private ways for residential units detailed in NZS 4404:2010.

#### Matters of discretion are restricted to:

- 1. public health and safety; and
- 2. safe and effective access for vehicles, pedestrians and fire service vehicles.

Table 4 – Minimum legal widths and formation requirements for private ways/vehicle access lots

Number of potential residential units	Legal widths (minimum)	Formation width (minimum)
1	4m	3.5m carriageway
2	4m	3.5m carriageway
3	4m	3.5m carriageway
4-6	6m	5m carriageway

#### TRAN-S4 Reverse manoeuvring

- On-site manoeuvring must be provided for a minimum design vehicle (car) so that no vehicle is required to reverse either onto or off a site for:
  - a) an activity required to provide or contain six or more parking or loading spaces; or
  - b) any non-residential activities, except for those within the Town Centre Zone; or
  - c) any non-residential activity that has access to State Highways 1, 8 or 83, except for where located in the Town Centre Zone.
- on-site manoeuvring must be provided for a minimum design vehicle truck so that no truck is required to reverse onto or off a site, where any activity requires loading areas or trade vehicle storage, with:

- the safety and movement of pedestrians, cyclists, public transport and general traffic; and
- 2. the operation of the transport network.

- a) direct access onto a road in the Local Centre, Mixed Use, General Industrial and Heavy Industrial Zones; or
- b) direct access onto an Arterial road (as listed in SCHED1 – Waitaki District Road Classifications).
- all truck refuelling sites must be designed to accommodate a semi-trailer minimum design vehicle so that it can leave the site in a forward direction.

#### TRAN-S5 Design standards for vehicle manoeuvring areas

- Sufficient area must be provided on a site for vehicles to stand, queue and make all necessary manoeuvres on site without using the road, and without using the area provided for parking, servicing, loading or storage purposes; and
- 2. sufficient area to allow vehicles to enter and exit the site in a forward direction, except where:
  - a) the access is for a single dwelling; and
  - b) the access is on to an Access road (including access-low volume),
     Secondary Collector road or Primary Collector road (as listed in SCHED1 – Waitaki District Road Classifications).

#### Matters of discretion are restricted to:

 the safety and movement of pedestrians, cyclists, public transport and general traffic.

#### TRAN-S6 Service Stations and Truck Stops

 Site access and manoeuvring space for service stations must be designed, constructed and maintained in accordance with NZTA RTS 13 Guidelines for Service Stations (March 1996).

#### Matters of discretion are restricted to:

1. the safety and movement of pedestrians, cyclists, public transport and general traffic.

#### TRAN-S7 On-site loading spaces for non-residential activities

The number of loading spaces for any non-residential activity must not be less than that shown in Table 5 – Minimum loading space requirements for non-residential activities below and must be provided on-site, except in the Town Centre Zone.

- 1. the effective, efficient and safe operation of the transport network; and
- 2. the identified loading needs of the activity.

- in the Town Centre Zone, each site fronting a State Highway, Secondary Collector road or Primary Collector road (as listed in SCHED1 – Waitaki District Road Classifications) must have practical and legal access to one loading space within 50 metres of the site, which is in the same street block as the site. This space may be shared with other activities.
- Neither Clause 1 or 2 above apply to sites of less than 50m<sup>2</sup> that are used for infrastructure purposes.

Table 5 – Minimum loading space requirements for non-residential activities

Gross Floor Area	Minimum Number of Loading Spaces	Minimum Design Vehicle
Up to 500m <sup>2</sup>	Nil	n/a
501-1,000m <sup>2</sup>	1	Small rigid truck
1,001m <sup>2</sup> - 3,000m <sup>2</sup>	1	Medium rigid truck
Greater than 3,000m <sup>2</sup>	1	Heavy rigid truck

#### TRAN-S8 Design requirements for loading and vehicle standing spaces

1. Loading and vehicle standing spaces required under TRAN-S5 must be designed, constructed and maintained in accordance with AS/NZS 2890.2.2002 Parking facilities Part 2: Off-street commercial vehicle facilities, for the specified minimum design vehicle.

#### Matters of discretion are restricted to:

- 1. the effective, efficient and safe operation of the transport network; and
- 2. the identified loading and vehicle space needs of the activity.

#### TRAN-S9 Accesible parking spaces

Where parking spaces are provided on site:

- any on-site car parking area containing 50 or more car parking spaces must include spaces for people with disabilities, at a rate of:
  - a) one space for the first 50 to 100 spaces;
  - b) plus one more for every additional 100 spaces; and
- 2. any parking space for people with disabilities:
  - a) must be located as close as practicable to the building entrance; and

- the safe, resilient, efficient and effective functioning of the transport network; and
- the safety and movement of pedestrians, cyclists, public transport and general traffic; and
- accessibility of the site by active transport and public transport; and
- 4. public health and safety; and
- 5. the safety and usability of the parking spaces; and

- b) on a level surface; and
- c) be clearly signed.

Note: Where parking is provided, the New Zealand Building Code D1/AS1 New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121-2001) sets out requirements for parking spaces for people with disabilities and accessible routes from the parking spaces to the associated activity or road.

6. site limitations, configuration of buildings and activities.

#### TRAN-S10 Design requirements for on-site vehicle parking spaces

#### Where provided on a site:

- car parking must comply with the requirements of AS/NZS 2890.1:2004 Parking facilities Part 1: Off-street car parking, except for:
  - a) a parking space in a garage or carport;
  - b) staff parking that is provided as stacked parking of no more than two vehicles complies.
- 2. a queuing space for both ingress and egress of at least 6m in length at each vehicle crossing must be provided for all vehicles entering and exiting an on-site car parking area where more than 20 car parking spaces are provided in the on-site car parking area served by the vehicle crossing. The queuing space length must be measured from the road boundary to the first point at which a vehicle can turn into a parking space or aisle.

Note that where parking is provided, the New Zealand Building Code D1/AS1 New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121-2001) sets out requirements for parking spaces for people with disabilities and accessible routes from the parking spaces to the associated activity or road.

- 1. the safe, resilient, efficient and effective functioning of the transport network; and
- the safety and movement of pedestrians, cyclists, public transport and general traffic; and
- 3. accessibility of the site by active transport and public transport; and
- 4. public health and safety; and
- 5. the safety and usability of the parking spaces; and
- 6. site limitations, configuration of buildings and activities.

#### TRAN-S11 Surface of parking and loading areas

- 1. The surface of all parking and loading areas must either be:
  - a) constructed to comply with the Waitaki District Standard Specification for the Construction of New Vehicle Entrances August 2016; or
  - b) constructed on a well drained subgrade developed to give a California Bearing Ratio (CBR) of not less than 12 with a minimum of 150mm of compacted AP65 basecourse and 100mm of compacted M4/AP40 basecourse layer, and sealed with two coat Grade 4/Grade 5 chip seal or M10 hot mix asphalt; and
  - c) marked by either signage or painted markings to define required staff and visitor parking spaces, loading spaces and spaces for people with disabilities.
- 2. Clause 1 does not apply where a site contains parking for one residential unit.

#### Matters of discretion are restricted to:

- 1. the adequacy of the materials used to construct the surface; and
- 2. the marking of the parking spaces; and
- the potential for materials to be carried onto the surface of sealed roads, sealed footpaths or sealed service lanes; and
- any adverse effects on the amenity of adjacent sites arising from the provision of unsealed parking spaces; and
- 5. dust and noise resulting from unsealed surfaces.

#### TRAN-S12 On-site cycle parking spaces

- All developments, excluding residential dwellings and primary production, must provide cycle parking at a rate of 1 cycle space for every 10 car parking spaces provided; and
- 2. cycle parking spaces must meet the following minimum specifications:
  - a) bicycle stands must be sized and spaced to accommodate bicycle dimensions of 1200mm high, 1800mm long and 600mm wide; and
  - b) stands must be securely anchored to an immovable object; and
  - c) stands must allow the bicycle frame and at least one wheel to be secured; and
  - d) cycle parking facilities must be located:
    - i. so they are easily accessible for users;
       and
    - ii. so they do not impede pedestrian thoroughfares, including areas used by people whose mobility or vision is restricted; and

- the availability of alternative, safe and secure cycle parking that meets the needs of the intended users, in a nearby and accessible location; and
- site limitations, configuration of buildings and activities, demonstrated user requirements and operational requirements; and
- 3. whether parking can be provided and maintained in a jointly used cycle parking area.

- iii. to be clear of vehicle parking or manoeuvring areas;
- e) cycle parking facilities must be available during the activity's hours of operation and must not be impeded by any structure, storage of goods, landscape planting or other use; and
- f) long stay cycle parking facilities (for staff or residents) must be located:
  - i. in a covered area; and
  - ii. in an area where access by the general public is generally excluded.

Note: Refer to the Austroads Bicycle Parking Facilities: Guidelines for design and installation: October 2-16 (AP-R527-16).

#### TRAN-S13 Width and number of vehicle crossings onto roads

- Every lot with direct vehicle access to a road or vehicle access lot must provide a complying vehicle crossing;
- the maximum number of vehicle crossings per site must not exceed the number set out in Table 6 – Maximum number of vehicle crossings;
- the minimum distance between any two vehicle crossings on the road frontage of one site must be no less than 7m;
- 4. any vehicle crossing must not have a gradient exceeding 1:8;
- any vehicle crossing must comply with the crossing widths set out in Table 7 – Vehicle crossing widths, except:
  - a) the crossing width for use predominantly by a Truck and Trailer unit must be 12m.

Note: All new vehicle crossings that intersect a State Highway require the approval of Waka Kotahi New Zealand Transport Agency, under the Government Roading Powers Act 1989.

Where a fire appliance is not able to reach either a house or the source of a firefighting hydrant, the vehicle crossing must comply with the dimensions for fire appliances for

- the safety and movement of pedestrians, cyclists, public transport and general traffic; and
- 2. any offset or compensation measures offered; and
- 3. the operation of public transport services; and
- 4. the formation and sealing of the vehicle crossing; and
- 5. the operation of the transport network; and
- 6. any loss of on-street parking.

developments contained in SNZ PAS 4509:2008	
New Zealand Fire Service Firefighting Water	
Supplies Code of Practice.	

#### Table 6 – Maximum number of vehicle crossings

Frontage	Maximum number
Primary and Secondary Collector	1 vehicle crossing, plus 1 vehicle crossing per km for sites with over 1km of road frontage
Access and low volume	4 vehicle crossings plus 1 vehicle crossing per km for sites with over 4km of road frontage
Vehicle access lot	1 vehicle crossing
Paddocks	1 vehicle crossing for each paddock fronting the road

#### Table 7 – Vehicle crossing widths

Activity	Width of crossing (r	Width of crossing (m)	
	Minimum	Maximum	
Residential	3.5	6.0	
Non-residential	4.0	9.0	

#### **TRAN-S14** Formation and sealing of vehicle crossings

- All vehicle crossings onto a sealed road, a sealed footpath or sealed service lane must be sealed in accordance with the requirements in this standard;
- 2. the surface of all vehicle crossings that are not to a State Highway must either be:
  - a) constructed to comply with the Waitaki District Standard Specification for the Construction of New Vehicle Entrances, August 2016; or
  - b) constructed as per the following:
    - i. constructed on a well drained subgrade, developed to give a California Bearing Ratio (CBR) of not less than 12 with a minimum of 150mm of compacted AP65 basecourse and 100mm of compacted M4/AP40 basecourse layer; and
    - ii. sealed with two coat Grade 4/Grade5 chip seal or M10 hot mix asphalt;and

- 1. the adequacy of the materials used to construct the surface; and
- 2. any offset or compensation measures offered; and
- the potential for materials to be carried onto the surface of sealed roads, sealed footpaths or sealed service lanes; and
- any adverse effects on the amenity of adjacent sites arising from the provision of unsealed vehicle crossings; and
- 5. dust and noise resulting from unsealed surfaces.

- iii. in locations where there is no existing kerb or channel, provided with a concrete culvert with a wetted cross section of not less than 80% of the wetted cross section of the existing channel on the down-stream side of the vehicle crossing; and
- iv. not be surfaced in concrete;
- 3. the area to be surfaced under 2 must include:
  - a) the full width of the vehicle crossing or service lane;
  - b) between the edge of the carriageway to the road boundary;
  - c) the first 5.5m of the access within the site (as measured from the road boundary);
- 4. the surface of all vehicle crossings onto a State Highway must be formed and surfaced in accordance with Appendix 5B – Accessway standards and Guidelines of the NZTA Planning Policy Manual ver 1 August 2007.

#### TRAN-S15 Distance between vehicle crossings and road intersections

- the distance between new vehicle crossings and road intersections must be at least the distance shown in Table 8 – Minimum distance between vehicle crossings and road intersections;
- 2. the distance is to be measured from the legal boundary of the intersecting road to the edge of the vehicle crossing.

#### Matters of discretion are restricted to:

- the safety and movement of pedestrians, cyclists, public transport and general traffic; and
- any offset or compensation measures offered; and
- 3. the operation of the transport network.

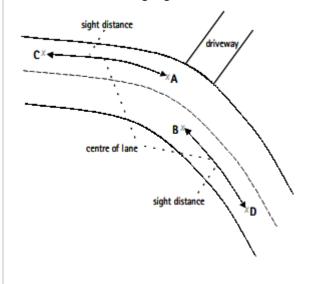
#### Table 8 – Minimum distance between vehicle crossings and road intersections

Road classification	Minimum distance between vehicle crossings and road intersection
National or Regional	30m
Arterial or Primary Collector	20m
Secondary Collector	15m
Access and low volume	10m

#### **TRAN-S16** Sight distances from vehicle crossings

- Any vehicle crossing must comply with the minimum sight distances set out in Table 9

   Minimum sight distances from vehicle crossings;
- notwithstanding 1. above, all vehicle orientated commercial activities must comply with the minimum sight distances set out in Table 10 – Minimum sight distances from vehicle crossings – vehicle orientated commercial activities;
- 3. all sight distance measurements must be undertaken in accordance with Diagram 3 Vehicle Crossing Sight Distances.



- The safety and movement of pedestrians, cyclists, public transport and general traffic; and
- 2. any offset or compensation measures offered; and
- 3. the operation of the transport network.

Table 9 – Minimum sight distances from vehicle crossings

Legal speed limit (km/hr)	Minimum sight distance (m) (approach sight distance)
50	50
60	70
70	95
80	125
90	160
100	195

Table 10 – Minimum sight distances from vehicle crossings – vehicle orientated commercial activities

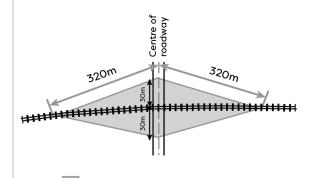
Legal Speed Limit (km/hr)	Minimum sight distance (m) (approach sight distance)
50	95
60	120

70	150
80	185
90	230
100	275

#### TRAN-S17 Vehicle crossings and railway crossings

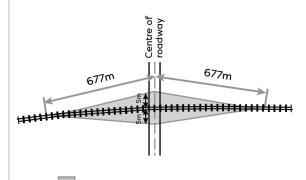
- Any new vehicle crossing must be located a minimum of 30m from a railway level crossing, as measured from the closest rail track to the edge of the vehicle crossing;
- 2. where a railway level crossing is controlled by stop signs or give way signs, any buildings, structures, plants or other visual obstructions must not be located within the approach sightlines or restart sightline areas, as shown in the shaded areas of Diagram 4 and Diagram 5 below.

#### **Diagram 4 - Approach Sightlines**



Visual obstruction-free area

**Diagram 5 - Restart Sightlines** 



Visual obstruction-free area

- 1. the safety and efficiency of rail and road operations; and
- 2. whether a grade separated crossing will be provided; and
- 3. any offset or compensation measures offered; and
- 4. visibility and safe sight distances for vehicles using the level crossing.