

Ministry of Education

Te Kura Kaupapa Māori of Te Horouta Wānanga

Transportation Assessment Report

1. INTRODUCTION

East Cape Consulting (ECC) has been engaged by the Ministry of Education (MOE) to assess the traffic planning implications of a proposal to designate land for a new kura to be established on a site in Kaiti, Gisborne.

As a Requiring Authority, the MOE is seeking a Notice of Requirement (NOR) to enable this process. The purpose of this report is to assess whether the site is suitable to accommodate the kura, rather than to focus on the details of its intended design and operation.

It is intended that the designation will ultimately provide for a kura of up to 300 students. The kura is known as Te Kura Kaupapa Māori of Te Horouta Wānanga ('the kura'). It is a wharekura that provides Maori immersion education for students from year 0 to 13. It will operate as a school of choice with no fixed geographic enrolment zone.

The report that follows evaluates and assesses the transportation effects of the proposed kura and recommends mitigation measures and conditions to manage those effects.

By way of summary, it is concluded that the proposed kura can be appropriately integrated with the surrounding transport network, subject to the following recommendations:

- A pedestrian facility, of a form to be agreed with Gisborne District Council (GDC), on Ranfurly Street linking the kura with the Marae.
- A pedestrian facility, of a form to be agreed with GDC, on Crawford Road linking the kura with the Crawford Road cycleway and the Dickson Street accessway.
- Consultation with GDC regarding establishment of 30km/h school speed zones around the kura.
- Provision of one or more vehicle accesses to the kura with parking suitable to meet staff, school bus/van, and drop off and pick up needs.
- Provision of on-site cycle parking for staff and students.
- Preparation of a Travel Plan as part of the design and operation of the kura.

2. SITE LOCATION

As shown on Figure 1 and Figure 2 below, the subject site is located between Crawford Road and Ranfurly Street in the Gisborne suburb of Kaiti.



Figure 1 – Site Location (Base Map Source: Open Street Maps)



Figure 2 – Site Location Aerial (Base Map Source: Tairawhiti Maps)

The immediate surrounding area is residential. Te Poho-o-Rawhiri Marae is located on the opposite side of Ranfurly Street at the base of Kaiti Hill. Eastland Port and the Esplanade commercial area are located to the west, with the Gisborne central business district (CBD) approximately 1km away across the Turanganui River. There is also a local commercial area on the Ranfurly Street/London Street corner.

The specific land parcels that are subject to the NOR are shown below as Figure 3.



Figure 3 – Land Parcels (Base Map Source: Tairawhiti Maps)

The overall site has an area of approximately 1.4 hectares (ha). Road frontage of approximately 40m is available to Crawford Road and 215m is available to Ranfurly Street.

3. ZONING CONTEXT

Most of the site is within the General Residential Zone of the Tairawhiti Resource Management Plan (TRMP). Crawford Road and Ranfurly Street are zoned 'Road Reserve'. Barton Street (between Crawford Road and Ranfurly Street) is a Neighbourhood Reserve. The site is surrounded by Heritage Reserve and Port B zones to the west, with General Residential on the other sides. The zoning context is shown as Figure 4 below.

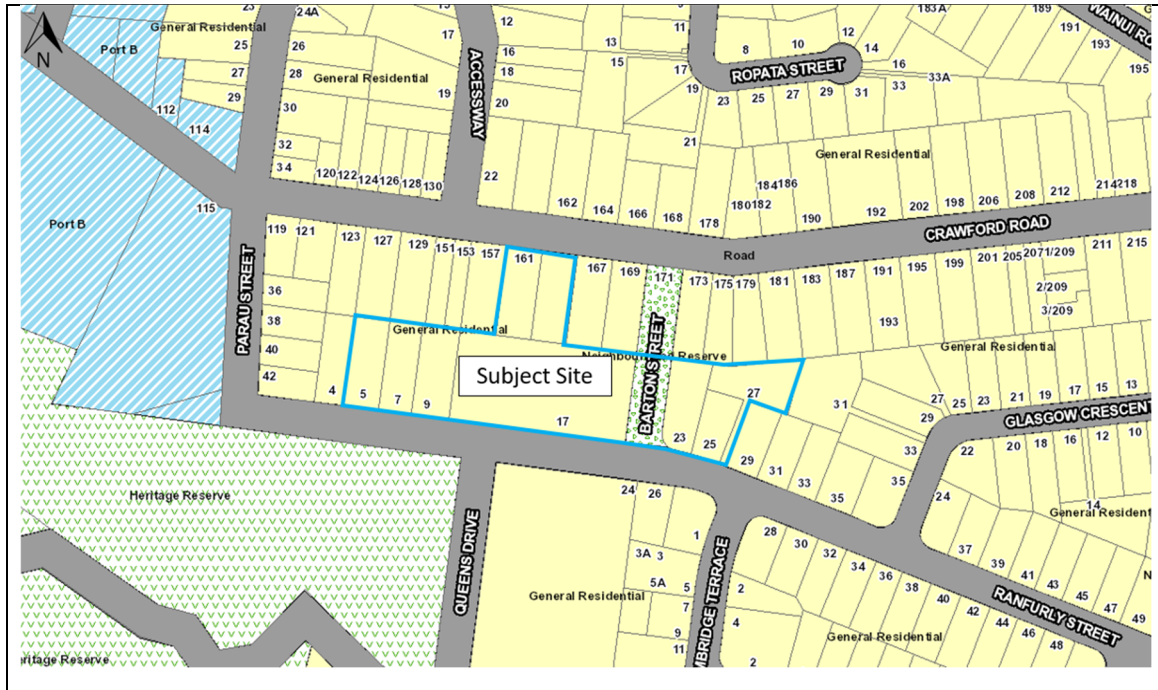


Figure 4 – Land Use Context (Base Map Source: Tairawhiti Maps)

4. EXISTING TRANSPORT ENVIRONMENT

4.1 Road Hierarchy

Wainui Road (State Highway 35 (SH35)) is the primary arterial transport corridor in this part of Gisborne. It runs generally east-west and provides both an inter-regional connection for the East Coast, and a city arterial connection between Gisborne and its eastern suburbs.

Rutene Road runs parallel to it and provides an alternative route, with De Latour Road (a collector road) providing the connection between.

Crawford Road, Ranfurly Street, London Street and Parau Street are all classified as local roads.

Barton Street is classified as 'other' in the hierarchy and as noted earlier, carries Neighbourhood Reserve zoning in the TRMP. ECC is advised (by The Property Group) that it is a Crown derived reserve that is vested in Council pursuant to the Reserves Act 1977. It is reserved for the purposes of 'reserve for local purpose (road reserve)'.

The site location in the context of the road hierarchy is shown as Figure 5 and Figure 6.



Figure 5 – Road Hierarchy (Wide View) (Source: Tairawhiti Maps)

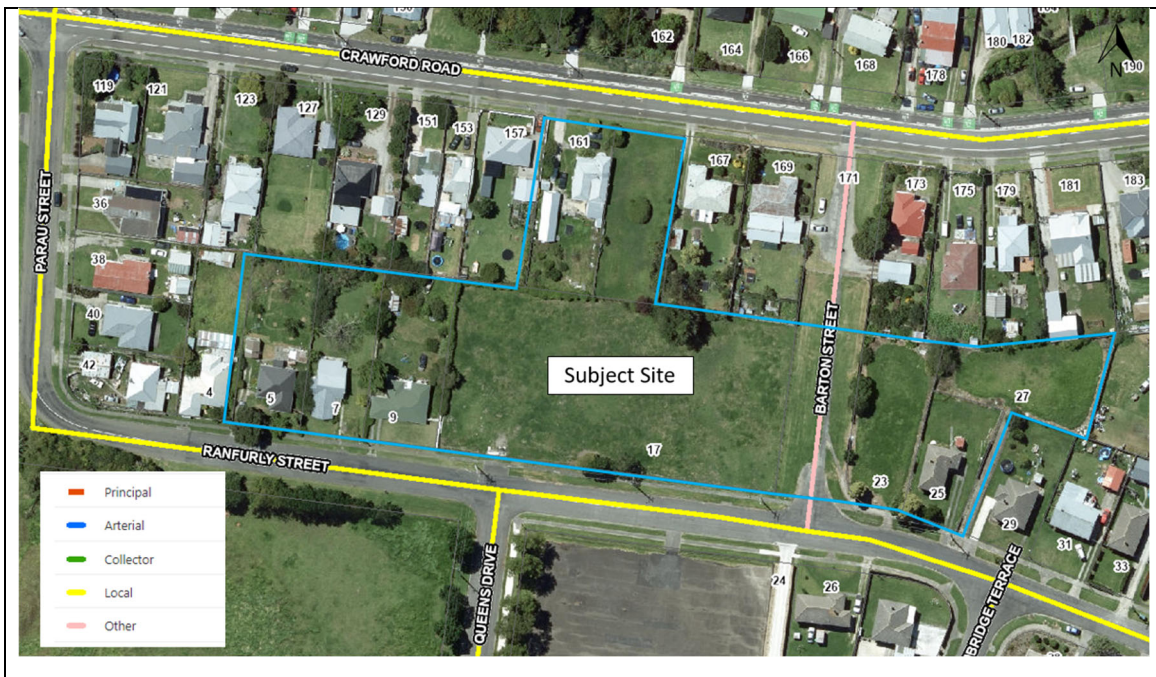


Figure 6 – Road Hierarchy (Close View) (Source: Tairawhiti Maps)

4.2 Crawford Road

Crawford Road has a legal width of 20m. It has a sealed width of approximately 12m, made up of two 3.5m wide traffic lanes, a sealed shoulder on the southern (site) side, and a separated two-way

cycleway on the northern side. The cycle way switches to the southern side of road at the eastern end of Crawford Road, near Wainui Road.

The carriageway is marked with a painted centreline and solid edge lines. Where parking is permitted, it is unrestricted. The posted speed limit is 50km/h.

Crawford Road has a footpath on one side of the road. This is on the northern side, between Hirini Street and Parau Street, and then switches to the southern side beyond that. There is an off-road path connection between the northern side of Crawford Road and the southern end of Dickson Street. A view of the existing form of Crawford Road is shown as Figure 7.



Figure 7 – Crawford Road, viewed looking east

4.3 Ranfurly Street

Ranfurly Street has a legal width of 20m and sealed width of approximately 9m. It provides one traffic lane in each direction and has minimal line marking, provided at intersections and on curves.

Footpaths are provided on both sides of the road except for a short section to the west of Queens Drive, on the southern side in front of Kaiti Hill. The posted speed limit is 50km/h.

4.4 Barton Street

Barton Street is a 20m wide Neighbourhood Reserve that connects from the southern side of Crawford Road to the northern side of Ranfurly Street. It is formed as a T-intersection where it meets Ranfurly Street and reduces immediately to become a pedestrian/cycle path only. There is a fence located approximately midway between Crawford Street and Ranfurly Street that prevents through movement by vehicles.

At its northern end, Barton Street is formed as a vehicle crossing to Crawford Road. This crossing is used as a driveway connecting to the residential properties at 169 and 173 Crawford Road.

Aerial views of Barton Street are shown as Figure 8.



Figure 8 – Barton Street Northern (Left) and Southern (Right) Ends. Source: Tairawhiti Maps

4.5 Public Transport Network

The 2A (City-Kaiti-Tamarau-City) service runs an anti-clockwise loop from Bright Street in the CBD through Kaiti and Outer Kaiti and back to the CBD. There are nine services daily on weekdays and none at the weekend or on public holidays. The route and stops are shown as Figure 9.

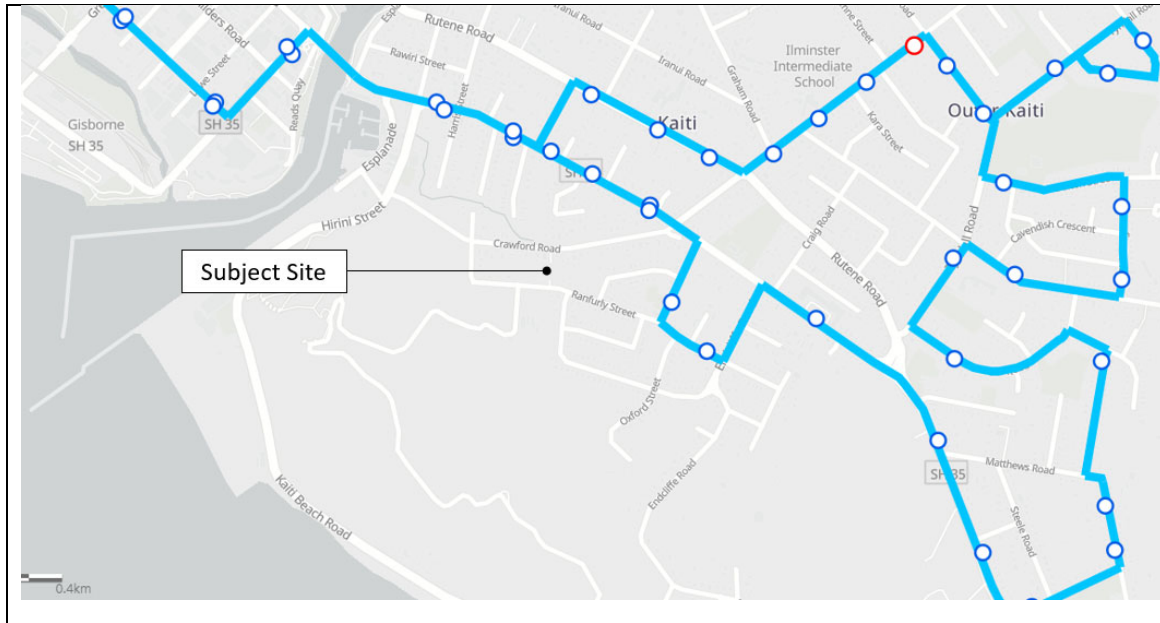


Figure 9 – 2A Bus Route Map (Source: GDC)

The nearest stop for the outbound service is located on London Street, some 350m east of the kura (a walk of 5 minutes). This is serviced once in the window before school (7:54am) and once in the window afternoon school (3:54pm), based on the current timetable.

The nearest stop for the inbound service is on Wainui Road, west of Dickson Street. This is located some 460m north of the kura, which is a walk of approximately 6 minutes via the Dickson Street walkway. It is also currently serviced once in the period before school (8:23am) and once in the period after school (4:34pm).

GDC also operates a fleet of Waka Kura buses which generally link students in the east of Gisborne to the city’s high schools which are mostly located in the east.

4.6 Walking and Cycling Network

Waka Kotahi’s Urban Cycleways Programme (UCP) has funded various improvements to cycle routes in Gisborne. The stated aims of the project¹ were to:

- Deliver safer and more connected facilities for people cycling to the Gisborne CBD, separating users from heavy commercial vehicles along the main corridor into town; and
- Encourage more students and residents to cycle to school, education and work, and for recreational and short utility trips.

As shown on Figure 10 below, these routes include the connection between Wainui and the CBD, along SH35, and a route along Crawford Road and Hirini Street.

¹ Gisborne Urban Cycleways Programme | Waka Kotahi NZ Transport Agency (nzta.govt.nz)



Figure 10 – Gisborne Urban Cycleways (Source: Waka Kotahi)

The cycleway along Crawford Road is mostly on-road, switching to off road on the northern side of Crawford Road as it approaches Hirini Street. A crossing is provided across Hirini Street to the north of the intersection, with asphalt road humps provided to the north and south, to slow vehicles on approach to the crossing.

There is an established footpath network in the area with paths on at least one side of each road. Off-road connections such as the Dickson Street accessway are also available to provide direct walking routes between the site and the surrounding network.

5. TRAFFIC VOLUMES

Traffic volumes on roads surrounding the site (sourced from the Mobileroad website and Waka Kotahi) are summarised below.

■ Wainui Road (SH35), south of Harris Street	20,036 vehicles per day (vpd)
■ Crawford Road (east of Hirini Street)	2,182 vpd
■ Crawford Road (west of Wainui Road)	2,450 vpd
■ Parau Street	880 vpd
■ Ranfurly Street (east of Parau Street)	1,200 vpd
■ Ranfurly Street (west of London Street)	1,050 vpd
■ London Street	1,450 vpd

Wainui Road (SH35) is the primary transport corridor through the area, carrying some 20,000 vpd (Waka Kotahi, 2020). Volumes on the local roads surrounding the site are all within the respective carrying capacities of these roads.

6. ROAD SAFETY

The Waka Kotahi Crash Analysis System (CAS) was used to review the road safety history of the area surrounding the proposed kura. The study area included the block generally bounded by Crawford Road, London Street, Ranfurly Street and Parau Road. The search reviewed safety performance for the five-year period 2017 to 2021 inclusive, as well as any available data from 2022.

A total of 21 crashes were reported. Their locations are shown on Figure 11 below. Eight crashes resulted in minor injury and the remaining 13 resulted in no injury.



Figure 11 – Reported Crashes 2017-2022

The crash types, locations and contributing factors are assessed further in Table 1.

Table 1 – Crash Analysis

Location	Crashes	Features
Wainui Road/London Street Intersection	3 Minor 1 Non-injury	Cyclist struck by car merging, driver failed to give way. Rear end, failure to notice vehicle slowing. Loss of control (2), alcohol and evading enforcement
Wainui Road/Crawford Road/De Latour Road Intersection	4 Minor 5 Non-injury	Struck another vehicle while manoeuvring, road rage. Hit by oncoming (2), failure to give way turning (4), new driver, conflict with major road traffic (2), merging.
London Street	1 Minor 2 Non-injury	Rear end, failed to notice queue. Conflict with oncoming vehicle, turned suddenly Hit from right side, failure to give way at intersection.
Crawford Road	1 Non-injury	Loss of control and hit parked vehicle, distraction.
Ranfurly Street	4 Non-injury	Overtaking, misunderstood intent of the other driver. Hit parked car, too far left.

Location	Crashes	Features
		Side swipe, failed to notice vehicle in front turning. Loss of control, excessive speed.

Thirteen of the 21 crashes (including seven of the eight injury crashes) occurred on Wainui Road. This crash rate (approximately 1.5 injury crashes per year) and the range of crash types are reflective of busy urban highway environment.

On the local roads surrounding the proposed kura, the causes of the seven crashes were varied, with the only repeated crash type being conflict with parked cars.

7. FUTURE TRANSPORT ENVIRONMENT

7.1 Regional Land Transport Plan

Te Tairāwhiti Regional Land Transport Plan (RLTP) 2021-2031 sets out the current state of the transport network, the challenges it faces, and the priorities for future investment. It is jointly prepared by GDC and Waka Kotahi.

The RLTP recognises population growth, COVID-19, increasing freight demands, climate resilience and financial constraints as challenges facing the Gisborne region's transport system. The RLTP is structured to invest in safety, resilience, access, economic performance, and environmental outcomes.

In the vicinity of the kura site, the RLTP includes \$5.15M of funding across the years 2021/22 to 2024/25 for a State Highway Improvement project at the Wainui Road (SH35)/Hirini Street intersection.

This project is ranked fourth in terms of regional importance (RLTP Table 3), following the Taruheru River and Makaraka Cycle way projects (first equal), a region-wide walking and cycling network plan (second), and improvements to SH2 through the Waioeka Gorge (third).

The project was not allocated funding in the National Land Transport Programme (NLTP) 2021-24, announced by Waka Kotahi on 31 August 2021, indicating that its delivery will sit beyond 2024.

In relation to school travel, the RLTP notes a focus on investment in safe cycling and walking infrastructure to enable more active mode travel to school.

7.2 Gisborne District Council Long Term Plan

The Gisborne District Council (GDC) Long Term Plan (LTP) 2021-31 was adopted on 30 June 2021.

It reflects the above RLTP priorities and details planned investment in asset renewals as well as maintenance, minor intersection improvements, parking, public transport infrastructure, and new subdivision roading.

There are no capital works projects specifically identified in the vicinity of the proposed kura.

7.3 Tairawhiti 2050 Spatial Plan

Tairawhiti 2050 is GDC's vision for the region for the next 30 years. It was adopted by GDC in 2020.

Under Outcome 4 (Connected and safe communities), the spatial plan recognises the importance of developing a network of walking and cycle trails to connect land uses including schools. The stated aspiration is that by 2050 40% of Gisborne residents will walk or cycle to work and 80% of children will walk or cycle to school.

8. PROPOSED KURA

The proposed kura will have a masterplan roll of up to 300 students with an initial build roll of 200 students. It is anticipated to be open by approximately 2025-2027. The kura will require an assumed staff of up to 20 people based on a ratio of one staff member (teaching or support staff) to every 15 students.

The kura is likely to include the following facilities on the site:

- Buildings accommodating teaching spaces, administration and maintenance functions, and staff/student amenities;
- Playing fields, hardcourts, and playground structures;
- Vehicle, cycle and pedestrian accessways;
- Parking areas for motorised and non-motorised vehicles;
- Footpaths, landscaping and fencing
- Services infrastructure including three waters, power, heating, telecommunications and outdoor lighting.

9. ACCESS OPPORTUNITIES

9.1 Walking Access

The site is in an established residential area with an existing network of footpaths. The future design of the kura can and should connect to these on both its Crawford Road and Ranfurly Street road frontages.

The kura is likely to have a relationship with the Marae on the opposite side of Ranfurly Street and therefore increase pedestrian crossing demand at this point. It is recommended that a pedestrian facility, of a form to be agreed with GDC, be established across Ranfurly Street to provide a connection between these two activities.

A pedestrian facility across Crawford Road would also be beneficial as it connects the kura to existing walking routes north (via the Dickson Street accessway), east towards Wainui Road, and west towards Hirini Street. It would also assist cyclists, as noted in the next section.

The appropriate location for this crossing will depend on the future design of the kura and what use (if any) is made of the Barton Street reserve area as a walking/cycling access route.

The recommended connections are shown as Figure 12 below. The exact location of each facility (one on each road) and the design of any associated civil works including changes to paths, signs, markings and parking arrangements on the frontage roads can be dealt with a OPW stage, in consultation with GDC as the road controlling authority.

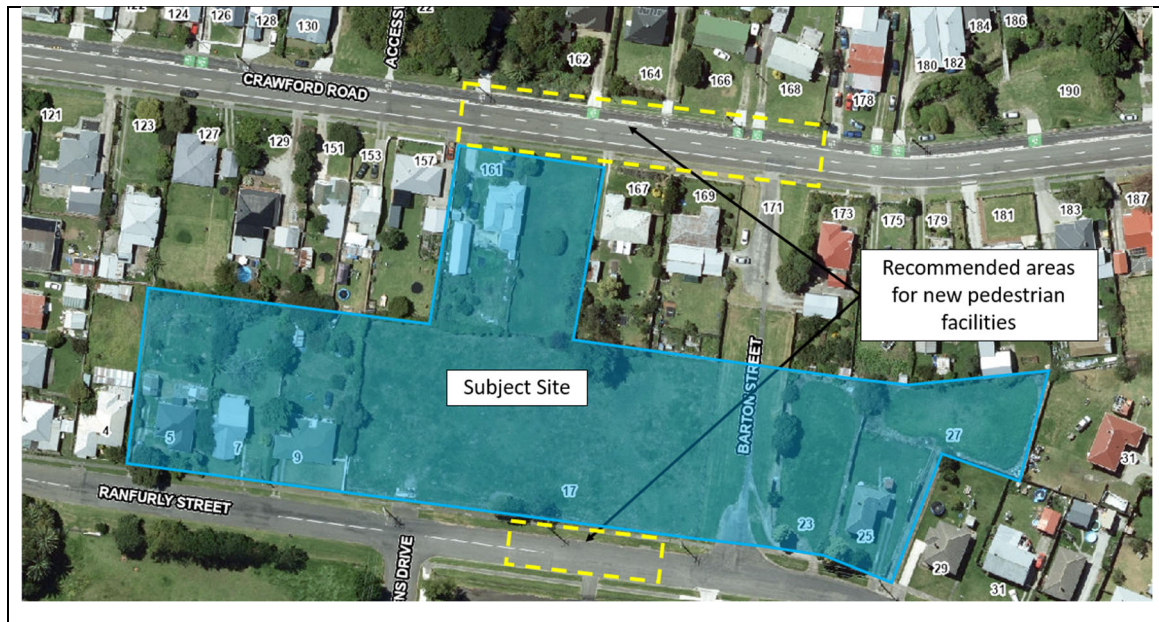


Figure 12 – Recommended Pedestrian Connections

As far as practical, walking access routes should be separated from vehicular access areas.

9.2 Cycling Access

Crawford Road is part of Gisborne’s urban cycleway network. This presents an opportunity for the kura to support and encourage cycling as a means of travel for staff and students.

It is recommended that the future design of the kura prioritises cycle access on the Crawford Road frontage (and/or via Barton Street) and provides a safe and convenient connection between the kura and the Crawford Road cycleway.

As noted above, it is recommended that a pedestrian facility be provided across Crawford Road. This could also be used by staff and students who cycle.

As far as practical, cycling access should be separated from vehicular access areas.

9.3 Public Transport and School Bus Access

By making connections to the existing footpath network on Crawford Road and Ranfurly Street, the kura will have walking connections to the two closest bus stops on Wainui Road and London Street.

The kura may also be serviced by dedicated school vans/buses. The site has adequate scale and adequate access opportunities (demonstrated in the following section) to accommodate the manoeuvring of buses if they are to be accommodated on site as part of the future design.

The site also benefits from an established public transport network in Gisborne including services and stops in the local area.

9.4 Vehicle Access

The design of the kura including its vehicle access and parking arrangements for all modes of transport will be undertaken at a later stage and confirmed through an Outline Plan of Works (OPW) process. This will include consideration of emergency vehicle access (for example fire appliances) and general access for larger vehicles if required.

In terms of feasible arrangements, the site has existing road frontage of approximately 40m to Crawford Road and 215m to Ranfurly Street. Both are classified as local roads within the TRMP road hierarchy which makes them both appropriate to consider for vehicle access to the kura.

In a 50km/h speed environment, which applies to both roads at present, a minimum of 40m of sight distance would be required in both directions² from any future vehicle access. There are multiple locations on both frontages that could comply with this requirement.

New vehicle crossings are also required to maintain separation of at least 20m from the centreline of intersections³. This creates some zones to be avoided on Ranfurly Street (as indicated on Figure 14 below) but leaves ample opportunities elsewhere.



Figure 14 – Access Restrictions due to Intersection Separation Requirements

It is noted that Figure 14 treats Barton Street/Ranfurly Street as an intersection and indicates an area to avoid around it. As noted earlier, Barton Street carries Neighbourhood Reserve zoning and is

² TRMP C2.1.7 H2(b) Figure C2.4

³ TRMP C2.1.7 I2(a) Figure C2.7

not currently part of the road reserve. There may therefore be some flexibility to explore options in this area, in consultation with GDC.

9.5 Access Summary

Overall, it is evident that the site has ample opportunity to establish vehicle, pedestrian and cycling access(es) that will integrate the kura with the surrounding transport network.

Pedestrian facilities are recommended on Crawford Road and Ranfurly Street to support active mode travel and integrate the kura with the surrounding transport network and land use environment.

Crawford Road is recommended as the primary active mode frontage, to take advantage of the developing cycling network within in Gisborne.

Various options are available to establish one or more vehicle accesses than can comply with the relevant TRMP rules.

10. TRIP GENERATION

10.1 Existing Zoning

As can be seen on Figure 3 and Figure 4 earlier in this report, the NOR area encompasses nine properties (plus part of Barton Street) and has a total land area of some 1.4ha. It is currently occupied by five dwellings, with some lots being vacant.

In the General Residential Zone, minimum lot size is 400m² per unit⁴. Ignoring the land within Barton Street, and assuming 75% of the remaining land is developable (deducting 25% for the likes of accessways, open space and infrastructure) a yield of some 26 dwellings is a reasonable estimate of what could be achieved through subdivision.

The estimated trip generation associated with these scenarios is shown as Table 2.

Table 2 – Trip Generation with Existing Zoning

Scenario	Dwellings	Trip Generation		
		Daily (vpd)	AM Peak Hour (vph)	PM Peak Hour (vph)
Existing	5	48	6	6
Potential Future Subdivision	26	247	29	29

Use of the land for residential purposes is estimated to generate some 247 vpd including 29 vph during the peak hours of the day.

10.2 Proposed Kura

Potential trip generation arising from the kura has been assessed using a mode split model. The mode splits are based on travel to education and travel to work data for Gisborne District from the

⁴ This can be reduced to 320m² and 250m² in some circumstances, but this has been ignored for the purpose of this analysis.

2018 Census and the typical mode splits by age group given in Waka Kotahi Research Report 453 (RR453)⁵. The Census data is summarised in Appendix 1. The resulting traffic generation rates have also been checked against the primary and secondary school trip rates given in RR453. The assessment is set out in Table 3.

This assessment assumes that 60% of the kura roll will be of primary age and 40% will be of secondary age.

Table 3 – Mode Split and Trip Generation Assessment

Travel Mode	% of Primary Students	% of Secondary Students	Total Students	Private Car Trips			
				Cars	AM Peak Hour	PM Peak Hour	Daily
Walk	20%	20%	60	-	-	-	-
Bike or other active ⁶	10%	15%	36	-	-	-	-
School or public bus	25%	30%	81	-	-	-	-
Car Passenger	45%	33%	121	86 ⁷	172	172	344
Car Driver	-	2%	2	2	2	2	4
Student Total	100%	100%	300	88	174	174	348
Staff							
Travel Mode	Staff		Private Car Trips				
	%	People	Cars	AM Peak Hour	PM Peak Hour	Daily	
Car Driver	82%	16	16 ⁸	16	16	32	
Car Passenger	8%	2	2 ⁹	4	4	8	
Bus	5%	1	-	-	-	-	
Walk/Cycle	5%	1	-	-	-	-	
% of staff travel that occurs during the student peak				50%	20%	-	
Staff Total	100%	20	18	10	4	40	
COMBINED TOTAL	-	-	-	184	178	388	
INCREMENTAL TRIPS							
Residential Baseline (from Table 2)				29	29	247	
ADDITIONAL TRIPS (Kura – Residential)				155	149	141	

In total the kura is expected to generate 388 private vehicle movements per day, including 178-184 vph during the before and after school peak hours.

This correlates to rates per pupil of:

- 1.3 vpd/pupil over the day; and
- 0.6 vph/pupil during the peak hours of the day.

⁵ Trips and parking related to land use, 2011

⁶ Includes all other active boards such as scooters and skateboards

⁷ Assumes average occupancy of 1.4 students/car

⁸ Assumed occupancy of 1 staff member per vehicle

⁹ Assumed occupancy of 1 staff member (as a passenger) per vehicle

These rates sit just above 85th percentile rates published in RR453 (using a weighted average for primary and secondary schools), showing that the mode split model is appropriate in terms of private vehicle trip generation.

In terms of incremental effects, the change in zoning from residential to the kura would result in a net increase of 141-149 vph during the peak hours of the day and 155 vpd over the course of the day. The hourly and daily changes are similar because education facilities typically generate traffic in two short peaks, with limited movements through the rest of the day. Residential activities are more dispersed, with the peak making up only around 10% of the daily total.

An estimated 97 people are expected to walk, cycle or use another active mode to travel to the kura. An estimated 82 people are assessed as travelling by school or public bus (164 person-trips on buses over the day).

Public transport and active modes should be the priority travel modes for staff and students at the kura. A Travel Plan is recommended as a Designation condition, to ensure that measures to support and encourage these modes are considered in the design and operation of the kura.

11. TRANSPORT NETWORK EFFECTS

A kura differs from most other urban land use activities in that it is developed to meet defined or emerging demands rather than to generate new demands. A new kura therefore does not generate new demand for education or new education trips. It simply creates an opportunity for that demand to be met in a different location, usually a more convenient one for an established or growing population.

The kura will draw additional traffic movements into its local area and the following assessment focusses on what those volume changes are likely to be. Conservatively, the assessment has not made any reductions for pass by or diverted trips (where a trip to the kura is made as part of another trip, for example travel to the parent/guardian's workplace).

The incremental change in traffic movements, set out above at Table 3, has been distributed to the surrounding network using the following assumed distribution:

- 20% to/from the north-west (Gisborne Central and west);
- 40% to/from the north and north east (Inner/Outer Kaiti);
- 20% to/from the south-east (Wainui and eastern suburbs); and
- 20% to/from local area to the south.

Assigning these trips to the most likely routes (and splitting them if there are similar routes) gives the following expected changes in daily volumes. It has been assumed for the purpose of this analysis that both road frontages would be available for access and drivers will use their shortest route option.

Table 4 – Daily Volume Impacts

Road Section	Existing Volume (vpd)	Volume Generated by Kura (vpd)	New Volume (vpd)	% Change
Crawford Road, east of Hirini Street	2,182	28	2,210	1%
Crawford Road, west of Wainui Road	2,450	32	2,482	1%
Parau Street	880	14	894	2%
Ranfurly Street	1,200	21	1,221	2%
London Street	1,450	32	1,482	2%

The table illustrates that the kura is expected to add up to 32 vpd to any one section of road. The levels of change are small, and the overall volumes remain within a reasonable range for local roads. The following table presents the peak hour analysis.

Table 5 – Peak Hour Volume Impacts

Road Section	Existing Volume (vph) ¹⁰	Volume Generated by Kura (vph) ¹¹	New Volume (vph)	% Change
Crawford Road, east of Hirini Street	218	31	249	14%
Crawford Road, west of Wainui Road	245	36	281	15%
Parau Street	88	16	104	18%
Ranfurly Street	120	23	143	19%
London Street	145	36	181	25%

The table illustrates that the kura is expected to add up to 36 vph to any one section of road¹². The levels of change are higher in percentage terms, but the volumes all remain below 300 vph (two-way). The typical carrying capacity of an urban traffic lane is upward of 900 vph, each way. On this basis, peak hour volumes of 104 to 281 vph represent low volume to capacity ratios.

The distribution of traffic movements to the surrounding network will be influenced by both the catchment area of the kura and its access arrangements. Even with some variation, volumes of this level do not indicate a need to increase the capacity of road network surrounding the site.

Strategically, this aligns with the RTLP, GDC LTP and the Tairāwhiti Spatial Plan, which all signal investment in walking, cycling and public transport as priority modes for children travelling to education.

It is recommended that the Designation includes a requirement for a Travel Plan. The aim of Travel Plan is to reduce reliance on private car travel, increase the number of staff and students who travel using active modes or public transport, and improve safety and environment conditions around the school. Many kura and schools in Gisborne are already involved with travel planning initiatives such as Enviroschools.

It is recommended that the Travel Plan is required to be submitted (in part) with the design of the kura. This will ensure that physical infrastructure designs prioritise walking, cycling and public

¹⁰ Estimated as 10% of the daily total

¹¹ The AM and PM analyses have slightly different volumes and directionality. This table uses the highest link volume from either the AM or the PM.

¹² Peak hour changes are higher than daily changes in some cases as the residential baseline scenario generates comparatively more traffic over the day, making the daily increment less pronounced.

transport access. Operational initiatives can then be developed and implemented by the kura at a later stage.

12. PARKING, LOADING AND END OF TRIP FACILITIES

12.1 Cycle Parking

Cycle parking should be provided for staff and students at a minimum of:

- 1 cycle space/5 students with space available to increase this if more demand is evident; and
- 1 cycle space/10 FTE staff.

Cycle parking should be designed to be secure, protected from the weather and conveniently located relative to walking and cycling routes.

End-of-trip facilities such as showers, lockers and changing facilities can increase the attractiveness of cycling and other active modes. Facilities such as these can be considered as part of the design process for the kura, and in the Travel Plan that is recommended as a Designation condition.

12.2 School Bus/Van Parking

Supply of any on-site bus or van parking can be appropriately considered as part of the OPW. The need for this (and its quantity and design) will depend on whether the kura is to be served by group transport of any form, what size those vehicles are, what their timing is and whether they remain on site during the day. It will also depend on what public services are available at the time the kura becomes operational.

12.3 Loading Spaces and Large Vehicle Access

Kura do not typically require loading spaces for reasons including that any loading and servicing visits they do receive can typically be arranged to occur outside of student hours. At these times, the likes of staff or bus parking areas can usually be used.

Any specific loading and servicing requirements can be considered in the OPW.

12.4 Car Parking

Although designated sites are not bound by TRMP parking rules, the minimum car parking rates within the TRMP would normally provide a useful guide for appropriate supply.

The rate for primary schools (prior to 23 November 2021) was two spaces per classroom equivalent. Assuming an average of 20 students per classroom at the kura, the requirement would have been 15 spaces.

Since Plan Change 5 was approved (effective 23 November 2021) minimum car parking standards have been removed from the TRMP, as directed by the National Policy Statement on Urban Development (NPUDES).

The rationale behind the NPUDS is that mandating minimum supply of on-site parking can lead to land use patterns that are car centric and discourage active and sustainable travel choices. They can also lead to the design of sites allocating prime space and frontage to carparks, which prioritises and sometimes cross-subsidises travel by car at the expense of other modes.

Parking supply at the kura should be confirmed as part of the OPW process and should be a key part of the Travel Plan that is submitted at that time.

The needs of staff, visitors/contractors, drop off/pick up activities and people with limited mobility can all be considered at this time.

13. ROAD SAFETY EFFECTS

The road safety history in the area includes mixed crash types and contributing factors. It would be appropriate to consider 30km/h school speed zones on roads around the kura to promote safe behaviour and reduce the likelihood and severity of crashes. This will require engagement with (and support of) GDC at the time the kura is designed.

Parking controls and delineation (markings) may be required to integrate the kura with the surrounding network. The need for these and their design will depend on the site layout and the form of pedestrian facilities on the frontage roads. This can be appropriately considered at a later stage, as part of the OPW process.

14. MITIGATION OF EFFECTS

The transportation effects of the proposed kura can be mitigated through the development of the following works:

- A pedestrian facility, of a form to be agreed with Gisborne District Council (GDC), on Ranfurly Street linking the kura with the Marae.
- A pedestrian facility, of a form to be agreed with GDC, on Crawford Road linking the kura with the Crawford Road cycleway and the Dickson Street accessway.
- Consultation with GDC regarding establishment of 30km/h school speed zones around the kura.
- Provision of one or more vehicle accesses to the kura with parking suitable to meet staff, bus/van, and drop off and pick up needs.
- Provision of cycle parking for staff and students.

Discussions as to how these works will be designed and delivered will be undertaken during the Outline Plan of Works stage. For the purposes of this report and the NOR, it is considered that each of these are achievable, and therefore the site is suitable to accommodate the kura.

Walking, cycling and bus transport should be the priority transport modes for the kura. To support this, it is recommended that a Travel Plan be required as part of the OPW.

15. CONCLUSIONS

The MoE has identified existing and growing demand for a new kura in Gisborne. Approximately 1.4ha of land is proposed to be designated between Crawford Road and Ranfurly Street in Kaiti to accommodate an ultimate roll of 300 students.

This report considered the appropriateness of the NOR from a transportation perspective. The following conclusions were reached:

- The site has multiple frontages to the existing road network and ample opportunity to establish vehicle, cycle and pedestrian access that will integrate it with the surrounding network.
- The design of the kura and the specifics of its access and parking arrangements for all modes of transport, and the details of its street interfaces can be developed collaboratively with GDC through the Outline Plan of Works process.
- Compared to the existing land use zoning of General Residential, the kura is estimated to generate approximately 140-155 additional vehicle movements at peak times of the day and over the course of the day.
- These will be distributed to multiple approach and departure routes. Assessment of existing and expected traffic volumes indicates that capacity improvements are not required on the local network surrounding the site.

Overall, it is concluded that the site can be developed in such a way that adverse effects can be avoided, remedied or mitigated. The site is therefore considered suitable for the proposed kura and is not likely to lead to adverse effects. The Notice of Requirement is therefore appropriate from a traffic and transport perspective.

Appendix 1 – Census Travel Data

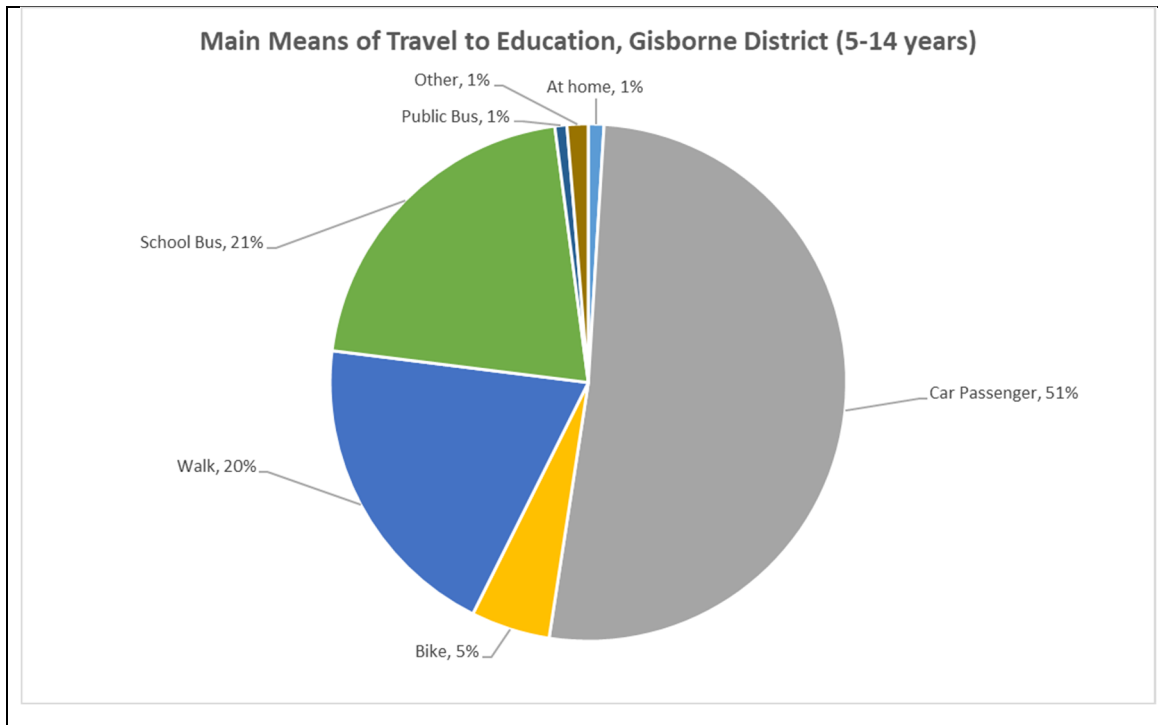


Figure A1 – Census Travel to Education Data, Gisborne District 2018

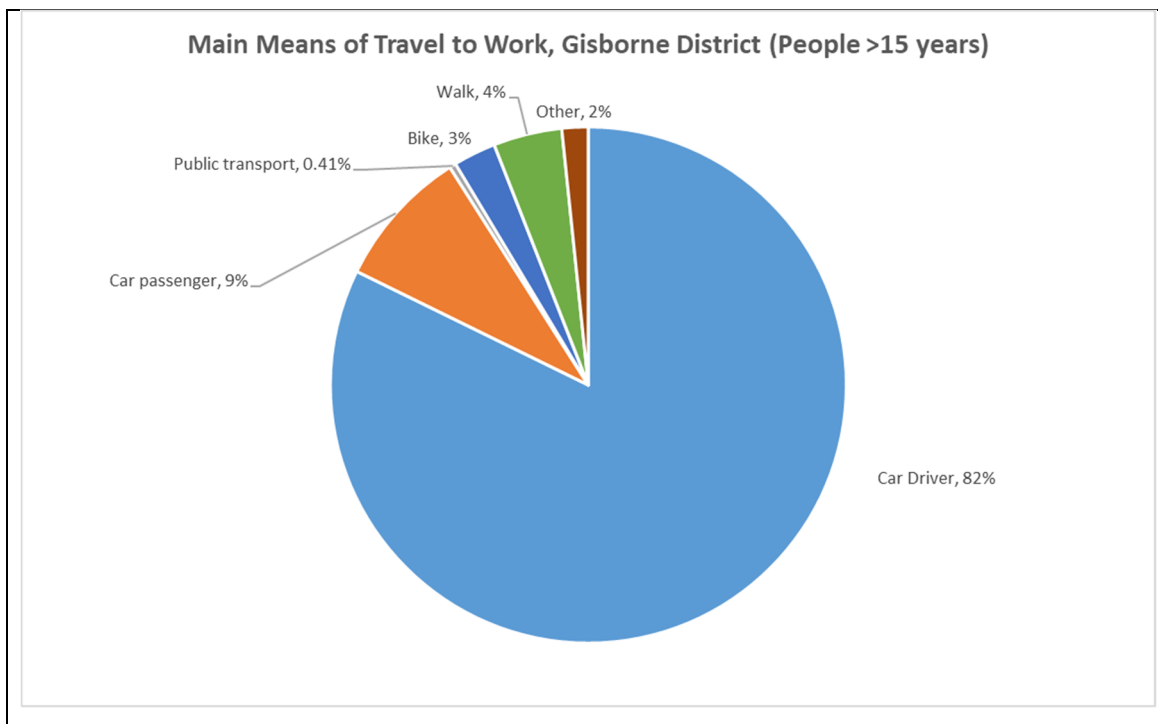


Figure A2 – Census Travel to Education Data, Gisborne District 2018