Integrated Transport Assessment

For
Plan Change 81 (Rezoning - Updates to the Tasman Resource Management Plan (TRMP))

Māpua

Date: May 2026

Prepared For: Policy Team, Plan Change 81

Version control			
Version	**Description**	**By**	**Date**
1	Draft for Review	Bill Rice	
2	Review	Rhys Palmer	16/12/2025
3	Final	Bill Rice	15/06/2026

1 Executive summary

Purpose

Tasman District Council is progressing **Plan Change 81 (PC81)** to the Tasman Resource Management Plan (TRMP), rezoning land in Māpua identified in the Nelson Tasman Future Development Strategy (FDS) 2022–2052. This Integrated Transport Assessment evaluates the transport implications of these changes and recommends mitigation measures.

Key Proposed Changes

- Rezoning of greenfield and brownfield sites for **Medium Density Residential**, **Standard Residential**, **Commercial**, and **Light Industrial** uses.
- Estimated residential yield: **~1300 dwellings** across multiple sites (e.g., Higgs Road, Seaton Valley Road, Stafford Drive).

Transport Environment

- **Active Transport:** Compact urban form supports walking and cycling, but undulating topography and limited footpaths reduce accessibility. Upgrades proposed in Tasman's Walking and Cycling Strategy.
- **Public Transport:** eBus service introduced in 2023 offers limited connectivity (4 daily trips each way), currently used by only 2–3% of commuters.
- **Road Network:** Māpua Drive and Aranui Road are principal roads; current traffic volumes up to **5,930 vehicles/day**.
- **Crash History:** SH60/Māpua Drive intersection has high crash risk (1 fatal, 2 serious injury crashes in 5 years). Other locations have few crashes.

Projected Transport Effects

- **Traffic Growth:** Māpua Drive volumes expected to more than **double** from ~6,000 to ~13,500 vehicles/day.
- **Parking:** On street parking on both the Māpua Drive and the wharf ends of Aranui Road is reaching capacity at peak times, but there is significant other capacity near the wharf.
- **Safety:** Increased risk for pedestrians and cyclists as volumes grow; separated cycle facilities recommended.
- **Emissions:** Likely to increase due to reliance on private vehicles for trips outside Māpua.

Recommendations

1. **Cycle Infrastructure:** Include funding for Māpua cycle facilities in the 2027–37 LTP.
2. **Intersection Safety:** Collaborate with NZTA Waka Kotahi to improve SH60/Māpua Drive intersection (options include speed reduction or roundabout).
3. **Parking Strategy:** Develop a plan for new commercial developments, particularly near the wharf, and overflow parking during peak periods.

Contents

2 Introduction

2.1 Purpose of this Transport Assessment

Tasman District Council (TDC) is progressing Plan Change 81 (PC81) to the Tasman Resource Management Plan (TRMP) to rezone land identified in the Nelson Tasman Future Development Strategy (FDS) 2022–2052.

Separate Integrated Transport Assessments (ITAs) are being prepared for each affected township: Māpua, Brightwater, Richmond, Māpua, Motueka, and Tākaka.

This assessment focuses on Māpua. It evaluates the proposed rezoning, existing transport conditions, potential effects, and identifies mitigation measures if the plan change proceeds.

2.2 Summary of Changes

The major proposed zone changes in Māpua include the following:

- Medium Density Residential zone in greenfields land bound by Higgs Road, Māpua Drive, and Aranui Drive
- Medium Density Residential zone in existing Residential zone bound by Higgs Road and Aranui Drive
- Medium Density Residential zone in greenfields land either side of Seaton Valley Road bound by Māpua Drive, Stafford Drive, and existing rural residential and residential land.

These are shown in Figure 1

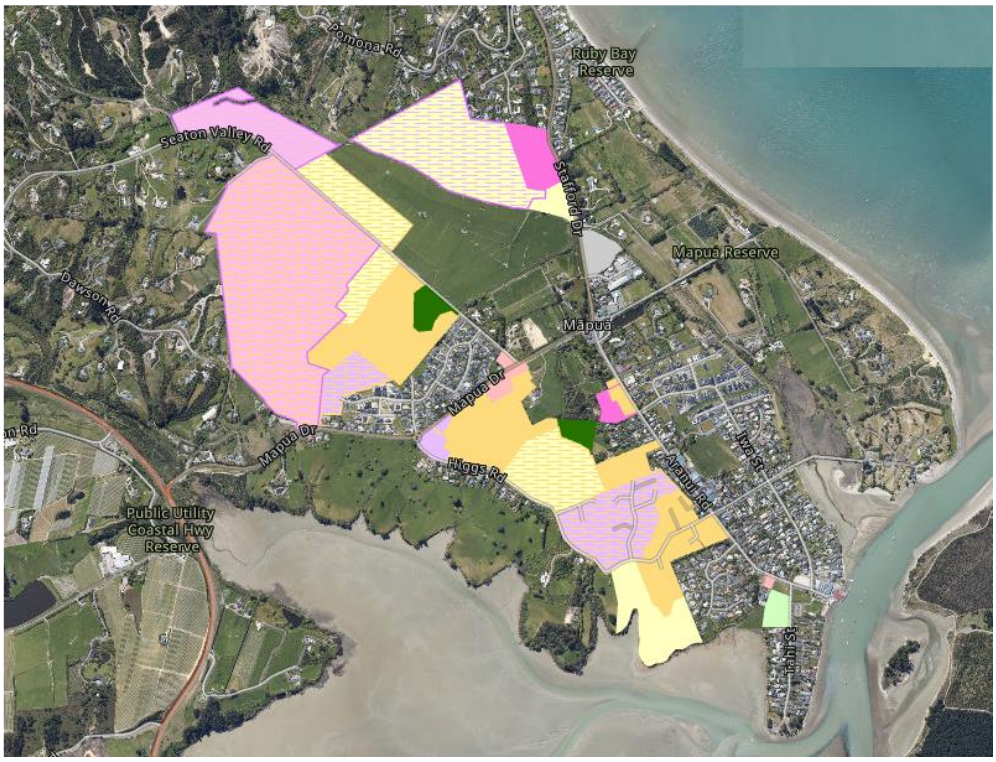

Figure 1 Map of proposed Māpua zone changes

3 Existing Transport Environment

3.1 Active Transport Network

Māpua has a compact urban form which encourages walking and cycling as viable transport options for local trips. This is offset a little by Māpua's topography, much of which is undulating resulting in moderate road gradients. However, Māpua's small size means that many employment, education. recreation, and retail opportunities are not currently available within the town. Residents therefore travel to larger centres, such as Richmond or Motueka for these opportunities. These centres are within comfortable driving distance, but not walking or cycling.

Most of the existing roads adjacent to development or intensification areas have one footpath. Exceptions include Tahi Street adjacent to the proposed new commercial zone, Stafford Drive , north of Warren Place, and Seaton Valley Road north west of the existing residential area, none of which have a footpath. A small number of streets such as Aranui Road, and Iwa Street have footpaths on both sides.

On Road cycle lanes have recently been installed on Aranui Road

The Tasman Great Taste Trail takes the following route through Māpua:

- Ferry Ramp at the wharf area
- Aranui Road to Iwa Street (on road)
- Māpua Domain to Aranui Road (off road)
- Aranui Road to Māpua School (on road cycle lane)
- Māpua School to beachfront (shared path)

This route is shown on Figure 2

Figure 2 Great Taste Trail Route

A shared path and on-road cycle lane have recently been constructed on Aranui Road from Stafford Drive to the Wharf area. There are also shared paths on both Māpua Drive and Seaton Valley Road. The Māpua Drive path runs on a section of board walk south west of the shops opposite Seaton Valley Road. The Seaton Valley Road path is a narrow unsealed path adjacent to the road carriageway

Tasman's 2022 Walking and Cycling Strategy proposes further upgrades (shown in Figure 3), improving both safety and connectivity for pedestrians and cyclists. Following changes to the Setting of Speed Limits Rule in 2024 many of the 30km/h speed limits proposed in the Strategy are unlikely to be implemented.

Figure 3 Proposed Walking and Cycling Network (Walking and Cycling Strategy)

3.2 Public Transport

The Nelson Tasman eBus service commenced in August 2023, and introduced a public bus service through Māpua to Motueka. There are currently four daily services in each direction between Māpua and Richmond, extending to Nelson as express services. The route through Māpua is shown in Figure 4.

The 2023 addition of the eBus service to Māpua has provided an alternative transport choice to and from Richmond and Nelson. As this service only operates six daily trips in each direction per weekday, this choice is limited. It is therefore assumed that this service has a small impact on vehicle trip numbers.

A proposed frequency increase on this service, including weekend services, is dependent on funding availability.

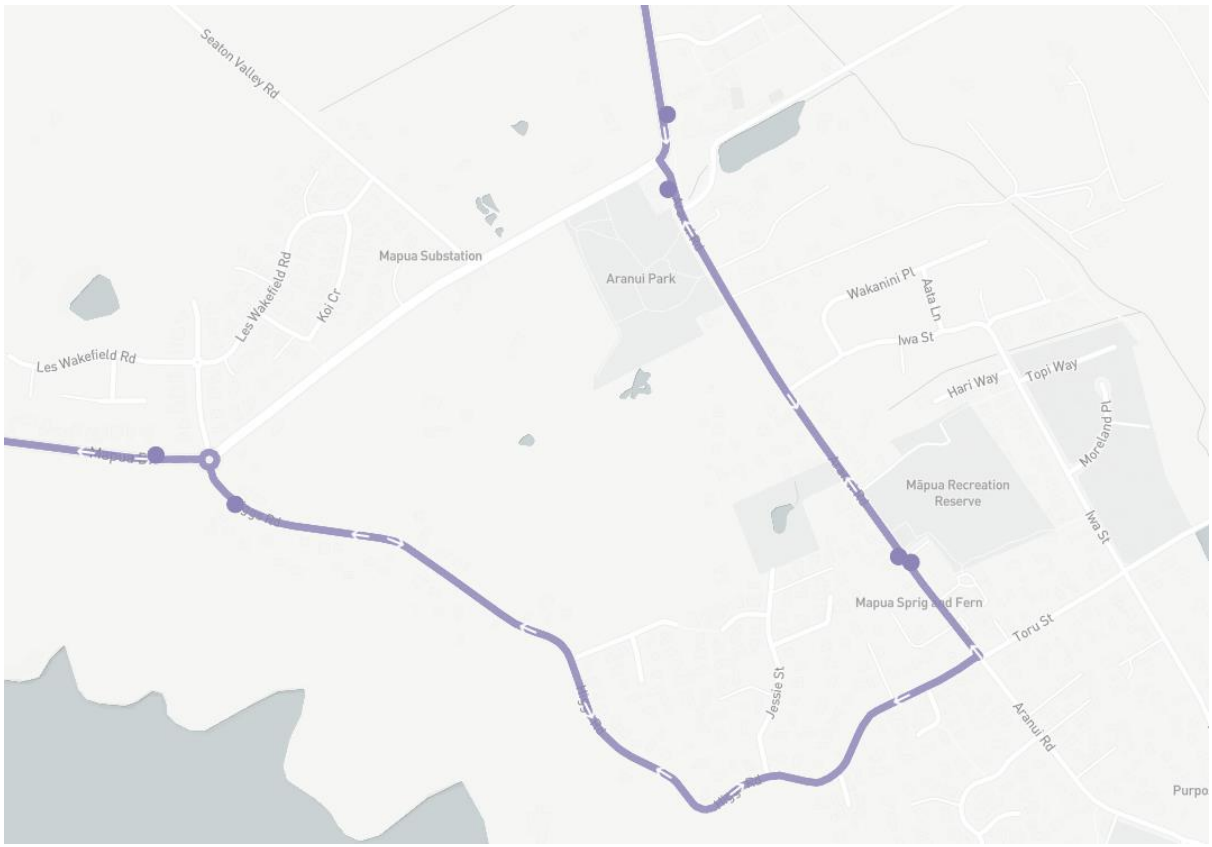

Figure 4 eBus Route Through Māpua

The 2023 census was held in March 2023, before the eBus service commenced through Māpua. Bus boardings in March 2024 indicated that 2 to 3% of those who travelled to work from Māpua caught the bus.

The Ministry of Education operates bus services to schools in Richmond. The 2023 census recorded 31% of students travelling by school bus.

3.3 Road Hierarchy

The road hierarchy in and around Māpua is shown in Figure 15. State Highway 60 between Richmond and Motueka runs to the west of Māpua. Key roads in the hierarchy, and the daily traffic volumes (vehicles per day (vpd)) they carry are shown in Table 1.

Road Name	Daily Traffic Volume (vpd)
Māpua Drive (Principal Road)	5,930 (west of Higgs Road)
Aranui Road (Principal Road)	4,310 (East of Māpua Drive)
Aranui Road (Collector)	2,380 (South of Higgs Road
Stafford Drive (Collector	4,140 (North of Māpua Drive)

Table 1 Traffic Volumes on key roads in Māpua

Figure 5 Māpua Road Hierarchy

3.4 Crash History

There have been six crashes (one serious injury, one minor injury, and four non injury) recorded in the Mapua urban area in the five years between 2020 and 2024, plus part of 2025. Many crashes (particularly minor crashes) are not reported to police, so are not included in the database.

The serious injury crash involved a vehicle which hit a raised pedestrian crossing at speed, lost control, and collided head on with an oncoming vehicle. The minor injury crash involved a pedestrian who was hit on the Māpua causeway, and two of the non-injury crashes involved vehicles leaving or manoeuvring in a parking area. These crashes are shown in Figure 6.

Figure 6 Urban Crashes

In addition there have been a total of eight crashes at the Māpua Drive, SH60 intersection in the same period. These crashes have included one fatal, two serious injury, three minor injury, and two non-injury crashes.

Four of the crashes involved vehicles turning right into Māpua Drive from SH60, two involved turning right out, and one each turning left in and out of Māpua Drive.

Using the methodology in NZTA's High Risk Intersection Guide this intersection is assessed as having high collective and personal risks.

4 Proposed Zone Changes

4.1 12.5 T-237a-g – Higgs Road - greenfield land

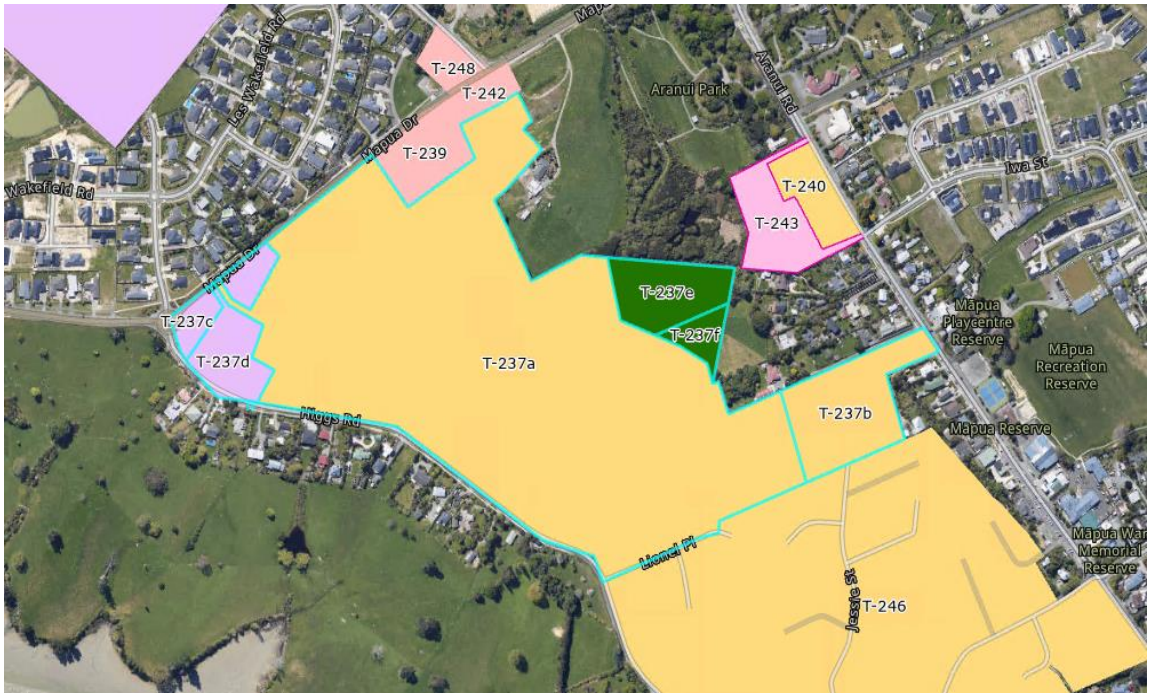

Figure 7 T-237a-g

12.5.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-237a-g	Rural 1 deferred Residential Zone	Medium Density Residential (T-237a/b), Standard Residential (T-237c/d), Open Space (T-237-e/f), Rural 1 deferred Medium Density Residential (T-237g)	Part - 29 Jessie Street 86 & 120 Higgs Road, Part 166 Māpua Drive **Estimated Yield:**320

4.1 12.6 T-238a-c – 33 and 35 Higgs Road

Figure 8 T-237a-c

12.6.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-238a-c	Rural 1 deferred Residential Zone	Medium Density Residential (T-238a/b) and Rural 1 (T-238c)	33 and 35 Higgs Road **Estimated Yield:** 28 Outline Spatial Plan

4.1 12.7T-239 - **Part 120 Higgs Road**

Figure 9 T-239

12.7.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-239	Rural 1 deferred Residential Zone	Commercial	Part 120 Higgs Road Outline Spatial Plan

4.2 12.12 T-244 – 18 and 34 Stafford Drive

Figure 10 T-244

12.12.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-244	Rural 1 deferred Light Industrial	Light Industrial	18 and 34 Stafford Drive

4.3 12.13 T-245 – 29 and 53 Seaton Valley Road

Figure 11 T-245

12.13.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-245	Rural 1 deferred Residential Zone	Residential	29 and 53 Seaton Valley Road **Estimated Yield: 96**(RM240148, consented lots)

4.4 12.14 T-246 – Higgs Road Brownfield Land

Figure 12 T-246

12.14.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-246	Residential Zone	Medium Density Residential Zone	Higgs Road Brownfield Land **Estimated Yield: 50 (**over 30 years)

4.5 12.15 T-247 – 57, 59 and 69 Stafford Drive

Figure 13 T-247

12.15.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-247	Rural 1 deferred Rural Residential (serviced)	Rural Residential (serviced)	57, 59 and 69 Stafford Drive **Estimated Yield: NA**

4.6 12.18 T-250 – 59 Seaton Valley Road

Figure 14 T-250

12.18.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-250	Rural 1 deferred Residential	Rural 1 deferred Medium Density Residential	59 Seaton Valley Road **Estimated Yield: 54**

4.7 12.19 T-11a/b - Seaton Valley Greenfield Land

Figure 15 T-11a

Figure 16 T-11b

12.19.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-11a/b	Rural Residential and Rural 1 (part 49 Stafford Drive	Residential (T-11a) and Medium Density Residential (T-11b)	Seaton Valley Greenfield Land - 120, 122, 132, 140, 154, 156, 164, Seaton Valley, Part 49 Stafford Drive **Estimated Yield: 29 (T-11a) + 90 (T-11b)** Outline Spatial Plan

4.8 12.20 T-42a/b– Part 49 Stafford Drive

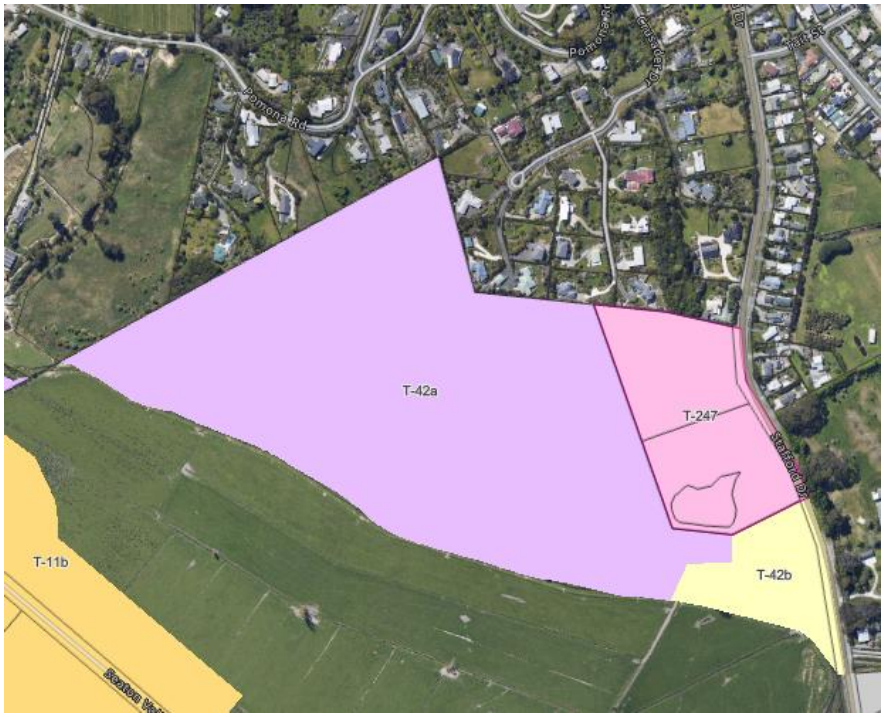

Figure 17 T-42a/b

12.20.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-42a/b	Rural 1 deferred Rural Residential (serviced)	Residential (T-42a) and Rural 1 (T-42b)	Part 49 Stafford Drive **Estimated Yield: 140**

4.9 12.21 T-33 – Seaton Valley

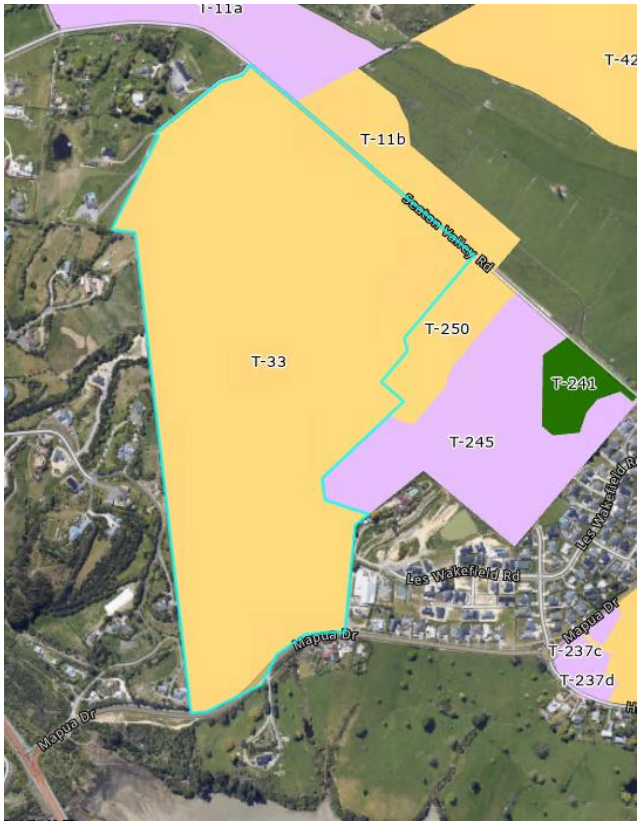

Figure 18 T-33

12.21.1 General description of changes proposed

Site	Current Zone	Proposed Zone	Description
T-33	Rural Residential	Medium Density Residential	69, 71, 75, 97, 107, 109, 113, 125, 129, 131, Seaton Valley **Estimated Yield: 455**

5 Transport Effects

5.1 Compliance with TRMP

PC81 generally complies with the transport provisions of the Tasman Resource Management Plan (TRMP). No specific transport non-compliances have been identified for the Māpua area at this plan change stage, although these may emerge as further details are developed through subsequent stages.

5.2 Trip Generation

5.2.1 Residential

A review of traffic counts at three residential cul-de-sacs in Māpua indicated the following vehicle trip generation rates per household.

Average:	Daily:	6.1 trips per day	Peak Hour:	0.67 trips per hour
85th%ile:	Daily	6.3 trips per day	Peak Hour:	0.72 trips per hour

This compares with the following trip generation rates from a number of residential cul-de-sacs in Richmond and Motueka:

Richmond:

Average:	Daily:	6.7 trips per day	Peak Hour:	0.86 trips per hour
85th%ile:	Daily	8.3 trips per day	Peak Hour:	1.3 trips per hour

Motueka:

Average:	Daily:	5.9 trips per day	Peak Hour:	0.82 trips per hour
85th%ile:	Daily	8.0 trips per day	Peak Hour:	1.1 trips per hour

The 2023 census recorded that 37% of Māpua workers worked from home. This compares with 19% and 18% working from home in Richmond and Motueka respectively.

The proportion of Māpua workers working from home possibly reflects the current demographic in Māpua, which may include a larger proportion of workers in employment which enables working from home. Future development in Māpua, which could include more intensification and affordable housing, may change the current demographic, resulting in a smaller proportion of workers working from home. This is likely to result in a greater proportion of trips between home and work than the current numbers.

The summary below outlines key travel-to-work characteristics for Māpua, with comparison to the larger nearby towns of Richmond and Motueka. This comparison shows that Māpua has distinct commuting and local-employment patterns relative to these larger centres

- Among Māpua residents who travelled to work, 46% worked locally and 74% drove.
- In comparison, 40% of Richmond residents and 51% of Motueka residents who travelled worked in their own town.
- In Richmond, 49% of travelling workers commute to Nelson, meaning 89% work within the Nelson–Richmond urban area.
- Driving rates for commuters were similar in Richmond (71%) and Motueka (70%).
- Including those working from home, 50% of Māpua residents, 69% of Motueka residents, and 33% of Richmond residents worked in their own town—though 73% of Richmond residents worked somewhere within the Nelson–Richmond urban area.

A trip generation rate of 0.8 trips per household in the peak hour has been used. This reflects the possibility that changing demographics in Māpua may reduce the proportion of workers working from home.

5.2.2 Business

Trip Generation rates per 100m^2 **Gross Floor Area** are often used for estimating trip rates for specific developments. These rates are often taken from NZTA's Research Report 453 (RR453)

No specific developments are planned in the business plan change areas at this stage., so no proposed floor areas are available, meaning the rates in RR453 are not applicable for this stage. Trip generation rates per 100m^2 **Site Area** from the Trips Database Bureau (TDB) have been used to assess likely trip generation from these areas.

5.2.2.1 Commercial

The proposed "Commercial" zone on Māpua Drive could include retail or office type businesses. Trip generation rates of 2.5 trips per hour per 100m^2 Site Area in the AM peak and 3.5 trips per hour per 100m^2 Site Area in the PM peak have been used based on trip generation rates from the TDB

5.2.2.2 Light Industrial

Trip generation rates of 0.6 trips per hour per 100m^2 Site Area in the AM peak and 3.5 trips per hour per 100m^2 Site Area in the PM peak have been used based on trip generation rates from the TDB.

5.3 Mode Split

The 2023 census records that 74% of Māpua workers who travelled for work drove, 20% walked or jogged, and 6% cycled.

The 2023 addition of the eBus service to Māpua has provided an alternative transport choice to and from Richmond and Nelson. As this service only operates four daily trips in each direction per weekday, this choice is limited. It is therefore assumed that this service has a small impact on mode choice.

5.4 Trip Distribution

There are three routes between the Seaton Valley area and State Highway 60 to the south (Seaton Valley Road / Māpua Drive, Catherine Road / Māpua Drive, and Seaton Valley Road / Stagecoach Road). The Catherine Road / Māpua Drive route is shorter than the Seaton Valley Road / Māpua Drive by approximately 300m, if the start point is north west of the Catherine Road intersection. This distance reduces if the start point is south east of the Catherine Road intersection. The Catherine Road route is shorter than the Seaton Valley Road / Stagecoach Road route by approximately 2km, depending on the location of the start point on Seaton valley Road.

As well as the shorter length, the presence of the roundabout at the Catherine Road / Māpua Drive / Higgs Road intersection is likely to make the Catherine Road route more attractive than the Seaton Valley Road / Māpua Drive route, especially for southbound traffic, which would turn right at the Seaton Valley Road / Māpua Drive intersection. This is likely to result in a significant increase in traffic on Catherine Road.

Some measures to address this include:

- Traffic calming on Catherine Road to make it less attractive as a through route
- Improvements to Seaton Valley Road including the intersection with Māpua Drive.
- Providing a new Collector road connecting Seaton Valley Road with Māpua Drive west of the existing urban area.

Table 1 shows assessed increases in traffic volumes on key roads in Māpua following development of this Plan Change, assuming traffic calming on Catherine Road, intersection improvements at the Seaton Valley Road, Māpua Drive intersection, and a new Collector Road between Seaton Valley Road and Māpua Drive.

These assessments are based on assumptions outlined in Appendix A.

Street	Daily (vpd)			Hourly additional (vph)
	Existing (vpd)	Additional	Total	
Māpua Drive (east of SH60)	5,900	7,500	13,400	900
Māpua Drive (west of Higgs Road)	5,900	5,200	11,100	760
Aranui Road (south of Māpua Drive)	4,300	1000	4300	120
Aranui Road (south of Higgs Road)	2,400	400	2,800	45
Stafford Drive (north of Māpua Drive)	4,100	2,700	6,800	300
Seaton Valley Road	800	2,100	2,900	250
Catherine Road	450 (estimate)	400	850	45
Higgs Road (south of Māpua Drive	1,650	2,800	3,450	320
New Collector Road (Seaton Valley to Māpua Drive)	0	3,400	3,400	380

Table 2 Estimated Increase in Traffic Volume on Key Roads

5.5 Safety

5.5.1 Pedestrian / Cycle Safety

There has been one (minor injury) pedestrian or cycle crash reported in Māpua between 2020 and 2025. This crash involved a pedestrian who was hit by a passing car on the Māpua Causeway. The small number of pedestrian and cycle crashes may reflect both under-reporting of these crashes and/or a small number of people who are walking or cycling in Māpua.

The proportion of residents who cycle or walk to work is similar in both Māpua and Richmond (2% cycle and 7% walk in Māpua cf 3% and 7% in Richmond). However the total numbers of cycles, pedestrians and motor vehicles are much higher in Richmond, resulting in a much higher number of interactions between pedestrians and cyclists and

motor vehicles, and a higher number of crashes involving pedestrians and cyclists. Pedestrians and cyclists make up 50% of the fatal and serious injury crashes in the Richmond urban area.

Growth in Māpua will result in growth in both pedestrian / cycle and motor vehicle numbers. The use of other micro-mobility devices, such as e-scooters is also expected to grow

This in turn will result in an exponential growth in interactions between the different users, and therefore the potential for an increasing number of crashes involving pedestrians and cyclists compared to the current low numbers.

Minimising the number of conflicts between vehicles and pedestrians and cyclists is considered critical to preventing a significant increase in crashes involving pedestrians or cyclists.

Tasman's Walking and Cycling Strategy proposes separated cycle lanes on Aranui Road, Māpua Drive, Seaton Valley Road and Stafford Drive, and shared paths linking Māpua wharf with Seaton Valley Road, and Māpua Drive with the coast. The proposed shared path network upgrades and extends the existing network in Māpua.

Recommendation:

1. That funding for Māpua cycle facilities be included in the 2027-37 Long Term Plan

5.5.2 Intersections

5.5.2.1 SH60 / Mapua Drive Intersection

As noted in Section 3.4, there have been several crashes at this intersection in the past five years, including one fatal and two serious injury crashes. The intersection has been assessed as having high collective and personal risk levels.

Significant further development in Māpua is likely to result in increased traffic volumes using this intersection, particularly making the high risk manoeuvres of turning right into or out of Māpua Drive. If there are no changes to the intersection, the increase in traffic volumes is likely to result in increasing crash numbers at this intersection.

Council is working in collaboration with NZTA Waka Kotahi to identify options to address the crash rate at this intersection. These options could include short term speed limit reductions when vehicles approach the intersection from Māpua Drive; a permanent speed limit reduction; or a roundabout.

Recommendation:

1. That Council and NZTA Waka Kotahi continue to work together to identify and implement measures to reduce the crash rate at this intersection.

5.5.2.2 Other Intersections

There have been no intersection crashes recorded within Māpua in the past five years. This suggests that the intersections in the township are generally functioning safely under current traffic numbers. This will not necessarily continue with significant increases in traffic numbers.

5.6 Network Capacity

The development associated with Plan Change 81 will result in significant increases in vehicle numbers on several roads in Māpua. Traffic volumes on Māpua Drive (SH60 to Higgs Road) are expected to increase from 6,000 vpd to over 13,000vpd, or approximately 800 vehicles per lane in the peak hour.

This increase in traffic is likely to result in a reduction in Level of Service (LoS) on this section of Māpua Drive from LoS A to LoS D. LoS D is defined as "*Approaching unstable flow*" (see Appendix B for more detailed definitions of Levels of Service).

Other roads in Māpua have lower current traffic volumes and are likely to experience a smaller increase in traffic than Māpua Drive, so will have higher Levels of Service than Māpua Drive.

Intersections which may experience declining levels of service and associated safety impacts include Seaton Valley Road Māpua Drive, and the intersection of the new road in T-33a and Māpua Drive.

More detailed modelling of Māpua Drive, Seaton Valley Road and the new road connecting to Māpua Drive west of the intersection with Higgs Road and Catherine Road is recommended

Levels of Service are defined in Appendix B

5.7 Parking

Annual parking surveys have been undertaken over the summer period since 2019/2020. The latest survey in Māpua was carried out on 13th December 2024. The average and maximum occupancy of parking areas in Māpua is shown in Table 2 below.

Location	Average Occupancy	Maximum Occupancy
Aranui Road (Māpua Drive end)	23%	87% (10:00am)
Aranui Carpark	44%	86% (9:00am)
Aranui Road (Village Centre	53%	75% (11:30am)
Aranui Road (Wharf End)	70%	88% (12:30pm)
Tahi Street	23%	45% (1:00pm)
Iwa Street	58%	76% (11:00am)
Aranui Shops Carpark	29%	69% (10:30am)

Overflow	2%	5%

Table 3 Average and Maximum Occupancies of Car Parks 2024

This table shows that parking demand in Māpua is quite variable by location and time of day. The following locations are approaching practical capacity (90% occupancy) at peak times:

- Aranui Road (Māpua Drive end)
- Aranui Carpark
- Aranui Road (wharf end)

Aranui Road (Māpua Drive end) and Aranui carpark had significantly lower demand in off peak times. The peak demand at Aranui Road (Māpua Drive end) is likely to be influenced by the school.

Aranui Road (wharf end) had reasonably consistent demand through the day. There is significant extra capacity on Tahi Street immediately adjacent to Aranui Road, without using the overflow capacity on the Kite Park

Survey data since 2019/2020 shows a significant drop in parking demand in Māpua post-Covid, with demand increasing in subsequent years, but still not back at pre-Covid levels.

More than doubling of the number of dwellings in Māpua is likely to result in an increase in parking demand in all locations. The development of alternative key destinations, such as a commercial area on Māpua Drive, and sports fields on Seaton Valley Road is expected to alleviate the increased demand at the existing reserve and commercial areas. Despite the TRMP not requiring minimum parking numbers for developments, it is expected that appropriate parking will be provided at new developments.

Anecdotal evidence suggests that parking at the Māpua wharf area is currently under pressure for a comparatively short time over the Christmas, New Year period. This parking demand is largely met by overflow parking on the Kite Park and Council owned Commercial land. Increased vehicle numbers accessing the wharf area will increase pressure on parking, and development of the Commercial area and Kite Park may limit the amount of overflow parking available.

One-off events, such as the Māpua Easter Fair, put significant strain on parking in Māpua. This is currently addressed with shuttle buses connecting off-site parking with the fair site. Providing permanent parking to meet the demand associated with infrequent events is likely to be costly, and result in large, often unsightly, parking areas which are underutilised most of the time.

It is therefore not considered feasible or desirable to provide permanent parking to meet the demand from infrequent events, or over a short period of time, such as the Christmas, New Year break. Overflow parking on undeveloped land currently meets large, infrequent parking demand. Development is likely to reduce the availability of undeveloped land close to Māpua and so reduce the available overflow parking.

Recommendation

1. That a parking strategy be developed for Māpua, which considers the provision of parking for new commercial developments, particularly near the wharf, and overflow parking for peak times.

5.8 Emissions

Māpua has a compact urban form. Walking or cycling are viable modes for a large proportion of trips within the Māpua urban area. However, Māpua's distance from larger urban areas results in a reliance on private motor vehicles for trips outside of Māpua, such as for employment, recreation, or education. These trips also tend to be longer than trips within an urban area.

As noted in section 5.2.1, a much larger proportion of workers living in Māpua work from home than workers in Richmond or Motueka. This possibly reflects the current demographic in Māpua, which may include a larger proportion of the population working in employment which suits working from home. A smaller proportion of Māpua workers worked in Māpua than Motueka workers worked in Motueka. A greater proportion of Māpua workers worked in Māpua than Richmond workers worked in Richmond, although a much larger proportion or Richmond workers worked in the Nelson /Richmond urban area.

Average household transport related emissions are therefore likely to be higher in Māpua than in the larger urban areas of Nelson / Richmond or in Motueka. Should PC81 result in a smaller proportion of Māpua workers working from home, then the average household transport emissions are likely to increase.

6 Mitigation

The following mitigation measures are recommended:

1. That funding for Māpua cycle facilities be included in the 2027-37 Long Term Plan

2. That Council and NZTA Waka Kotahi continue to work together to identify and implement measures to reduce the crash rate at the SH60 / Māpua Drive intersection

3. That more detailed modelling of Māpua Drive, Seaton Valley Road and the new road connecting to Māpua Drive west of the intersection with Higgs Road and Catherine Road be carried out

4. That a parking strategy be developed for Māpua, which considers the provision of parking for new developments, and overflow parking for peak times.

Appendix A

Traffic Volume Assumptions

The following assumptions have been made in estimating peak hour traffic volumes following Plan Change 81:

Trip Generation

Trip generation rates have been assessed as per section 5.2.

Trip Distribution

The Journey to work data from the 2023 census has been used assess likely trip distributions following the plan change. Workplaces of Māpua residents were assessed to identify trip distributions for residential zones. Home locations of those who worked in Māpua were assessed to identify trip distributions for business zones

Of **Māpua residents who worked**:

- 37% Worked from home
- 9% Walked or cycled
- 52% Drove a private or company car truck or van

The **workplace locations** of the 52% residents who worked and drove to work were:

- 22% Within Māpua
- 16% North of Māpua (Motueka, Ruby Bay etc)
- 58% South of Māpua (Nelson, Richmond etc)
- 5% West of Māpua (Moutere etc)

The **home locations** of those who worked in Māpua and drove were:

- 23% Māpua
- 23% Ruby Bay
- 15% North of Ruby Bay (Motueka)
- 12% South of Māpua (Richmond, Waimea)
- 27% West of Māpua (Moutere)

Appendix B

Levels of Service (LoS) Definitions

LoS A – Free Flow

- Traffic flows at or above the speed limit.
- Drivers experience complete freedom to manoeuvre and high comfort.
- Minimal interaction with other vehicles.

LoS B – Reasonably Free Flow

- Speeds remain high, but manoeuvrability is slightly restricted.
- Comfort is still high; minor incidents have little effect.

LoS C – Stable Flow

- Speeds near free flow, but lane changes require more caution.
- Freedom to manoeuvre is noticeably restricted.
- Small increases in traffic can cause deterioration in service.

LoS D – Approaching Unstable Flow

- Speeds start to decline; manoeuvrability is limited.
- Driver comfort decreases significantly.
- Minor incidents create delays; queues may form.

LoS E – Unstable Flow (At Capacity)

- Road operates at capacity; speeds vary and gaps for lane changes are minimal.
- Any disruption causes breakdown and queuing.
- Drivers experience frustration and very low comfort.

LoS F – Breakdown / Forced Flow

- Demand exceeds capacity; flow breakdown occurs.
- Severe congestion, long queues, and delays.
- Often associated with oversaturated intersections or bottlenecks.