

NTCA – Devon Street West Cycle Route Audit

8 September 2007

1.0 Background to this Audit

Recently the North Taranaki Cycle Advocacy group (NTCA) submitted a cycle audit to the New Plymouth District Council (NPDC) of the Mangorei Road “cycleway route” which was very well received and in fact has prompted NPDC to make some changes. NPDC requested that NTCA complete more of these audits to support their efforts to promote and improve cycling in New Plymouth.

The Mangorei Road audit was prepared by a fit male, confident, long term commuter and recreational cyclist with children who has cycled in many countries, in particular Holland, where cycle routes are world class. In contrast, this audit has been prepared by an un-fit female, unconfident, relatively new commuter and recreational cyclist who is quite nervous about the New Plymouth traffic and its lack of awareness of cyclists, either at all, or simply their space requirements. I am aware that my sense of space necessary to feel safe is wider than that for experienced cyclists. Interestingly, one of our male cyclist’s motivations for joining NTCA was to improve children’s cycle safety in New Plymouth.

This Devon Street West/South Road audit is the section of road from Pioneer Road to Robe Street which I ride on daily in my commute to work. My reasons for cycling to work are:

- Avoiding the use of petrol for environmental and cost reasons
- Increasing fitness and the well-being benefits of exercise
- CBD parking headaches

1.1 NPDC/TRC Definitions

The majority of my commute is defined as a cycleway by NPDC and the Taranaki Regional Council (TRC) in their recent publications, “Draft Cycle Strategy June 2007” and “Regional Walkways and Cycleways Strategy for Taranaki”. Both documents show Pioneer Road to Morley Street as an “existing route” (NPDC - Appendix 1) or an “existing cycleway” (TRC - Figure 7)

From the TRC publication, quoting from Sport and Recreation New Zealand: “Active Friendly Environments, making the active choice the easiest choice” (2006), facilities for cyclists can be classified as follows:

Cycle ways: Dedicated pathways separate from motor vehicle traffic, usually marked with signs, usually a sealed surface.

Cycle lanes: Areas of roadway designated for cycling, usually marked with painted lines and signs.

Road shoulder: Edge of road, sometimes marked with line to separate from motor vehicle lane, usually not marked with a sign, sometimes sealed.

Shared pathways: Shared with walkers, separate from motor vehicle traffic and usually marked with signs, usually sealed.

Cycle tracks: Off road and usually marked with signs, mostly unsealed.

And from the NPDC Strategy:

Cycleway: Cycleways are the roads identified in the primary cycle network for New Plymouth. These cycleways are the most-used roads and facilities for cycling and are mainly for trips across town and between suburbs. The primary cycle network is mapped, and

there is a *schedule of cycle infrastructure projects being planned to develop or enhance it*. These cycleways have, or it is proposed they have, facilities for cycling. These include adequate width or dedicated cycle lanes, on-road cycle signage and/or other safety and accessibility measures to create a primary cycle network that is safe and connected.

It would be nice if NTCA could get a copy of this *schedule*.

One of the main drivers for this audit is my concern that both NPDC and TRC claim the majority of my commute is an “existing” cycle route and I want to demonstrate that very little of the route is “existing”. I worry that by claiming this route, the funding efforts of these bodies for route establishment or improvements will be diverted to other areas.

Furthermore, a recent contractor road marking exercise did not re-paint much of the existing cycleway lines, which in my opinion was a missed opportunity. I have noticed this trend with the contractor not re-painting cycle lanes and stencils throughout my riding in New Plymouth. I wonder what their scope of work is... to repaint all lines on roads or to repaint only the lines “they” feel need repainting. In the bright sunlight, lines can appear adequate but in the dusk in the rain, their effectiveness is significantly reduced. For example, this cycle and lane marking (right line), on Devon Street heading east at Belt Road (the real start of the cycle route). Note in the second photo how the faded cycle stencil blends into the colour of the pavement and disappears for the drivers. This often happens for the non re-painted dashed cycle lane markings. At the left hand side of this photo is one of only two cycle route marker in either direction on my commute. It shouldn’t be too expensive to add more signs and road markings?



From the TRC definitions, in my opinion, my commute is primarily a “road shoulder” route, with some “cycle lanes” and is never a “cycleway”.

The NPDC document is more realistic with its implication, in the definition above, that the designated existing cycleways may not now have facilities for cycling. Thus my commute qualifies as a NPDC “cycleway”. However, I prefer the TRC definitions for clarity of designation.

1.2 Motorist Cyclist Awareness and Respect

In my opinion, as a relatively novice commuter, the most important factor for cyclist road safety is motorists awareness and respect that bicycles are sharing the road. Most of the close calls I have had occur when motorists do not see me or misjudge my speed and turn left or right in front of me or do not give me adequate room on the road, sometimes on purpose. One of my colleagues was very badly injured riding east on Devon towards Lawry (Seaview) Road when an extended cab ute, did not see him and turned right, causing him to hit the side of the ute.

I believe that increased signage and road markings, including bicycles painted on the road and parking spaces, can significantly increase driver awareness and increase the probability that the cyclist will be expected to be sharing the road. I mention parking spaces, because I notice that parked cars are closer to the kerb when lines exist, thus giving cyclists more room on the

roadway. I have also noticed that council is reducing the width of some parking and I applaud that effort.

However, some of the pavement has been so built up over the years that a significant wheel-width 'ditch' exists along much of the route (see photo). This causes motorists to park farther away from the kerb and in some cases infringe on the cycle lane or cycling space.



Additionally, the painted stop/yield lines on the majority of the intersections on this route are very close to the cycle route. In some cases, as shown in the photo below of westbound at the intersection of Mt Edgecombe Street, the contractor appears to have ignored the existing lines and moved the stop line forward 0.5-1m. As many motorists overshoot such lines, particularly at yield signs, this makes for either a dangerous situation for cyclists or a perception by the timid cyclist that the motorist is not going to stop. Some of my close calls have been at such locations as motorists are focused on getting through the intersection without hitting a car, and seem to have no awareness of the possibility of cyclists. Strangely, the re-marking contractor has painted the furthest lines and not the back lines, again perhaps encouraging the motorist to infringe upon the cyclist space.

The second photo, taken travelling eastbound at Calvert Road, is an example of the typically significant distance between stop signs and the stop lines. In other countries, the stop/yield line is perpendicular to the stop sign. The law requires one to stop/yield at the sign and then slowly move forward until you can safely see that the way is clear. This method increases the probability that a cyclist (or pedestrian) will be sighted. Another benefit and often law, is that pedestrians have the right of way at these intersections and the driver must allow them to pass. I have actually almost been hit by a car walking across such an intersection naively unaware that a turning driver will not stop for me.



The Carrington Road cycle route has some very good examples of road marking where there is inadequate width for a "standard" cycle lane but where driving and parking motorist awareness of cyclists is increased (see photos below). I have driven that route, seen those markings and realised that adequate room for cyclists is difficult and have increased my vigilance. Note also that the contractor has re-painted the fading markings on this route.



I believe that there are locations on my Devon Street West commute where such marking strategies could be employed. There are also many many locations on my route where parking sizes could be reduced or marked and cycle lanes and cycle stencils could be marked to dramatically increase motorist awareness. I will note these areas in the following detailed audit.


1.3 Devon Street West Cycle Audit






1.3.1 General Section






Main use of cycle route	<ul style="list-style-type: none"> • Main commuting route on workdays • Recreation • School traffic (predominantly Spotswood College, Devon Intermediate, St Josephs, West End School) • Some local cycling traffic
Traffic conditions at time of audit	Calm, Sunday traffic, overcast with some sprinkling showers.
Cycle route type	Painted lines demarking a cycle lane in some areas on a primary road/state highway. Cycle lane, where present is part of the road pavement.
Condition of road surface	Condition of pavement is reasonable to good. Painted lines for motorists recently re-painted, most cycle lines faded and should be re-painted.







I will use the TRC cycle route definitions in this audit.


1.3.2 South Road/Devon Street West (Eastbound from Pioneer Road)

Location	Comments	Photos
Pioneer Road Junction	This is mainly a road shoulder route with lots of room for a cycle lane to be created. The dashed line across the intersection contains the traffic and leaves lots of room for cyclists. Note also how far into the main road the lines are painted (this occurs frequently, and will not be repeated here).	

Location	Comments	Photos
Pedestrian Crossing at Spotswood College	Note how the pedestrian crossing start “kerbing” protrudes into the cycling area. Sometimes vehicles travel too close to me and I have veered towards this curbing. I am nervous that I might hit a pedal on the kerbing and have an accident. This should be considered when planning cycle routes and pedestrian crossings.	
South Road east heading towards the intersection with South Road/Devon Street West	Note the distance between the parked cars and the road marking. There is lots of room for a cycle lane. Parking space marking would also increase the chance that the parked cars would stay near the kerb.	
South Road/Devon Street West intersection	This intersection is particularly hairy for cyclists (and pedestrians) as motorists, unaware of their presence, merge left onto South Road. A cycle lane marked through this intersection and increased cycle marking/awareness at this intersection would improve safety.	
Devon Street West (across from Blagdon shops)	<p>Biking past here can be quite crazy as inattentive motorists often park badly or far right, run across to the shops without looking for cyclists and then pull out without looking for cyclists. I have had close calls with car doors, people running across and cars pulling out unexpectedly. (There has been a recent incident where a vehicle pulled out and a cyclist has crashed into the side of the car and gone over the bonnet. The driver is currently being prosecuted).</p> <p>I am not sure what could be done to improve this but do think that improved motorist awareness with road signs and painted cycles on the road would help.</p> <p>Note also at this location that there is essentially a cycle lane; it's just not fully marked. It would be quite simple to add lane painting here.</p>	
Devon Street West (just past Blagdon shops)	Note how the bus rectangle pinches the ‘cycle’ lane. It would be good if the bus lines were repainted so that the cyclist has at least a metre to pull to the left.	




Location	Comments	Photos
Devon Street West (just before Bayly Road)	Note how there is very little room for cars to park here, but they do, and then there is no room for cycles. Perhaps, some of this area could be cycles only as there shouldn't be too much need for on street parking here? This comment applies to the other side of the road as well.	
Bayly Road Intersection	Same comment as above. Also, note the far forward yellow line and the lack of re-painting on the leftmost line.	
Lawry (Seaview) Road Intersection	Coming down this hill you can really get up some speed. Unfortunately, this is a busy intersection and cars turning onto Devon or from Devon onto Lawry often don't see cyclists, especially when they have turned from Seaview onto Devon and are in a rush to turn onto Lawry. Note also how the car on Lawry has overshot the lines waiting to turn. I come down this hill with brakes primed. A further problem is the complete lack of cycle space on the other side of the intersection. I would assume that motorist safety and traffic flow in adding the turning lanes sacrificed some cyclist space. My caution at this intersection causes me to hit the uphill section beyond at a slower speed than I could/should be going and I have a tough time getting up the hill. If motorist awareness of cyclists here was improved perhaps cyclists would get up the hill faster and more would perceive the route to be easier and more would take their bikes.	
Devon Intermediate and Lorna Street Intersection	This is a crazy area in the mornings with cars stopping, opening doors and pulling out without cycle awareness. There is no cycle lane here. Improved signage and marking would be helpful. I understand that a pedestrian/cyclist underpass is planned at this location and I hope that improving the intersection for schoolchildren includes cyclists' needs on Devon street.	
Approach to Pedestrian Crossing at Belt Road	Note adequate room for cycle lane, if car parking area and lane were narrowed.	






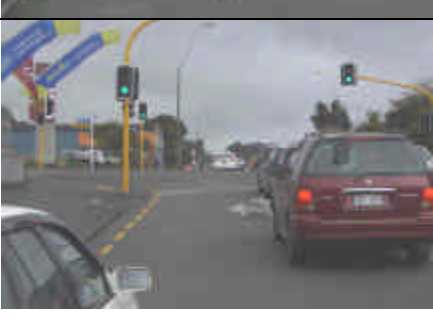
Location	Comments	Photos
Pedestrian Crossing at Belt Road and Start of real Cycle Lane	This crossing kerbing at Belt Road is a much safer design for cyclists. Note how the cycle route sign beyond the tip top awning fades into the background due to the other visual information at that location and motorists are unlikely to see it. In fact I did not notice it during my audit and only saw it upon reviewing the photos. Note also how the dashed line through the intersection helps motorists stay out of the cycle lane.	
Cutfield Road Intersection	The road marking is confusing here. There is no dashed line across the intersection helping mark the cycle lane as in the previous photo. I am also unsure what the half chevrons in the cycle lane mean. <i>Further research indicates that they might be advising motorists not to drive in this area but I don't think this is clear to most and is inconsistent with other cycle lane marking in New Plymouth.</i>	
Morley Street Intersection	The cycle lane just ends here before the intersection. There is no indication to cyclists or motorists that the cyclists are meant to turn right to join the cycle lane on the one way system. Cyclists going straight are at risk from cars turning left.	
Just past Morley Street	There is lots of room in this part of the road to continue the cycle lane. In fact, as the Morley intersection is so hairy, it might be safer to route cyclists past Morley to turn right on Dawson and then onto the one way system.	
Approaching Dawson	Again, lots of room for a cycle lane here. Recently parking lines have been painted. The Dawson Street intersection is tricky as the lights are fast cycling and it can be hard to judge your speed to ensure you go through on green. Also left turning cars are often unaware of cyclists and it can be hairy to ride straight through.	
Just past Dawson Street	Continue cycle lane.	






Location	Comments	Photos
Atkinson Building	My destination. Where my employer has kindly provided a bike locker room for safe storage of bikes and gear.	







1.3.3 Devon Street West/South Road (Westbound from Robe)







The majority my objectives and intent has been covered in the eastbound 'morning' section of this audit of my cycle commute. Therefore, I will be much briefer in my comments, but obviously common themes apply and 'a picture tells a thousand words'.







Location	Comments	Photos
Pedestrian Crossing at Atkinson Building.	Note the room between the road lane marking and the 'safe haven' for bicycles. Note also that there is lots of room here for a cycle lane. <i>Not sure what the dashed yellow line means though!</i>	
Looking towards Dawson Street	Lots of room for cycle lane, but could also reduce width of parking area. Reflectors are protecting a tree in front of STOS and are out of way of potential lane.	
Dawson Street intersection.	Again, the Dawson Street intersection is tricky as the lights are fast cycling and it can be hard to judge your speed to ensure you go through on green. Also, left turning cars are often unaware of cyclists, sometimes watching right turning vehicles to see if they need to give way, and it can be hairy to ride straight through.	

Location	Comments	Photos
Past Dawson Street Intersection	Lots of room for a cycle lane.	
Between Dawson and Mt Edgecombe	Lots of room for a cycle lane.	
Towards Mt Edgecombe	Lots of room for a cycle lane.	
Mt Edgecombe intersection.	Lots of room for a cycle lane. And note the stop line painting so far into Devon Street and the painted over (or faded) lines behind it. This is actually the lines I show a close up of in the general section of this audit.	
Towards Morley	Lots of room for a cycle lane.	
Morley Street intersection	This intersection in this direction is quite tricky as the lights are long cycling and the drivers get impatient and irritable, not seeing cyclists or even hurling abuse at them to help the boredom? Furthermore, as a cyclist at night I think that I don't weigh enough to trigger the mechanism and it seems to take forever to get a green... several times I have thought about walking to the pedestrian crossing button. Also, left turning cars are often unaware of cyclists, sometimes watching right turning vehicles to see if they need	

Location	Comments	Photos
	to give way, and it can be hairy to ride straight through.	
Morley Street intersection	When you do ride through it's slightly uphill and you are often given dirty looks or have near misses from the right turning oncoming traffic as you are slower than the other through traffic. Note also that there is lots of room for a cycle lane here.	
Past Morley at start of cycle lane.	Note how cycle lane just starts, past Fresha driveway, with no signage or warning to motorists. Note also how faded the cycle stencil is, it's hardly visible in this photo.	
Cutfield Road Intersection	Confusing chevron and no lane markings through intersection, inconsistent with other locations.	
Just past Cutfield	Another faded and doubled cycle stencil.	
Past Cutfield	Parking solid line re-painted but dashed cycle lane markings faded (does not show as well in photo as actual).	

Location	Comments	Photos
Belt Road intersection	Inconstant lane marking though intersection. Most likely not intended as cycle lane but used that way.	
Heading up hill towards Lorna Street	Lots of room for cycle lane if painting adjusted.	
Lorna Street Intersection	Some room for cycle lane marking.	
Between Lorna and Doone	Some room for cycle lane marking.	
Doone Street Intersection	Effectively a cycle lane here, so it would be nice to paint one. Note how far into road yield lines are painted. When cars overshoot them, it is quite scary for cyclists. There are also problems here with people turning right and not seeing the cyclist bridging the hill.	
Doone Street Intersection	Close up of faded lines above.	

Location	Comments	Photos
Down hill towards Seaview Road	Some room for a cycle lane, but not much. Parking areas only really used during pub overflow hours. Intersection tricky as people are often in a hurry to turn left off Lawry onto Devon, then right onto Seaview and don't see the cyclists.	
Up hill past Seaview Road	Some room for a cycle lane, but not much. Is parking necessary here?	
Bayly Road Intersection	Some room for cycle lane, note far out stop markings, note inadequate room for car parking past intersection but ample room for cycle lane.	
Bayly Street Intersection	Close up of faded lines above, and no painting of first line.	
Stuart Street Intersection	Very tight here for cyclists. Have had close calls from turning traffic not seeing me (left turning traffic off Devon, left or right turning traffic off Stuart).	
Blagdon Shops	Biking past here can be quite crazy as inattentive motorists often park badly or far right and then pull out without looking for cyclists. I have had close calls with car doors, people running across and cars pulling out unexpectedly. I am not sure what could be done to improve this but do think that improved motorist awareness with road signs and painted cycles on the road would help. Note also at this location that there is essentially a cycle lane; it's just not fully marked. It would be quite simple to add lane painting here.	

Location	Comments	Photos
Blagdon Road Intersection	Lots of room for a cycle lane in this area	
Belair Avenue Intersection	Pinched area for cyclists but could be improved. Lots of room beyond intersection for cycle lane.	
Past Belair Avenue	Lots of room for cycle lane.	
In front of Spotswood College	Lots of room for cycle lane.	
Approaching Pioneer Road intersection.	In rush hour traffic, it can be quite difficult for me to get from the shoulder (cycle area) to the right hand turning lane for Pioneer Road. I have used the Spotswood College pedestrian crossing at times. I mention this not as part of potential improvements only to increase awareness of the issues hesitant cyclists face.	
Past Pioneer Road intersection	I note that the contractor is reducing the size of these parking bays. This creates room for a cycle lane. Is that the intention?	

1.4 Glass on the Roads

It is notable that on the date of this audit there was only a little broken glass on the road. Subsequently with the coming of the spring/summer weather the amount of broken glass has increased exponentially. In my opinion there are all too many people that think it is fun to throw RTD bottles (the majority) out the window in the fine weather. I know of people have actually had bottles thrown at them while cycling! There needs to be a fundamental shift in the attitudes of such people and of the people who watch this happening and don't report their registrations to police (which can be done online now). Perhaps bottle refund systems may work, but given the mentality and possible inebriation of people who think it's fun to throw bottles from a car, I wouldn't be surprised to discover that refunds wouldn't work. Such issues would be the subject of a full separate paper!

1.5 Keeping the new Cyclists on the Road

I believe that there are many tentative people who after buying bicycles and starting cycling get scared off commuter cycling by the perceptions and reality of unsafe situations. Whatever roading engineers can do to improve our safety and sense of safety, increases the probability that those tentative people will stay on the road. My desire for fitness and support of the environment override my fear, others may not have such drivers. I believe that improvements on Devon Street, and throughout New Plymouth, will help keep those cyclists on the road and maybe inspire others to join or parents to feel confident about sending their children to school on bikes.

Thanks ever so much for your attention to this audit.

NTCA