

16 June 2022

IR-01-22-14590

J Turner

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Dear J Turner

I refer to your Official Information Act 1982 (OIA) request dated 22 May 2022 for information relating to the E-bike trial.

You requested:

I am writing to request documents relating to the outcome for the e-bike trial that was undertaken in 2020, and also in Gisborne in 2021.

https://www.gisborneherald.co.nz/local-news/20210123/e-bike-trial-for-police-patrols-big-success/

https://evsandbeyond.co.nz/e-bike-trial-for-new-zealand-police/

I would like to see the final evaluation report, as well as any decisions around extending the trial or putting it into use.

The following report is attached:

 Officers on E-bikes Insights Report – Views and opinions of our people from Phase One and Phase Two of the Trail – April 2021

Please note that some information has been withheld pursuant to the following sections of the OIA:

- section 9(2)(a), as the withholding of the information is necessary to protect the privacy of natural persons, and
- section 9(2)(b)(ii) as the withholding of the information is necessary to protect
 information where the making available of the information would be likely
 unreasonably to prejudice the commercial position of the person who supplied or
 who is the subject of the information.

Police National Headquarters

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Police has identified that the use of e-bike capability is likely to be beneficial to the whole of Police, rather than just in road safety context. For this reason, further potential investment in e-bike capability will now be led by Fleet Group as part of its whole of police strategy.

I trust that this information is satisfactory in answering your request.

You have the right, under section 28(3) of the OIA, to ask the Ombudsman to review my decision if you are not satisfied with the way I have responded to your request.

Yours sincerely

Inspector Peter McKennie

Acting Director: National Road Policing Centre



Officers on E-bikes Insights Report

Views and opinions of our people from Phase One and Phase Two of the Trial

Service Design Team



Contents

Introduction	3
Background and practicalities	5
What we heard	7
Going places	8
Increased community engagement	12
Road safety	19
Rider training and riding safely	21
Getting deployment right	24
Having the right gear	31
Phase One observational research	37
Another tool in the toolbox	40
Some tasks performed during the trial	45

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Introduction

The Evidence Based Policing Centre was commissioned to assist the National Road Policing Centre in an evaluation of Phase One and Phase Two of the Officers on E-bikes Trial.

This report

This report replaces the previous released versions annotated v1.X.

This document represents the views of those we spoke to and not necessarily the view of New Zealand Police. This document forms only part of the evaluation of the Officers on E-bikes Trial.

Our report focuses on those involved in the trial and represents:

- Insights obtained through observations of operations during Phase One by the Service Design team
- Views and opinions of Police staff and others directly and indirectly associated with the trials who were spoken to by the Service Design team

The outputs of this insights report will help National Road Policing Centre (NRPC) determine the next steps.

The Officers on E-bikes Trial

Phase One of the trial took place in Auckland, Wellington and Dunedin in early 2020. It was part of a wider programme to ensure Road Policing is prepared for emerging modes of transport and take a nationally consistent approach to operations and equipment. The trial was built around existing concepts and drew on Police knowledge and experience.

Phase Two of the trial took place in Northland, Auckland, Counties Manakau, Waitemata, Waikato, Eastern, Central, Wellington, Tasman and Canterbury in late 2020 and ended early 2021. Phase Two differed from Phase One in that it occurred in more districts with more officers and was completed over different seasons which included holiday periods.

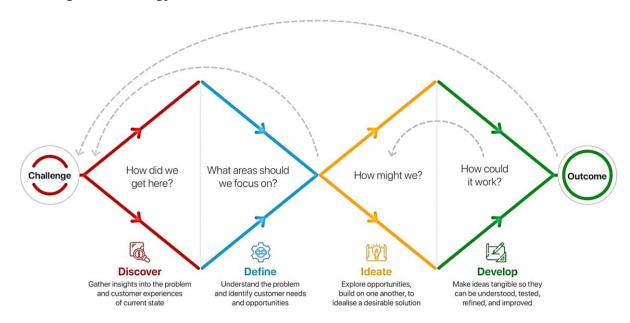
The trial was part of the Road Safety Partnership Programme, which is funded by Waka Kotahi, NZ Transport Agency. This partnership adds a greater emphasis on road safety.



Our approach

After an initial review by the Evidence Based Policing Centre (EBPC) Evaluation team it was determined that a traditional evaluation was not desirable and a human-centred or subjective review by the Service Design team was more suitable for this trial.

Our Design Methodology



The Service Design team uses a structured people-centred design framework, the Double Diamond model. In this project we utilised skills and practices from the discover and define parts of our methodologies.

What we did:

Two ride-alongs with Wellington officers in March 2020 during Phase One of the trial. The total observation time was roughly six hours and provided insight into officer opinions and views, as well as objective observations of the trial's operation and effectiveness.

Structured interviews with officers involved in the trial were also conducted to ensure a well-rounded understanding was gained.

Interviews with key stakeholders were conducted in addition to the focus areas identified above, we looked for pain points, satisfaction points and lessons learnt. We spoke to:

- The business owner of uniform, equipment and deployable assets within Response and Operations
- s9(2)(b)(ii) who created and delivered the training
- The operational coordinator for the trial
- Officers deployed on e-bikes as part of the trial
- Individuals who delivered training to officers using e-bikes
- s(9)(b)(ii) , one of the e-bike, uniform and equipment suppliers

Email survey with officers who were trained but were not recorded as having deployed.

Background and practicalities

To fully understand what we heard about the Officers on E-bikes trial it is necessary to consider the views of participants about the operation of the trial.

Timelines and management

The majority of participants involved in the trial told us it was well managed and there were only a few minor issues. We received feedback that training was well organised and tasks undertaken during trial worked well.

In Phase Two of the trial there were single points of contact within each district to help manage the trial. Their differing approaches, attitudes and effort made a big difference to how the trial ran, and the support needed from the project. We heard about a corresponding increase in the administration required to manage the trial, and the significant workload to coordinate and educate participants.

"The biggest challenge was getting them [e-bike officers] out there, which was the Districts job"

It was perceived some had not read or followed the Operation Orders and this caused frustration . We were told that Phase Two would have benefitted from more national communications at high levels of the organisation enabling similar traction and visibility to Phase One. Instead the project was dependant more on District project leads to communicate the reasons and expectations of the trial.

"What was needed was someone in the Districts who took ownership"

"The things that caused trouble were chasing up officers, dealing with no-responses, officers not following instructions. It really depended on the arrangement at the district level and the attitude of the lead"

In Phase One the setup timelines for the project were tight which presented challenges with supply logistics in some districts. In both phases limitations caused by COVID-19 impacted the trial although overall these amounted to minor inconveniences.

Participants were pleased with how things came together inside a short timeframe, for example the project engaged Response and Operations about uniform and equipment early in the project life and took a positive outlook to working with processes and restrictions.

"An upside of the tight timeframes was that we put this together quickly and successfully"

Recruitment for the trial

In Phase One the National Road Policing Centre asked for officers with riding experience to apply. Officers with a mix of riding ability and operational experience ranging from only a few months to 20 years applied. Participants told us most of their colleagues thought they needed to be in Road Policing to apply and assumed it was not for them.

In Phase Two we heard stories from participants who were told to participate rather than volunteering themselves.

"The request to do this was put to me very soon before the training. I was not really advised as to what the trial would involve. I did not think it was practical given my area and if I had been given more information or time to consider I probably would have declined given my work load."

Officers in the trial

We heard that some of the less experienced officers involved in the trial had limited Road Policing experience and this resulted in lower contact rates, differing levels of communications with the public and fewer incidents being identified.

"For some of those younger officers 'See something, do something' was not a part of their mind-set."

Participants told us that being on a bike does not suit all officers and all roles.

"Personally, I believe the Te Awamutu area (township) is too small to justify the use of the e-bikes"

"I felt vulnerable on the bikes given the open roads, it is not like the city where cars are travelling at slow speeds and there are a lot of pedestrian and bike traffic already."



What we heard

The ideas heard from interviews and observational research represent the views, opinions and feelings most commonly expressed by participants.

12	Going places	E-bikes allowed the officers in the trial to go places efficiently, with minimal delay and with little fuss.
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	Road Safety	Participants told us that e-bikes can make a difference to road safety in New Zealand.
A	Rider training and rider safety	Rider training was perceived as high quality and appropriate. Opportunities were identified to ensure our people are safe when riding.
### ### ### ### ### ### ### ### #### ####	Getting deployment right	Refining the ways we use and deploy e-bikes is a key factor in continued success.
	Having the right gear	Participants felt the equipment was well suited for trial, and with a few changes would be suitable for operational activities. Needing specialist gear to ride a bike might create some barriers to use.
	Phase One observational research	The EBPC Service Design team went on ride-alongs with Wellington officers to understand their opinions and views.
Y.M	Another tool in the toolbox	E-bikes are a flexible mode of transport with their own unique strengths and weaknesses that could contribute to the many parts of Policing.

Going places

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E-bikes allowed officers in the trial to go places efficiently, with minimal delay and with little fuss.

Efficiency of travel

Officers told us e-bikes travel at a good speed and access areas and places motor vehicles cannot. This meant they would often arrive at a scene before a car dispatched at the same time.

"A few times I left the station the same time as an i-car and I got there first."

"We were often the furthest away than others when the job came in and we were still first there. We were quicker on the bikes."

Participants told us there are fewer issues associated with parking or holding up traffic than when using a car.

"We got to help out PST with some jobs. We'd get to things quicker and parking was easy, we'd pull up on the footpath where an i-car might be stuck in a bus lane."

We heard that e-bikes were particularly compatible with officers who would usually be on foot patrol. E-bikes complemented work usually done on foot and their usage parameters are similar, for example, foot patrols have existing procedures for arranging transportation when making arrests.

"Staff would love being on an e-bike rather than being on foot. It's a nice thing to give the legs a break, and to also break up the monotony of foot patrol."

"Getting off the feet and onto a bike for a few hours would be great."

Walking tracks and hilly suburbs

Participants told us e-bikes were able to go where needed such as riding through walking tracks around Wellington's Mount Victoria, and through Dunedin's town belt. Tasman officers used e-bikes to keep an eye on trails with a history of arson issues. In Dunedin they rode out to beaches, around South Dunedin, through the town belt, over to Kaikorai Valley and one went as far as Signal Hill. This was especially useful during the first week of COVID-19 level 4 lockdown where officers could speak to people who were out walking and weren't expecting to see Police, it was a great opportunity to educate people about social distancing.



"We would help with missing person cases or lost children. We could get on the bikes and take the trails around Mt Vic and other trails around the area that aren't accessible for cars. It's a quick way to clear a lot of ground."

The e-bikes were also useful to access walking routes and bike tracks where Police do not normally get to, participants said members of the public using those trails were 'very happy' to see officers on e-bikes. Participants were impressed they could get to so many places with minimal effort.

"On eco mode got up Te Whiti riser in 18 mins which included chatting to people on the way."

"People get quite surprised when they see you on a bike in the middle of nowhere."

Alleyways and pedestrian areas

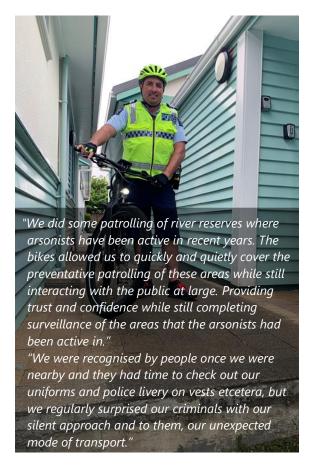
Participants said e-bikes are more efficient, faster and more visible than a foot patrol in alleyways and pedestrian areas. E-bikes allowed them to travel efficiently and cover more ground than in a car or motorbike where they would be restricted to the road network. Having knowledge of local tracks and alleyways was an advantage and reduced risk to officers.

"There are so many alleyways in Wellington and people can travel a long distance without ever seeing a police car. It's like another dimensional world in there where police don't patrol. Alleys, stairs, walkways. People certainly don't expect to see us going into those areas."

"It was a great way to network with the community.

There were a lot of positive comments seeing police on bikes where our patrol vehicles can't get too especially along over river ways where people exercise."

"It also allowed us to go places that were difficult to access using vehicles and get to locations quickly. Many of these would have been more difficult and less likely to be explored, had we been relying on vehicles."



Participants talked about how being on an e-bike in school areas during busy drop off and pick up times went far smoother than being in a car. They were able to monitor school areas efficiently, interact with people in a positive way and didn't need to find a park.

"In eastern Hutt one school has 3 crossings and 2 drop off points, we could get around the whole thing in minutes and move parents on who were double parking."

We heard a story about a mother who was picking up her son from school. He had Asperger's Syndrome and had run off, the bikes were able to quickly respond, search and interact with other parents and members of the public.

"We could get in and around the school, across fields, down cycle ways and pathways in residential areas where cars can't go."

"The way we were patrolling on the bikes was extremely efficient."

"Certainly, the reassurance that we were patrolling on the bikes was good."

Participants said it would be good if there were a change to allow them to ride in bus lanes, footpaths and in pedestrian malls when needed. However, we were told bus drivers did not like bikes being in the bus lane. There were concerns that leaving bikes in public areas may result in them being deliberately damaged, although there is no record of this occurring.

"We couldn't take our bikes through the mall when foot patrolling, someone would have to wait with them otherwise seats would get nicked."

Can navigate through heavy traffic at pace

The bikes were especially useful in gridlocked traffic and officers found they would often get to an event in the city centre before the i-car. One officer saw a driver speed through roadworks, flicked their bike around and quickly caught up with the driver, something that would have been difficult to do in a car.

Participants said one advantage on e-bikes is that they can catch up to vehicles and engage with drivers as vehicles frequently need to stop in built up areas, whereas bikes can often keep moving.

"I was never really too far from stop sign or give way where I could catch up and easily pull them over. On the bike you're able to get around the traffic and get to the ball a lot quicker."

Events

Most participants thought e-bikes were an excellent tool for large public gatherings or events. They were able to get around carparks, travel slowly and mingle easily with the crowd at events they attended. In Wellington they were able to traverse the Basin Reserve and exit the other side, where in a car they would have needed to park and return to the vehicle.

Participants in Phase One felt there had been missed opportunities explaining the e-bikes should have been used at night as that is when many major events occur, such as sports games and concerts at the stadium in Dunedin. Crowds of often drunk people can cause traffic issues walking back into town. However, in Phase Two of the trial the e-bikes were used at night. One participant pointed out that history was created when e-bikes deployed over New Years Eve, enabling New Zealand Police to be extremely mobile and get around the gridlocked roads that evening.

"Not a single negative comment the entire night."

E-bikes were used at New Years Eve events, Spooks and Sparks and the Americas Cup and participants believed e-bikes would be suitable to use at other events also.

"[Protests] lend themselves to a cycle. And the protesters are often happier too because they can see we are helping them."

Opportunities we heard

- Use of e-bikes at a multitude of events and happenings
- Efficient for responding to PST calls
- Protests
- Searches for missing persons
- Patrol events
- Patrol alleyways
- Patrol pedestrian malls
- Areas that are difficult to access such as parks
- Events where there are a lot of people which often makes it difficult for cars to get round. "[the e-bike] really saves your legs"
- Ongoing use of Strava to see areas covered during shifts
- Flat provincial or rural cities and towns, making communities more accessible
- Allow Police e-bikes to be ridden in bus lanes, footpaths and in pedestrian malls



Increased community engagement



E-bikes enabled officers to engage better with different communities and highlighted the need to consider the image of officers using e-bikes.

The public's reaction

Participants told us public reaction was "overwhelmingly positive" and e-bikes created a greater connection to the public, especially as we see increased use of scooters and e-bikes.

We heard the public liked the idea of Police using bikes and the majority of comments officers received were positive, although there were occasional jokes or jibes such as "Oh Police not buying cars anymore, on ya bikes now hahahaha". One officer mentioned a disparaging comment on the radio "I can't respect a cop in shorts".

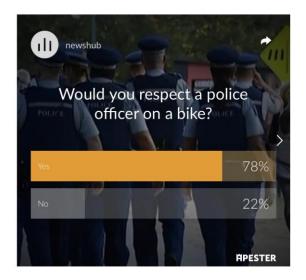
All participants said the public engagement was the best part, everywhere they went people wanted to say hello, take a photo, ask about the bikes and know why they were out and about.

"I always got the feeling people were looking out for us."

"They loved it, people at the lights would say 'good to see you out on the bikes'."

Vote in The AM Show poll below.

Having trouble viewing the poll? <u>Click</u> here.



Officers visited schools on their e-bikes to conduct cycle road safety classes where they practiced safe riding and completed safety checks for the children. We spoke to a school teacher who told us the children were impressed to see officers on bikes for the session, previously officers had arrived in cars. They told us children thought the officers being on bikes made them more accessible.

"The kids were impressed and thought it was cool" - School Teacher

While e-bike officers had not patrolled at their school they had been told the officers had made a difference to road safety at schools they did patrol using the e-bikes.

"There are a lot of problems with parents on the road during pick up and drop off times – they'll park on yellow lines, do U-turns right outside the school, things like that" – School Teacher

We asked if she thought officers on e-bikes could improve road safety.

"Yes definitely has had an impact on safety, because the officer is right there."

"More and more children are being driven to school now and any police presence does a lot." – School Teacher

E-bikes allowed officers to interact with communities in a more relaxed manner. Officers felt being on an e-bike made the officer more approachable and brought them closer to their communities, they mentioned e-bikes made them less threatening to the public and more approachable.

"It was cool how the bikes de-threathenised us."

"The bikes were great from an iwi youth perspective, the trial personalised the police for them in terms of our interactions. We were mentioned in a whanau hui on the marae which is a really positive thing. Asking if we would be a permanent fixture as they liked the idea."

Members of the public would come out of their homes to interact with them. One person was on bail at their address and officers did a couple of bail checks without conflict or stress. Another person who is known to Police and who usually gives the finger, the first day he saw the officers on bikes he called out to them and challenged them to a race.

"We wave to each other now, he waved to us first today!"

"Those are the small wins, that's when you know you are making a difference."

"Being on bikes is fantastic for communities, we're much more approachable, though it wouldn't work for every community."

One example centred around a person who was causing trouble and being fascinated by the e-bikes which completely changed their demeanour and deescalated the incident.

"It was funny because seeing us on bikes kinda changed it [the situation] for him. It was a conversation changer."

It was suggested that in some communities' patrol cars may be a barrier to community interaction. The publicity around the trial was generally positive and participants felt this increased public acceptance.

"There was a lot of newspaper coverage in the local papers, so people knew about us which was good."

In Phase Two participants commented on the lower levels of publicity and communications from Police and media.

Positive engagement on police social media channels

New Zealand Police social media posting about e-bikes were generally well received. Most comments were supportive and hopeful police on bikes would become a permeant part of their communities. Others wondering why officers on e-bikes had not made it to their communities. There were plenty of light-hearted comments, often about the likeness of characters from the comedy movie Jump 21 Street.

"This looks like a scene out of 21 Jump Street, kinda cool 🕙"

"Well cops on bikes aren't new, but electric bike yes!"

"Great way to have a street presence - silent and fast too 💍 💍 "

"Seen them I think they look very cute"

"do the delta units get skateboards so the dogs can pull them along?"

There were a limited number of negative comments, for example, one person accusing police of being lazy not using non e-bikes,



another suggesting the money would be better spent on more CCTV to address issues with stolen cars and burglaries. Another commented that they shouldn't be riding on the footpath.

"Hope ya quick enough to chase a stolen car when we wave lol"

"Wait till they get off to chase someone and they get their bikes stolen"

Being seen

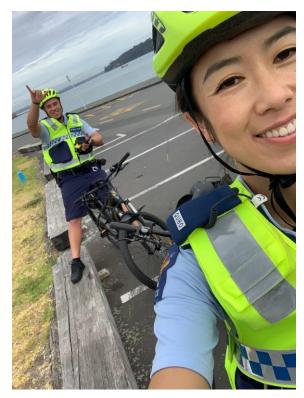
Participants told us e-bikes can go places other modes of transport don't and as they move quickly the communities' perception of Police presence increased. As the public might see an e-bike multiple times in a shift it may seem there were more officers patrolling. Officers patrolled locations they would not usually access, indeed some residents told them they had never seen a patrol in their street. It was felt that e-bikes would be well suited to 'hot spot' patrols.

"For them it was really positive to see us riding up and down those streets."

"Criminals don't expect to see us in those laneways."

"They didn't see us coming. They weren't looking for cops on bikes."

We heard from some e-bike officers who were delighted to receive some helpful information by a young girl, which assisted in apprehending a burglar.



"The Burglar popped his head over the fence and saw me in uniform, he took off, we didn't catch him at that time, but just as we were about to leave a 5.9(2)(a) OIA on a scooter saw me and asked what we were doing on bikes. We told her we were looking for a guy with a yellow shirt. She had just seen him go through a house yard and showed us where. We were able to silently get in behind houses and catch up to him and apprehend him. I thought it was excellent that the had assisted us in detaining a burglar, and it was because I was on a bike. Being on a bike makes us more approachable to the public."

We were told there is a perception that police only operate in cars and members of the public were often surprised to see officers on e-bikes. "it was another thing for them to look out for". Participants felt this was particularly relevant to road users and those involved in criminal activity.

"Drivers weren't looking for you, they would be looking out for the regular police vehicle and mufti cars, I'd pull them over and more often than not they would say 'where did you come from?!"

"They didn't see us coming. They weren't looking for cops on bikes."

Officers believed e-bikes increased Police visibility at major events and could have been even more useful if the trial had extended further into the COVID 19 Level 4 lockdown.

"We would have been great in Level 4 COVID, so easy to get around and speak to people."

"During covid19 we did premise checks, supermarkets, chemists places where there were big queues in the beginning, we'd turn up and catch the security guards eye let him know we were there."

The external and internal image of officers on e-bikes

Participants felt the public's image of e-bike officers was positive, and issues they faced mostly related to reactions within Police. Some felt there wasn't always support from the rest of Police, particularly senior staff and they were not deployed to jobs they could have done. The initial apprehension of other officers soon gave way to curiosity and interest, however some participants expressed frustration about the reaction of other Policing staff to their shorts. Most participants felt any larger roll out of e-bikes would need to be better promoted both internally and externally.

"[People in my district] should have been briefed about us so they knew what our capabilities were."

"It has to be promoted well internally."

Participants told us that by the end of Phase Two there was a greater acceptance of e-bikes from colleagues, and many had commented how impressed they were with the e-bikes' capabilities. Many told us that colleagues had expressed interest in joining the programme.

"We had a few other people who wanted to be part of it, initially we thought we'd be laughed at, but totally the opposite."

"We have quite a few people who wanted to do it. We thought people would be laughing at us but it was totally different in Gizzy"

"Colleagues had a lot of questions."

There were some comments about the bikes needing to have a presence, some participants did not want to use step through bikes due to the less rugged image they have.

"We as kiwis are a bit more rugged than that. A look good and feel good image plays a big part whether we like it or not."

Credibility on the road

We heard sometimes e-bikes did not have enough presence and might not be noticed by the public, causing some issues in traffic. An example is participants felt the public didn't always recognise them as police despite them wearing high-visibility Police kit and as a result it could be difficult to pull over cars. Occasionally they had to tap on the window or use hand signals while trying not to scare the driver to avoid a situation where "people would react the wrong way and we could risk taking a tumble". They came up with strategies to pull people over including working in pairs and on opposite sides of the road.

"We weren't visible enough."

"People just don't expect to see a cop on a bike right there beside them in traffic."

"...also lots of times where negotiation didn't work haha. Spotted a tradie not wearing his seatbelt, he just took off around the corner and gone."

Some participants were surprised at the level of credibility afforded by the e-bikes from the public.

"On the side of the road you got more respect from the drivers because of the way we were patrolling, we thought we wouldn't be taken seriously, so that was nice, we were blown away how good people were about it."

Some participants thought Police should consider how the use of bikes might differ at night where they might be harder to see and there would be less people about to see them. They suggested they would be better suited to specific tasks rather than general patrols.

"The other thing is you've got 50k commuter cars coming into Wellington every day, where at night, and if it's raining you'll only see like 20-30 cars so if it's about being seen, then day time hours make sense."

Police branded gear

Some participants felt it was good the bikes were not Police branded as they might have been damaged if left unattended. There was also discussion about possible confusion with other cyclists who wear Hi-Viz gear.

"We would be in our glow vests and people wouldn't always know we were police, we could be mistaken for a tradie, or another cyclist, a lot of cyclists are wearing yellow glow vests now!"

Many officers wanted the e-bikes branded to identify them as Police and give the riders more credibility. They explained it was hard to get people's attention and they lacked 'pulling over power', some even suggesting a siren and red and blue lights. However, some participants felt Police branding might make them targets and it was suggested the gear be provided without manufacturers branding. One officer suggested the option of removable branding on items like the bikes and panniers which could be used when needed.

"Branding the bike would only be a strength, the whole bike would become more of a uniform and would give us more credibility on the road."

"If our gear was branded people wouldn't think we were angry cyclists on the road, but Police."

"I wanted to flick on sirens but I couldn't."

Opportunities to educate the public

Officers told us they had many more conversations with the public than they would have on foot or in a car. The bike was a talking point and people would approach them to check out their kit, ask questions about what they were doing or to ask about Police processes such as how to report a crime.

"We are more approachable on bikes because we can stop easily."

E-bikes also enabled officers to speak to people or quickly warn them about poor behaviour in a more relaxed way which provided opportunities to educate the public.

"It was great, we would spot someone doing something they shouldn't be like texting on their phone, we'd signal them to stop and could have a quick chat and educate them."



"I didn't ticket anyone, but I did stop and talk to people about not wearing seat belts and stuff like that, just chat to talk and educate."

"Sometimes the lights would go green and there wasn't time for much else."

Participants were able to model the right behaviour to other bike users and influence other road users and pedestrian's behaviour due to their presence and the ease with which they could communicate or be

communicated to. Some officers perceived that cyclists use of hand signals improved noticeably during the trial which they attributed to behaviour they had modelled. It was easier to deliver road safety messaging while on a bike.

"I would stop and chat to cyclists who didn't have helmets, they'd say it was at home and I'd say 'put it on!"

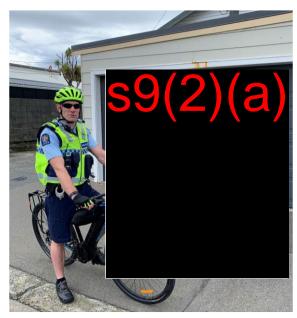
E-bikes allowed officers to interact with communities in a more relaxed manner, one officer told us about interactions with youth at a skatepark, with whom they managed to develop positive interactions.

"They were showing me all the tricks they could do. And I would suggest 'maybe you should wear a helmet when you do tricks like that'. It was a cool way to engage."

Cycling communities

Participants told us being on an e-bike brought them closer to other cyclists and cycling communities. It was easy to have a conversation with someone else on a bike when you are right next to them. Officers noticed an improvement in cycling behaviour and suggested it was because cyclists were mimicking good habits demonstrated by the officers.

Dunedin officers attended 'Spokes' which is a ride to work day, and told us community cyclists loved that they came along. One officer rode to a 'bikes breakfast' to normalise the concept of police on bikes. We heard that the reaction on Wellington's waterfront was positive from other cyclists, and many motorists commented they were pleased that Police could now target poor cycling behaviour.



In one District during the trial there were cycle campaigns which supplied commuters with free bike lights and vouchers for helmets. Participants felt e-bikes were well suited to this exercise.

"Having e-bikes for those promotions was amazing. They appreciated the schemes to help them be visible."

However, there was the occasional negative comment from cyclists, mostly from those who would not normally be stopped who felt they were being picked on by officers on bikes. Usually these were for actions such as jumping a red light, pushing through a pedestrian crossing, riding in pedestrian areas, riding on footpaths or not wearing a helmet.

In Phase One some cycling communities and advocate groups in Auckland believed they were being targeted and issued unfair tickets, despite no tickets being issued.

Engaging with communities we would not normally see

Participants told us they engaged with many communities they do not often deal with, and interacted with a different set of people than usual. One of the reasons was the ease in which they could stop to speak with people.

"We were interacting with people we didn't normally interact with, like in cycle ways, lanes, places too far for foot patrol and where cars can't go."

"Being on a bike meant we got to engage with both ends of the people scale, locals and people we don't often get to talk to and then people we deal with often."

An officer said he rode into some retirement villages and the residents were always pleased to see him. One had said 'We haven't seen a police officer in here for five to ten years'. The officer felt it was important to visit those kinds of places so those communities didn't feel forgotten.



Opportunities we heard

 Sirens and red lights, "A horn or buzzer on the bikes would have been good to help with pulling people over"



- Increased patrols of no car areas
- One on one in-situ education for the public
- Branded Police e-bikes
- Branded equipment
- More training for officers about where to put the bike when talking to public, and how to talk to public while on a bike
- Communities with lots of cyclists
- Policing more alleyways as people don't expect to see officers there. "There are a lot of day-time burglaries by people in orange vests so I get out and patrol those parts because it surprises them"
- Daytime running lights
- "Get people who are personable and are great with engaging with the public for e-bike roles. The public love to talk to us and it's a way of closing the gap between us and public."
- School community officers
- When schools are running Grade 1 and 2 Pedal Ready courses
- Community policing

Road safety



Participants told us that e-bikes can make a difference to road safety in New Zealand.

Road Safety Partnership Programme

Phases One and Two were funded as part of the Road Safety Partnership Programme, which is funded by Waka Kotahi, NZ Transport Agency adding a greater emphasis on road safety. We asked participants whether they thought e-bikes impacted Road Safety.

This section summarises comments related to solely to road safety and may repeat content seen in other areas of this report.

Educating children and being visible in school areas

We spoke to a school teacher who told us that their pupils were impressed to see officers arrive on bikes for road safety education as previously officers had arrived in cars. Both the children and officers having bikes for the training meant they could deliver education that was more relevant and far more engaging for the pupils.

While e-bike officers had not patrolled at their school they had been told the officers had made a difference to road safety at schools they did patrol using the e-bikes. They were certain that officers on e-bikes could improve road safety, especially for children

"There are a lot of problems with parents on the road during pick up and drop off times – they'll park on yellow lines, do U-turns right outside the school, things like that" – School Teacher

"Yes definitely has had an impact on safety, because the officer is right there."

Modelling the right behaviour

Participants were able to model the right behaviour to other bike users. Some officers perceived that cyclists use of hand signals improved noticeably during the trial which they attributed to behaviour they had modelled.

One interesting observation was how much easier it was for officers to improve road safety for cyclists when they are riders themselves and understand the environment and rules better.

For one officer it was more about getting the basics down with riding in traffic and knowing the road rules to set a good example for the rest of the people out there on bikes.

Easy to communicate with

We were told that it was easier for officers to interact and communicate with cyclists and other road users while on a bike. It was easier to physically deliver road safety messaging especially when in traffic waiting at the lights.

"I would stop and chat to cyclists who didn't have helmets, they'd say it was at home and I'd say 'put it on!"

While the majority of officers were happy to pull cars over, some did mention some apprehension due to concerns about their own safety.

E-bikes allowed officers to interact with communities in a more relaxed manner, one officer told us about interactions with youth at a skatepark, with whom they managed to develop positive interactions.

"They were showing me all the tricks they could do. And I would suggest 'maybe you should wear a helmet when you do tricks like that'. It was a cool way to engage."

Participants specifically mentioned the speed in which conversations could occur

"Really good tool to have those quick conversations right there in then."

"Quick easy touch points with road users without having to pull over."

"You can speak to so many more motorists in a line of traffic than you ever could in a police car"

A focus on warning

Participants felt that while on a bike they focused more on changing behaviour by warning and interactions through methods such as tapping on vehicle windows and giving a warning or a reminder about safety.

"The interactions with drivers were different on a bike, they were more warning based."

Ability to operate in built up areas

Officers specifically told us that e-bikes would make a big difference to road safety, especially in areas where

speed was generally slower and traffic often stops and even more so at peak traffic times.



"Great tool in Road Policing. I issued 12 tickets from the bike and it was fantastic for cell phone and seatbelt compliance in heavy traffic." – non deployment email response

"I was never really too far from stop sign or give way where I could catch up and easily pull them over. On the bike you're able to get around the traffic and get to the ball a lot quicker"

Contact with people

Participants told us there is the perception that police only operate in cars and the public are used to looking out for officers in cars (marked and unmarked). E-bikes enable police to become more visible and are able to hold more people to account.

They spoke about how one way to change a person's behaviour is to catch them in the act and e-bikes allowed them to do this well in longs lines of busy traffic.

"The perception of getting caught is what changes peoples' behaviour. It's pretty hard to hide from a bike riding down the cycle lane. It could be any cyclist on any corner that could bring out the rules."

"On a bike it is easier to see what is happening a car."



Rider training and riding safely



Rider training was perceived as high quality and appropriate. Opportunities were identified to ensure our people are safe when riding.

Training

To be effective and safe officers must be able to cycle competently and confidently in all traffic environments such as inner-city terrain, multi-lane roads, off road on surfaces like gravel or sand, down stairs and anywhere pedestrian centric.

Phase One training was created and delivered by \$9(2)(b)(ii)

Participants said the two days allowed for training was good, they were able to get through all the planned content with enough time to account for varying rider ability. Participants in both phases generally felt while it might be possible, training time should not be reduced to a single day. The potential for one on one individual training was discussed as being beneficial.



"You might be able to reduce it to one day, but nah, I wouldn't want to risk it."

"The product that designed for Police was absolutely spot on, with his knowledge and experience and the way he set it up."

Phase Two training was mostly provided by two officers who had been trained by \$(9)(2)(6)(ii) , it was a two-day course. Most participants felt the training was well focused and about the right duration. Some participants had one-on-one training which they liked because of the focus on the individual while others were trained as part of a group, which they liked because participants could learn from watching each other. Officers in Phase Two especially liked the exercises and 'games' used in the training.

"They taught us how to slow ride in 5m square area. You had to ride without stopping or putting your foot down. They then had us passing items between each other, as many as we could. They were all good games, fun with a bit of competition."

Training took account of the different roads and conditions in the districts and evolved as it happened, applying lessons learnt at the next training session. For example, we heard the last officers to be trained were performing more complicated drills like rapid dismount, tight cornering, slow riding and advanced handling skills. Some participants would have liked to receive training on e-bike mechanics to enable them to understand and where practical fix issues.



"I hadn't changed a bike tyre in 20 years so that was a mission. A guy on the road came over and showed me some tips."

"That could be something to add to the training we didn't cover any of that off. Would have been so helpful to know about changing tyres."

"All 3 of us had punctures at some stage."

Some participants told us they were also trained on safe Police operational tactics related to using a bike, for example how to stop a vehicle, detain someone, perform a search and where to place the bike when busy. Others told us they were not trained on Police operational tactics related to using a bike.

Most people we spoke to told us refresher courses would be beneficial and a few suggested a recertification process. There were only a few issues raised concerning training.

"We were all different levels of riders, and different types of riders but the training worked well. Regardless of experience anyone could have done the training."

Officers were in plain clothes for the training, and one officer mentioned it would have been beneficial to have done some training in uniform to better understand how the equipment worked together. Some said they would have liked to have done a training day while working to see what it was like responding to jobs while one a bike.

"Having some experience using our gear on the bike would have been good.""

The trainer found it helpful to have assistance from a sworn officer to organise logistics, add context and ensure continuity.

"It was great to have a direct contact, made things much easier to coordinate."

E-bikes were only to be used by those who completed the two-day training, however the bikes weren't always in use by the trained officers. Some participants mentioned it would have been good to put some other officers through training so the bikes could be used more. Participants said training is key to ensuring other areas of policing such as Prevention, Traffic, and the Public Safety teams (PST) utilise e-bikes. However, this was tempered by comments around training too many people who may not then use the e-bike.

"The more people you get trained the more people you'll get out on the bike."

"There would be some who would do their first initial training and that's it."

Riding safely

Participants generally felt safe riding e-bikes, but some expressed concern there might be risks. Developing similar guidelines to those for urgent driving was suggested. Participants also commented on how much they sweated and needed fluids and electrolytes.

"Sometimes I forgot I was on a bike and I needed to remind myself not to put myself in a situation where I could get hurt, like pulling out to pass a bus and not knowing what's on the other side."

"I found I got dehydrated but didn't realise at the time, only when back home, gotta stay hydrated through the day. Self-awareness needed for things like that".

Some officers commented that a full day riding would be too tiring, especially in warmer weather.

"For me it got a bit painful after an hour riding from the extra gear on the torso."

"E-bike patrol needs to be managed into one or 2 hours at a time probably, could never handle a ten hour shift, you would need lots of breaks."

Opportunities we heard

- Video hints and updates to procedures and training
- Refresher training or certification
- Training in basic e-bike mechanics such as how to change a tyre
- · Training in uniform while wearing the right gear
- More widespread training to increase the pool of potential riders (and Police groups)
- Conduct training while wearing a uniform to enhance skills and gain knowledge
- Create 'urgent riding" guidelines



Getting deployment right



Refining the ways we use and deploy e-bikes is a key factor in continued success.

Trial deployment approaches

Phase One operation orders for the trial limited operations to daytime and fit for purpose weather. Phase Two operational orders gave districts discretion to take into consideration deployment risk, including inclement or adverse weather, however the operational orders also stated that e-bikes will only be deployed in favourable weather.

While both phases of the trial were supported with national operational orders, how to deploy staff was at the discretion of each district and districts took different approaches. In some districts, rosters were not changed and officers did their shift or parts of their shift on e-bikes, allowing them to support their normal



teams. In other districts officers were removed from their sections and rostered onto e-bikes. This caused frustration with some officers who say the trial took them away from their core role.

"We left big holes in our section, as we weren't back filled."

In Phase One and Two many participants felt there was little ownership of staff deployed on e-bikes. As a result, there was little forward planning, opportunities were missed and many tasks including running their shifts fell to the riders, indeed some officers felt they were winging it and doing whatever task popped up. The participants' perceived lack of prescribed activity or predetermined deployment may have contributed to less cohesive or organised e-bike deployment during the trial. In Phase Two participants mentioned confusion as to what the operational orders were.

"We didn't have any real guidelines on what we were supposed to do, except if we could do two hours of Road Policing."

"We'd find work ourselves, our senior sergeant would get tied up with things so we were always left to our own devices."

"In terms of deployment it needs to be pushed by the supervisors. We were ridiculed but it was two-fold, they were a bit jealous that we got to ride around and get exercise."

"I wasn't dispatched to any jobs on my bike. Just patrolling."

Participants felt restrictions on night operations limited their effectiveness as e-bikes would have been perfect to deploy at night for big sports events and concerts.

We heard that reporting was complex and sometimes difficult to complete, and we found several officers who had deployed on e-bikes did not complete shift returns.

There was some frustration expressed around the barriers to using an e-bike resulting in the e-bikes being underutilised.

"I was away a lot and the bike didn't do anything, we should have had more people trained so that others could have gone out."

Working to the strengths of our people and e-bikes

Participants told us it is important New Zealand Police understand and work to the characteristics of working with e-bikes, one example we heard was a supervisor assigned to the trial, who found it difficult to manage his team while on a bike.

The right people

Participants suggested a key factor in the success of e-bikes will be selecting the right people. This applied both to the trial and any potential large scale roll out.

There was a mix of people who had experience riding bikes in their own time, and those who didn't. Some officers were identified for the trial because they knew they had an interest in bikes. In Phase Two it was more common officers were selected who had little interest in the trial or cycling.

It was felt staff were put forward without thought given to implications about deployment. Participants felt that deploying in pairs was safer and more successful, but this was difficult due to officers' different physical locations and rosters.

"It would have been nice to have had someone else at the station to go out with."

"would have been better with two people based at the same station for the e-bike trial."

Many participants commented they enjoyed the exercise and the trial rekindled or created an interest in bikes.

"Oh yeah, it's got me interested in riding bikes again, I've been riding my bike to work again now and get my fitness up. The last 4 weeks I've been riding to work."

"I ride my bike to the surf when I can, but after the trial I was googling e-bikes to buy, totally on my wishlist now!"

Understanding e-bikes

There was a perceived lack of understanding by supervisors as to the nature of being deployed on an e-bike, and how it can complement existing Policing. We heard some supervisors thought that when the officer was out on the e-bike it took them out of consideration for other areas. Some mentioned there were some who initially saw the bikes were 'a bit of a jolly and a bit of joke' and didn't see how e-bikes were useful.

"All some could see was that they had to provide a staff member, the staff member was still there, just on a bike."

"We had to prove the value of the e-bikes to everyone else."

"Our supervisor didn't have too much knowledge it was happening. It was up to us what we did really."

"A lot of people in the station thought you were off for a jolly for the day, we were still just as productive though, and got some exercise it was great."

However, participants also told us that their supervisors understanding of e-bikes increased during Phase Two and they began thinking outside the box of how they could be used. For example, a way to transport the bikes to Picton or Kaikoura for patrols.

"I really do support the idea, but think to make it work we'd need to reassign staff to e-bikes on a fulltime basis, but realistically we don't have spare staff to do that." – Supervisor

"It was suggested if we had been able to transport the bikes, we could have taken them to Picton. In hindsight we could have taken them to Kaikoura and done some work there. Good to see supervisors thinking outside the square."

Strength in numbers

We heard that officers believe riding in pairs is more effective and as a result looked for opportunities to work in pairs and avoided situations when they couldn't. Participants felt "it was more comfortable with two of us". They also said they would often work with others even if the other party was not on an e-bike. In one district e-bike officers were never deployed alone, but were always with officers on foot, or in a car. Some officers did not feel safe alone and one told us they had experienced a car driving threateningly at them. Riding in pairs also allowed officers to get to know their bikes better and develop their own operational processes.

"I was a bit concerned being on the bike though, for two reasons, you're an easy target like gang members hitting me on the bike, but also for safety in general. More vulnerable on the bike."

"Would not have felt comfortable trying to stop a vehicle on my own."

"In the first month went out a few times by myself but didn't feel comfortable going out on my own in case I come across any people I deal with and then having a bike to deal with to 'what do I do with my bike, who will be my back up'. More of a safety thing really too."

"Riding two up is better. Some of the areas I work in aren't really very nice."

"For one month there was only one staff member to ride."

It was interesting that while officers appreciated the ability to get to places other vehicles could not, they felt some anxiety that if something did happen it may take time for help to arrive.

Rostering

In many instances' officers needed to cover for shortages in their old teams and could not use the e-bikes. More experienced officers on the trial said they worried about their absence from their regular teams, and particularly the impact on junior staff.

Participants also felt using an e-bike resulted in additional work or other problems for their usual workgroup, either because of e-bikes being viewed as incompatible with their usual work or the potential inconvenience they may cause if assistance was required.

"It was never going to work with a workgroup that was understaffed and being a community constable, we just get so much stuff thrown at us, just another thing to manage."

"It was one more thing we were struggling to find time to do."

Many participants told us they were redeployed to other roles, and as using the e-bike was not part of the other role their e-bike use was minimal. This may have been exaggerated during Phase Two of the trial

when many potential heavy users such as officers attached to schools were reassigned. There were also many participants redeployed to Operation Mercy.

"Same, I got back from leave and my big plan was to ride bikes around schools and stuff to educate kids and families."

"School patrols would be epic."

Many participants told us that injury or illness severely impacted on rostering and their ability to effectively deploy. With Phase Two of the trial falling over the usual holiday period, many of the participants took leave over this time also impacting on deployment.

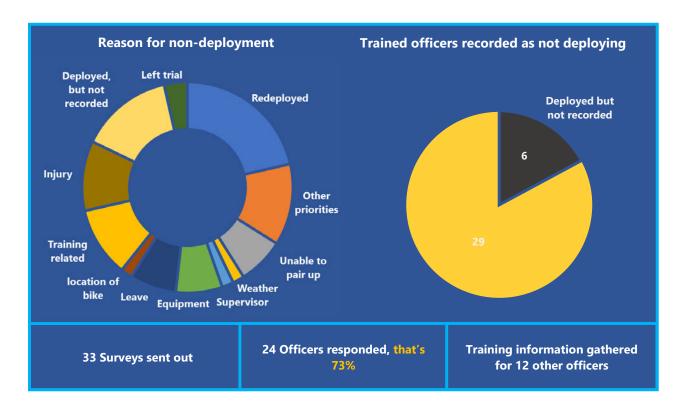
"Here in Eastern we have a summer policing roster where prevention staff get rostered to help out PST along with working the numerous concerts etcetera, which also affected our e bike use." – Non deployment email response

Officers who trained and did not deploy

An interesting subset of the trial are those officers who were trained but did not deploy. As part of the research shift returns were analysed. Over 20 officers were identified as participating in the training, without being deployed on e-bikes for a variety of reasons.

We conducted an email survey of these officers. The results showed the reasons for non-deployment were similar to the barrier to deployment that trial participants raised. The survey showed that four indicated they deployed only a few times and six of indicated they did deploy, but had either not completed shift returns or had been incorrectly identified as not deploying. In total we received responses from 25 of the officers queried about the circumstances around not deploying. Insights from their experience has been included where relevant in this report.

"Our e-bike use was disappointing. Despite my best intentions to task staff to deploy on them a mixture of other priorities, leave, injuries, last minute incidents, weather, rostering and so on meant they hardly got used." – Non deployment email response



The most common reason officers didn't participate in the e-bike trial after training was due to being redeployed or seconded to another role. Other common reasons given include taking time off work for injury, illness, annual leave, training or other priorities.

In the remarks submitted to us, officers who did not deploy indicated a preference to be deployed in pairs, the reason being safety. Challenges with rostering meant this wasn't always possible which seems to have resulted in less use of the e-bikes.

"I really do support the idea, but think to make it work we'd need to reassign staff to e-bikes on a fulltime basis, but realistically we don't have spare staff to do that."

"During the trial period I had in excess of 6 weeks annual leave."

Another officer commented that e-bike deployment wasn't practical to the local area.

"I did not think it was practical given my area and if I had been given more information or time to consider I probably would have declined given my work load."

Phase Two trial communications

Phase Two, participants told us they and their supervisors were confused about the trial. Some thought it was a Road Policing initiative, and that the tasks to be completed in the trial did not include other prevention activities. We also heard they had been told not to take the bikes out in the rain due to health and safety, while others thought they were allowed to use them in the wet. Some officers participated in the Americas Cup event, while others were told that e-bikes were not suitable.

Participants felt a nationwide communications strategy was lacking, which impacted how the trial operated, reducing understanding and cooperation.

"There was a lot of opportunity lost with the lack of communication and the way staff were recruited."

Day to day work

Districts also took different approaches to the operations of e-bikes. In one district they would often begin their shifts by heading in different directions, meeting up later to set up road checkpoints which they found particularly effective during peak traffic, school drop off and school pick up times.

Officers found effective ways to conduct road checkpoints, some used one officer to spot issues and another officer to stop vehicles where it was safer, or some had officers on opposite sides of the road spotting and stopping for each other. They would sometimes work with Road Policing officers on checkpoints. Officers felt they needed to constantly assess their safety, especially if alcohol was present or it was a violent situation.

Many officers said it would be better to be full time on the e-bikes, rather than part time. They found being in pairs was safer and more practical as one could watch





45 m
Avg Speed
15.9 km/h
Max Speed
32.8 km/h

out for the other and in Phase One they suggested e-bikes should have a special call sign to avoid Comm's not being aware they were on a bike.

"We needed our own call sign, we'd sometimes be confused for being on motorcycles too."

In Phase Two call signs were created, however despite being included in the operational orders, most participants said they didn't use them or stopped using them because they felt the call signs were causing confusion and additional work for colleagues on the frontline and in communication centres.

".. I didn't. If I logged in on bike sign it seemed like comms wouldn't check on me like they would normally. they'd leave me alone."

"Would be cool if when we logged in we could tick our devices we have, like a taser, and the e-bike."

Participants suggested improvement was needed for officers to communicate with each other while riding e-bikes, one suggesting trialling headsets similar to those used by the Armed Offenders Squad (AOS). Often communications between officers would be heard by members of the public.

"A few times riding in pairs and I was turning left but my partner was ages away and wouldn't see where I went. Would be good to talk about what we were doing and when but in a way that not everyone had to hear it."

"A few times I wanted to turn left and we went ahead."

Some participants felt e-bikes prevented them from doing bail checks as they might need to leave their bikes for a prolonged period of time. However other participants overcame this issue by locking the bike and placing it near CCTV cameras. At large events some participants felt security of the e-bikes was not an issue as there were so many people around.

"We had bike locks but didn't need to secure bikes much, never seemed to be an issue."

Officers told us about gear or bikes not arriving in time for training or in some cases not arriving at all, for example in Phase One the bike locks for one district never arrived.

Making e-bikes an easy option to use

Participants told us that getting out on e-bikes required additional planning. Some participants felt that once on a bike it was difficult to switch to other work. Officers applied different strategies to cope with changing uniforms and getting showered. The bikes weren't always conveniently located which may have caused them to be used less.

"My biggest challenge was getting myself in the right mindset to get out on the bike."

"Leaving the bike in the car garage would have been better – they were annoying where they were. Locate bikes with cars, that probably would have made a big difference to me getting out more".

While participants became used to having a battery some mentioned they felt anxious about running out of power. It was mentioned that some of the bikes had bigger batteries. There was discussion about whether bikes charge themselves from going downhill and braking.

Maintaining the bikes

While officers were told to take their bikes to the retailer to get repairs done, many found it more practical to do simple repairs (such as punctures) themselves. Though some told us they were not very skilled at this and would like training in basic repairs.

"That could be something to add to the training we didn't cover any of that off. Would have been so helpful to know about changing tyres."

"I need a spanner, that's all."

The project control overhead

The project's success was due to the efforts of the project team prompting, co-ordinating and managing participants and the gear needed to deploy.

Opportunities we heard

- Have officers full time on e-bikes
- Increased planning to utilise e-bikes
- An e-bike call sign for comm's
- Many participants said their own Webex group with taskings would have been awesome
- Stronger management of deployment within districts
- Review the use of call signs and how Police can recognise when an officer is on a bike
- Create the e-bike as a resource that can be assigned to an officer (or vice versa) like a car
- Conduct work to understand how officers on e-bikes could communicate with each other while riding, possibly using headsets



Having the right gear

Participants felt the equipment was well suited for trial, and with a few changes would be suitable for operational activities. Needing specialist gear to ride a bike might create some barriers to use.

The e-bikes and the equipment

This trial evaluated officers on e-bikes and not the e-bikes nor the equipment used. However, what we heard about the e-bikes and equipment should be considered in future decision making.



The bikes themselves

Participants told us any bike used by Police must be robust and have specifications suitable to its tasks, including battery life and power.

"Don't just buy things [equipment] based on cost."

Models of e-bikes used for training or deployment differed between districts and participants believed this could help Police identify which bikes were most appropriate. Everyone we spoke to told us their bikes were good quality and did the job well. Most suggested



Police should look at robust mountain type e-bikes with front suspension rather than a commuter type e-bike, however we heard in Phase One, each officer in one district had a different type of e-bike and the mountain bike wasn't as comfortable or seemingly as powerful as the other e-bikes.

Officers could take their e-bikes into approved supplier bike shops around the country for repair and advice, although we were told this was not often required.

The bikes were 'Pedal Assist' which conserved power, lasted longer and we were told are safer. Officers reported the bikes to be easy to use and not tiring and "offered enough assistance that you were not worn out". Most had no issues with the batteries and the bikes were usually charged between shifts although officers needed to be mindful of how much riding was being done and remaining battery life. One participant told us they had run out of power after five hours of riding.

"They are heavy and cumbersome to ride afterwards (when the battery has run out) as we are pedalling on 28kgs."

The bikes in Phase One were limited to 250W.

"The motors were great, I did 600km in distance on the trial."

"I did 3 full shifts before I had to recharge my bike!"

Officers asked for Police to ensure bikes are provided that have the correct size frames for the rider's size. They also mentioned that a strong and sturdy stand is a necessity and the public can get upset if you lean bikes against their property. Many participants commented on how much they enjoyed using the e-bikes.

"Well, that sturdy bike stand was the best because you're not always riding the bike. It meant I could stand my bike quickly and then focus on the person I was dealing with."

"The stand was the piece of the bike I used the most."

"e-bikes are much better than a push bike, I wouldn't want to do this trial on a proper pushbike that's for sure."

The uniform

Participants felt the uniform was practical, professional, and worked well with police equipment. They appreciated the obvious efforts that went into creating it.

All changes to New Zealand Police uniforms must be approved to ensure they meet legal requirements, match the New Zealand Police corporate look, are safe and are comfortable. The non-standard uniform issued was only approved for use on the trial and as a result most officers needed specific clothing ordered.

In Phase Two there was a lot of confusion as to the process of obtaining uniforms and equipment.

We heard it was sometimes challenging to find suitable off-the-shelf clothing, so pieces needed to be custom made. Officers and stakeholders told us there would have been less sizing issues if officers had measurements done for them rather than size themselves. Invoicing and purchase orders didn't always match and small items were often added or removed.

"Getting the uniforms was a bit of a headache, the wrong clothing items got sent to the wrong people."

"People don't provide the right measurements."

"The only guaranteed way of removing this issue is people trying on samples."

The shorts were well liked by most and many felt they (like some other pieces of the new uniform) would be suited for other Police activities.

"I wore them all the time!"

Some officers wore their own personal shorts for a time due to receiving shorts late or receiving the wrong size. They explained the shorts they owned were almost an exact match. Officers said they needed a second pair of the Lycra liners worn under their shorts as these are like underwear and they were difficult to wash and dry between shifts. In Phase Two, two styles of shorts were initially offered, but due to supply issues only locally sourced shorts were used. The need for pockets and storage space was emphasised. Long trousers were used less, but it was noted that the weather was mostly fine while the officers were on the bikes. Some packages were delivered to the wrong address or got lost for a time in the station. Many smaller stations have no front counter which make package delivery harder.



We heard the body armour was heavy and changed the officer's centre of gravity, but didn't seem to cause much discomfort to some, indeed some said the SRBA was more comfortable to wear on a bike than on foot as they were less sweaty. Others commented that SRBA was the biggest hindrance, and "we got used to it, but it was never comfortable". Participants said the option to have sunglasses was fantastic as they protected eyes from wind, bugs and small stones from the road. Although it was mentioned the sunglasses could have been more fashion neutral so officers weren't pegged as a 'rocker'.

"..... they had purple grey lenses and were almost like safety glasses."

Participants told us the new SRBA were easier to use on the bikes than the old, partly due to the flexibility of appointment storage.

"SRBA was fine on the bike, no issues."

Overall participants thought the gloves were good but would have liked a higher grade glove with Velcro openings. They identified a need for a light-weight windbreaker in cooler weather that can go under the vest for improved protection from the elements. The jersey didn't provide any extra warmth on chilly windy days and duty jackets were sometimes worn under the SRBA.

"Those jerseys are like wind sieves!"

Caps were much easier for participants to use than a forage hat which can fall off and are uncomfortable. Caps were easy to fold and pop into a vest pocket or pannier when bike helmets were worn. Many told us they wore the caps continuously when not riding and some told us they hardly wore them at all. Initially some were wearing caps under their helmets for sun protection but soon discovered this compromised protection provided by the helmet. There is still a need for some kind of sun visor while wearing the helmet.

"We should have them for general caps at all times, we wore them a lot! Great for sunny days."

"Those caps were so much more comfortable than our forage hats."

Participants told us there were some early issues with the helmets, the 'one size fits all' option didn't fit everyone, but this was rectified before launch. There wasn't a noticeable difference wearing either the grey or fluoro helmets. Officers were supplied black shoes that were better suited to cycling than boots, these were off the shelf and originally came with bright green laces, which Police swapped for dark laces. Frustratingly some boxes of shoes showed up without the laces. In Phase Two the most common negative comment was about the shoes, primarily about the sizing or the impracticality of using them. Other parts of the uniform were generally liked and participants told us that some items would be suitable for other New Zealand Police duties.

"Hated the shoes, my feet went numb in thirty minutes."

"The one size fits all wasn't a one size fits all."

"The socks were probably the best thing, they're really good ones!"

"The uniform would make for a pretty cool summer uniform here in Wellington!"

Because Phase Two of the trial covered more of the country including especially hot areas we were able to discover participants' views on uniform suitability to these climates. They told us the new uniform items were well suited to the bikes and for other roles they had. There was a general view that the new uniform items were better suited to the warm climate than the old uniform.

"We have forty degree days here, and wearing SRBE and reflective gear on top, you have to keep biking to get the breeze on you."

"They went to a lot of effort to make sure we had good stuff, the right size and all and that we were comfortable which was really nice."

"Was great, everyone was pretty jealous of us because of the shorts, shoes and socks."

The uniform might be a barrier

Participants told us specialist training and uniforms would be a barrier to more general use of e-bikes, especially in areas where a high turnover of staff would make it harder to train and equip all officers. They had to plan the day well and decide whether to deploy for a half day shift, the main reason given for this being a uniform change.

"I had to make a real conscious effort to be on the bikes because I'd have to change uniform."

"It's not like going out for a walk, there's some planning involved."

"I can't sit around in my cycle gear before I go out."

"You get back hot and sweaty and then you've got to get changed back into regular uniform, you need to have a shower and all that."

A common factor raised by participants and project members was supply issues encountered during the trial. We were told these were primarily due to either production or shipping issues related to COVID-19, small volumes meaning it was not practical to hold stock. In addition, because of the sizing issues discussed above it proved difficult to get the right sizes to everyone on the trial in a timely manner. We heard that First Aid kits were sourced, but participants did not receive them

"The numbers we buy are so small."

"It's always a problem for little things like this."

E-bike accessories

Participants felt the carrier bags (panniers) were too flimsy to carry documentation and equipment and could be improved to be more practical and secure. Some did carry documentation and items like a small COVID-19 pack with a mask and gloves, a first aid kit, lunch, small tools and multi tools. Some officers felt their gear may have been unsafe in the carrier bags. Officers specifically suggested panniers be at least A4 size to enable them to carry documents and spare clothes in case the weather changes. There were other suggestions such as mirrors being attached to the bike or the helmets to improve rider safety.



Officers did tell us most of the work they needed to do could be done via the mobile phone applications such as OnDuty and some requested a phone holder on the front of the bike. Participants told us it was difficult to filter messages received while riding as notifications do not impart the nature of the message. It was suggested using smart watches or a mounted display to let riders know the content and nature of messages. GPS usage did reduce battery time on their phones.

"I was able to do most work via OnDuty."

"The phone does enough and I could call for more forms if needed, but I didn't need to."

"A phone holder on the handle bars would have been good so we could look at our jobs really quickly, I felt like I was always patting myself down looking for my phone."

Some participants felt the locks provided were not up to standard.

"We need a way to track our bikes if they were to get stolen."

"GPS tracking would be good."

Opportunities we heard

- Continue to provide e-bikes that have the correct size frames for the officer

- Mountain type e-bikes with front suspension
- Ensure e-bikes have a robust stand
- Second pair of Lycra liners worn under shorts
- Full fingered gloves for colder days
- Sun visor on the helmet
- Fitting the bikes with side mirrors
- Fitting the helmets with side mirrors
- Supply the same range of bikes to all regions seeing which bikes work best and in which location
- Mount a display for urgent notifications and messages on the e-bike
- Use smart watches for urgent notifications and messages on the e-bike
- Shorts in the standard uniform
- Caps in the standard uniform
- More practical carrier bags
- Trialling a few different seats especially from brands that are easy to swap
- Hand grips
- Ensure everyone has the same type of battery so they can be swapped if needed
- Enable officers to carry spare clothes such as a rain jacket in case the weather changes
- Use of A4 sized panniers to carry documents
- Add GPS trackers to the bikes in case of theft

Phase One observational research

During March 2020, the EBPC Service Design team went on ride-alongs with Wellington officers to understand their opinions and views of the trial, although ride-alongs were limited to two partial shifts they provided valuable insights.

Public reaction

The public's response to the officers on e-bikes was positive overall. People were curious and would stop and watch the officers in action. Some members of the public would wave and say hello, or stop to converse with the officers. Most people who stopped asked questions like:

- How long have cops been using bikes?
- If I join Police can I be a cop on a bike?
- Do you enjoy using the e-bikes?

"Sign me up now! And give me a bike! I'll definitely become a cop if I can have the option of riding around on a bike all day." – Member of the public

"Fantastic idea! Hope the trial goes well and that they become a permanent fixture on our roads." – Member of the public

The officers on bikes said they enjoyed the chatter at traffic stops with other cyclists and road users which was largely positive, it gave them the opportunity to educate people and check in. We were waiting in traffic when a road user started talking to us:

"Officer, our car was broken into last night and we don't know what to do, should we go into the station?"

— Member of the public

The officer told them to call the 105 number and the person on the phone would help them through the next steps which was quick sound advice. The person thanked the officer as the lights went green.

We also ran into people who were rude and joked about the officer's ability to arrest people because they were on bikes, and one man made fun of the officer's shorts:

"Got the legs out in the sun today ay? Hahahaha! What will be next." — Member of the public

While riding with the officers through traffic, we noticed drivers would drive more cautiously, give way to the officers without being requested to do so, and they would usually follow behind the officers without overtaking them. At times officers would signal to road users to pass them to keep traffic flowing.

Benefits and delights

The officers expressed how much they loved getting out on the e-bikes and ride around the city. They said they are a great way of getting around with easy manoeuvrability through traffic and an effective way of doing community patrol and increasing interaction with the public.

The officers said riding e-bikes meant they were able to:

- Catch up to a vehicle so they could signal the driver to pull over
- Easily navigate around the city and cut through narrow laneways and shared pathways to get to where they need to be
- Do community patrols around areas such as Wellington's waterfront and Oriental Bay
- Ride effortlessly to get up hills
- Ride all day without getting tired



When observing the officers riding through stopped traffic, we noticed how easy it was for the officers to look into vehicles to check whether drivers were on their mobile phones and people were wearing their seatbelts. When the officers spotted a driver on their phone, they would knock on the window and signal to the driver to put the phone away. Most drivers we observed responded in a friendly and polite manner.

We also noticed how easy it was for the officers to quickly setup roadside checks that focused on distracted drivers on their phones and people not wearing seatbelts. The officers didn't need to spend any extra time trying to locate car parks as they could just park their e-bikes on the footpaths, out of the way of pedestrians (they also had bike locks if they were going to be leaving them for some time). It also meant they could blend in with the surrounds a bit more and spot people without seatbelts or on phones before members of the public spotted them.

While waiting at a big busy intersection we heard sirens and saw that drivers were confused about where the sirens were coming from. An officer on his e-bike cycled out into the middle of the intersection to halt traffic so two fire engines could get through. This was incredibly helpful for everyone on the road and would not have been easily done in a police car.

The ability to manoeuvre fast and easily was a huge advantage.

Officers said the e-bikes provided them with more ability to undertake road policing prevention activities, such as giving verbal warnings to distracted drivers and people not wearing seatbelts, as well as deter disorderly behaviour. They said e-bikes give increased visibility of police in our communities.

Limitations or frustrations

None of the officers expressed any significant frustrations. However, they did highlight a few limitations:

- Cannot carry much gear on the e-bikes. However it is possible to carry more on an e-bike than a normal bike.
- Cannot transport detainees, they have to call in an i-car (this is no different to current practice for Beat Section Staff).
- Cannot pull over vehicles that are speeding.
- Do not have as much presence as other Police vehicles especially those with lights.
- Constraints around patrolling during the evenings or night and in variable weather.

The officers also felt the recommended speed limits were too slow and that it was in fact difficult not to exceed that limit. One officer who usually polices on a police motorbike explained he liked the e-bikes but preferred his motorcycle. He said there's wasn't a huge amount of difference between the two except the motorcycle was better because of its visibility, lights and sirens and speed.

Another situation observed during a checkpoint was when a driver was spotted clearly not wearing their seatbelt and were signalled further down the road by an officer on foot to pull over. Their windows were down and the driver and passengers pretended as if they hadn't seen the officer and continued on through the lights. The car number plate was recorded.

Work arounds employed by the officers

One work around observed was adjustment of the seating height on the e-bikes. The e-bikes purchased for the Wellington region are a large frame, which is more suited for a tall rider. The officers had cut the length of a seat post from a normal push bike, which they could refit to one of the e-bike if the rider was slightly too small for the frame.

Stories

One of the officers shared a story about how they stopped multiple drivers using their mobile phones while driving within a space of 1.5 hours during a routine roadside check.

All the officers agreed that they have seen an increase in drivers using their phones while driving. They said:

"People just aren't getting it! Even with all the marketing around not using your phone while driving, people still do it anyway."

"We get every excuse under the sun, such as 'I was just changing the music' and 'I was looking to see the directions on the GPS (Google Maps)."

In contrast, officers said they have noticed a decrease in people not wearing their seatbelts.

Another tool in the toolbox

E-bikes are a flexible mode of transport with their own unique attributes. They fit with the many areas of policing and should not be limited to use by the frontline, during daytime hours, in good weather or on Road Policing.

"The opportunities are endless and this trial has given us a taste."

E-bikes could be used for the whole of policing

While the officers on e-bikes trial was run by National Road Policing Centre there was a strong view amongst participants that e-bikes could be used by the whole of policing.

We were also told officers on e-bikes could independently perform most of the inner city Road Policing calls, were often first on the scene, helped with traffic management and were well suited to assisting in emergency situations. Officers felt they could have performed a wider range of activities if Police understood the e-bikes capabilities. We heard e-bikes



would be suitable as general service bikes for Police or for transport between locations in a similar way to how scooters are used for getting staff to meetings. Other staff asked participants about using e-bikes, especially in the city where parking is an issue.

"You could have a fleet of bikes going between Central and PNHQ."

"E-bikes absolutely fit with all of policing."

"I think they feel threatened like 'this is the way we're going' but actually its just another tool/way of policing."

"I think they're getting it now, and understand why we're doing it."

Participants thought it would be great to put more officers through the cycle training days so if they did want to jump on a bike they could.

"If you've got people trained they could definitely choose to use them on their shift."

In Phase Two it was noted that some operational supervisors did not appreciate the nature of e-bikes, that assigning a staff member to an e-bike did not mean that the person was extracted from normal duties for that shift, rather, that their mode of transport was primarily or initially an e-bike.

Officers in areas not involved in the trial told us they would like to use e-bikes. We heard some Waiheke Island officers would prefer to have e-bikes on the island rather than a car because they could get around and go on the beaches and talk to everyone.

Participants told us that criminals often use bikes themselves and Police having e-bikes would make dealing with them easier as it means the officers can take the same shortcuts the offender takes and places them on par with them when they are riding off.

"We are taking the same shortcuts offenders will take."

"It puts us on a par."

Selecting when to use e-bikes

Participants told us that while there are many opportunities to use e-bikes, like any other form of transport there are some occasions where they would be less suitable. The primary reasons e-bikes might not be suitable are when:

- Passengers are required to be carried
- Large amounts of equipment are needed (for example forensics)
- The bike takes officers out of their assigned role
- The speed zone is over 50 km/h

E-bikes can be used by anyone

Participants told us e-bikes are easier to use, require much less effort than regular bikes, could be and were used by a wide range of officers and didn't require the rider to be ultra-fit.

"I could keep up with the younger officers."

"I'd say I was averaging 30km a day and about 5 hours of riding."

"I never got unpleasantly hot, it was no different than being on a motorbike. You didn't get worn out."

We heard e-bikes could be a useful tool to return injured, older or unfit officers to operational roles and they could also be a good way to keep officers fit and healthy.

As with all parts of Policing some staff are not well suited to biking and this type of work. This may be an issue due to the overhead associated with training and equipping the officers.

One former Wharf Police officer suggested that e-bikes would be especially suitable for Wharf Police.

"Wharf police because I've worked in there down in Wellington going from place to place but one of the cops had his own bike. 3Fs could be good too."

Another officer had just come off leave from an injury and felt going on the bikes first when she returned to duty was very positive.

"It was awesome to be engaging with the public in such a positive way before coming back on full time."

E-bikes could be used in most weather and at night

Participants told us the main reason e-bikes were not used in poor weather was because the trial had specified dry weather without adverse conditions and in daylight hours. They felt e-bikes could be used in variable weather conditions, many said they wouldn't mind riding in the rain and some pointed out that they go out in the rain on their motorbikes. There would likely be some limitations to e-bike use in adverse weather due to safety concerns or operational efficiency and there were concerns rain would lessen the ability of officers to connect with the community as the public would not want to be talking to

them in the wet. They said e bikes could have been deployed to events, road checkpoints or to help PST at night and not just during the day. Some participants told us they agreed amongst themselves that if it got too wet they would not deploy.

Officers enjoyed riding the bikes

Officers enjoyed being able to ride while working, however it must be noted officers self-selected for the trial and not every Police officer would enjoy cycling.

"They were able to cover big areas quite quickly on those e-bikes, the staff were loving it!"

"I felt that I achieved something."

Seeing more

E-bikes are not as noticeable as a car and this means they can be used as a tool for covert patrols. One officer told us when they were out looking for a person of interest they could quietly ride down streets and lanes, stand up on the pedals and look over fences with little chance of being seen. Police cars are often spotted quickly and you can't see as much. Another spoke about how they had used bikes in Australia for police but in plain clothes, cycling around with a radio to communicate to other units nearby. During training days in Phase Two we heard a participant who is AOS did a covert mission and drove past a house they were potentially going to be visiting, doing some low key scoping.

"You're sort of like an unmarked car at that point, particularly if you're in plain clothes."

"Mufti cars are so easy to spot, but bikes, not so much. There are a lot of people at the station who could benefit using them for sure."

Participants explained being on bikes meant they could see more than if they were in a car as they travel at a slower pace and had a wider field of vision so it was good for finding people or spotting problems.

"You can see so much more on a bike, you can ride around and see who's out and around and often being in a car you'll miss things."

"You can see more on a bike too like if people were using phones in their laps and stuff -you're higher up."

Our modes of transport

Participants told us e-bikes are a tool that could be used by nearly the whole of police, they have unique strengths and weaknesses and it is important to understand them in context of the other modes of transport Police have. An e-bike is only suitable for one person, although they can operate in pairs and apply similar processes to foot patrols, for example calling for additional support to transport



people, themselves and the bike back to the station. One interviewee described this exact situation and said they had at least six members of the public offer help. They said it was more difficult to walk with someone back to the station with their bike because you needed both hands and to react quickly. Others described the person needing transport getting agitated while waiting for the car. As addressed in the 'Going Places' section e-bikes can move with efficiency in a city.

"If we ever needed anything we would call the road team and they'd bring it to us, wasn't a drama at all."

"Anything you can do on foot, you can pretty well do on a bike."

"[e-bikes can] give people a respite from being on their feet."

Some participants had done their own calculations showing New Zealand Police could potentially purchase and maintain ten e-bikes for the cost of one patrol car.

"Trying to police riverbanks etc, they had horses in the past and what's more cost effective?"

Officers specifically told us that e-bikes would make a big difference to road safety, especially in areas where speed was generally slower and traffic often stops and even more so at peak traffic times.

"If they use them for CBD areas, yes another good tool for the toolbox."

"Great tool in Road Policing. I issued 12 tickets from the bike and it was fantastic for cell phone and seatbelt compliance in heavy traffic." – non deployment email response

Opportunities we heard

- Use e-bikes for the whole of policing
- Attending all types of calls for service
- Ensure the whole of policing understands the capabilities of e-bikes
- Ensure the whole of policing understand e-bikes as another mode of transport
- Train more officers to use e-bikes so that if they did want to jump on a bike they could
- Increased use in variable weather
- Night time operations
- A fleet of general services bikes for the rest of the frontline to use
- A fleet of bikes for non-sworn staff to use, for example as transport between sites
- "Having general service bikes available for staff would be great for meetings and things, you could have a fleet of them between Wellington Central and PNHQ"



Attributes of our modes of transport

"We are not trying to change your business, but giving you another option in terms of transport."

"There are a lot of pros and cons for all modes of transport but the e-bike fits in the middle and fills a gap."

This table represents what participants told us about different modes of transport.

			决	6	
	e-Bikes	Push Bikes	Foot	Motorbike	Standard Car
Efficiency of access in city	****	***	***	***	**
Efficiency of access across the city	***	**	*	****	****
Access through traffic	****	****	***	***	*
Transporting people	*	*	*	*	**** Note 1
School visits	****	****	***	****	****
Access in pedestrian areas	****	****	****	*	*
Access through crowds	***	***	****	**	*
Connection with people	****	****	****	**	*
Carrying specialist equipment	*	*	*	*	****
Carrying items such as lasers	***	*	*	***	****
Carrying forms	**	*	*	★★1/2	****
Easy for officer to leave vehicle	**	**	****	**	****
Suitability for most fitness levels	***	*	**	***	****
Environmental sustainability	****	****	****	**	*

Note 1 – If 2 officers are in the vehicle

Some tasks performed during the trial

And finally we wanted to share with you a selection of the jobs we heard that were attended and/or whole of policing activities completed by officers on e-bikes.

•	Attended cycling events	Suicides
•	Speed enforcement	Attended events
•	Attended crashes 7	Take Pressure off PST
•	Responded to other calls for service	Lost children
•	Missing persons	Speed laser
•	Alcohol breaches	RIDS
•	Car crashes	University orientation
•	Theft f	Providing advice to the public
•	Public disorder	Arrests (Not just Road Policing)
•	Educate cyclists 7	COVID-19 patrols
•	Checkpoints	Looking for offenders
*	Trespassing	Attending assaults in the CBD
•	Road Policing / Road Safety	Riding through the botanical gardens
•	Getting to landmark areas	Directing traffic
*	School and Crèche visits	Visibility and community work
*	Patrolling parks	Patrolling pedestrian areas
*	Speeding, phone and seatbelts enforcement and education	Identifying traffic hazards
•	Assist PST	Education
•	Community engagement	Traffic management
*	Prevention activities (especially in high risk areas)	School Patrols
•	Bike safety campaigns	