

Chairperson and Community Board Members
PAEKĀKĀRIKI COMMUNITY BOARD

2 OCTOBER 2018

Meeting Status: **Public**

Purpose of Report: For Decision

ELECTRIC VEHICLE CAR CHARGERS AND PARKING

PURPOSE OF REPORT

- 1 This report seeks the Paekākāriki Community Board's endorsement for the installation of an Electric Vehicle Fast Charger (50 kW DC) in the Paekākāriki village.
- 2 To promote the use of the Electric Vehicle Fast Charger the report also seeks endorsement for changes to current parking designations to 'Electric Vehicle Only' parking with a time restriction of P60.

DELEGATION

- 3 The Paekākāriki Community Board has the delegated authority to consider this matter under Part D of the Governance Structure and Delegations:

*“Authority to approve or reject officer recommendations relating to **traffic control and signage matters** for existing local roads, except those matters that involve significant safety issues. Community Boards will be consulted about these matters but final delegation will rest with Council officers.”*

BACKGROUND

- 4 The Energy Efficiency Conservation Authority's (EECA) have announced their decision to fund the 'Horowhenua and Kāpiti Electric Roads' project through its Low Emission Vehicle Contestable Fund (LEVCF). This project involves installing nine Fast Chargers (50 kW DC) in strategic locations in the Kāpiti and Horowhenua Districts. It is a trans-regional partnership between Electra, ChargeNet, Horowhenua District Council and Kāpiti Coast District Council.
- 5 The project aims to support a transition to low emission transport options by establishing a nationwide recharging network and encourage the uptake of Electric Vehicles within Horowhenua and Kāpiti districts and supporting business, private drivers and passengers of electric vehicles (EV's) to easily reach destinations in Horowhenua and Kāpiti.
- 6 The project assists the government's aspirations to reach its target of 64,000 electric vehicles in 2021, by:
 - Strengthening State Highway 1 and 57, enabling higher vehicle capacity, reduced queues and wait times.

- Enhancing visibility of charging facilities within the Kāpiti and Horowhenua districts themselves, leading to increased local electric vehicle purchases by businesses and residents.
- 7 The Horowhenua and Kāpiti Electric Roads' project costs are \$545,000; this includes a \$40,000 contribution from the Kāpiti Coast District Council. The project is co-funded by Horowhenua District Council, Electra and ChargeNet NZ with match funding from EECA.
 - 8 Five fast chargers are to be installed in key locations around Kāpiti, the proposed sites are:
 - Paekākāriki
 - Raumati Beach
 - Paraparaumu (x2)
 - Waikanae Beach

ISSUES AND OPTIONS

Issues

Paekākāriki Fast Charger

- 9 A 50kW DC Fast Tritium Veefil EV charger is considered the best value for money and offers conveniently short charging times, with a power level supported by the majority of electric vehicles manufactured this decade. A 50kW DC charger will offer a Nissan Leaf an 80% battery charge in 20-60mins. The charging capacity varies according the make and model of car.
- 10 The charging point is a limited resource, so parking restrictions are desirable. A restriction on the type of vehicle that can use the park to "EV only" will discourage petrol and diesel vehicle owners from occupying it, so it is available for EV cars that need to charge. A time limit on the park will likewise motivate drivers to move their vehicle after it has charged.
- 11 'EV charging' signage will also increase the visibility and perceived accessibility of electric vehicle infrastructure; this in turn will help encourage the uptake of EVs.
- 12 To ensure that the charger is accessible to all EV models existing angle or parallel parks need to be changed to perpendicular parks.

Sites options:

- 13 It is important to note that a range of components are required for the Charger infrastructure including, an adequate power supply, lighting, a perpendicular park layout (or space to allow for this layout), accessibility and visibility. The positioning of the charger will ideally be close to local businesses and amenities to benefit local businesses and EV drivers without causing disruption to local residents.
- 14 Three sites have been identified as optimal locations. One space is adjacent to number 9 Wellington Road; another is adjacent to 2 Ames Street and third is the village parking adjacent to 19 Beach Road.
- 15 To ascertain the preferred location, type of parking restrictions and views on installing a public Charger in Paekākāriki staff undertook a survey of the local

business community, EV users and Paekākāriki residents, the results of 100 respondents showed:

- Over 90% wanted an EV charger installed in Paekākāriki
- 60% preferred 9 Wellington Road
- 29% preferred 2 Ames St
- 11% preferred 19 Beach Road
- 70% preferred 2 EV only P60 parks
- 30% preferred 1 EV only P60 park

OPTIONS

16 An EV charger (50kW DC) is proposed to be installed in Paekākāriki. This report presents three site options for the charger and designating parking restrictions to support its use.

Option 1

Wellington Road **Option**

Installing the Charger adjacent to 9 Wellington Road will keep premium parks on Beach Road free for all drivers. Changing the parking layout to perpendicular only requires repainting the lines. While further away from the shops it is accessible to the tennis courts, bowling club, library and public toilets.

Recommended Parking Restrictions are 'P60', 'EV only' for two parks. This is the preferred option as it reflects the survey results undertaken in August/September.

Option 2

Beach Road **Option**

Installing a Charger on Beach Road means that the EV parking will be located in the town centre close to village shops and cafes. It will also be easy to locate for out of town EV users who require the charger as it will be visible upon entrance to the Village via State Highway one.

For a Charger to be installed at this location the parking layout needs to be altered from an angle to perpendicular parking which will require additional space. This could be achieved through utilising some of the space where there is currently a garden and avoid losing other carparking through layout changes.

Recommended parking restrictions for this option is, P60 'EV only' for one park as car parks are at a premium in the village centre.

Option 3

Ames Street **Option**

Installing the Charger adjacent to 2 Ames Street will ensure premium car parking remains in the village centre on Beach Road for all drivers.

As with Option 2, the parking layout needs to be changed to a perpendicular (or right angle) park - this will require cutting into the berm to reconfigure the parking layout. Recommended parking restrictions: 'P60', 'EV only' for two parks.

CONSIDERATIONS

Legal considerations

- 17 The Council's Legal Advisors have confirmed that there are no legal considerations.
- 18 The signage and road-marking used are in accordance with New Zealand Transport Agency (NZTA) guidelines. NZTA have gazetted standard symbols for EV charging and parking and these will be used.

Financial considerations

- 19 The Council's \$40,000 contribution has been allocated to this project using funding from Strategy and Planning. There are sufficient funds to support this initiative within the Environmental Sustainability budget.
- 20 The 50kW DC charger infrastructure, installation, subsequent signage and road marking costs are covered by the 'Horowhenua and Kāpiti Electric Roads' partnership.

Tāngata whenua considerations

- 21 There are no known issues relating to iwi or the Treaty of Waitangi.

SIGNIFICANCE AND ENGAGEMENT

Consultation already undertaken

- 22 An email informing Council's intention to submit a proposal to the EECA Low Emission Vehicle Contestable Fund was sent to all Community Board members on March 15th 2018.
- 23 An initial announcement of successful LEVF applications was announced by EECA on August 7th. Following this announcement, a notice was put out in the Elected Members Bulletin available to community board members.
- 24 Board members were invited to a site visit. The board and chairperson were advised through email and phone call about site options. Their feedback was given on the development of survey for the community and EV drivers.
- 25 Paekākāriki residents and EV drivers were invited to offer their option on sites and parking restrictions. The results of this survey has informs recommendations in this report.

Publicity

- 26 An initial announcement of successful LEVF applications was announced by EECA on August 7th. A subsequent media advisory by Kāpiti Coast District Council followed on August 9th.
- 27 Once the chargers are in place further publicity will occur through the Council's media channels to promote their placement and uptake.

RECOMMENDATIONS

- 28 That the Paekākāriki Community Board endorses the installation of an Electric charger in Paekākāriki, and:
- 28.1 Agrees to the Wellington Road option outlined in this report as the location for the installation of an EV fast charger.
 - 28.2 Recommends to Council that parking restricts be made to support the EV charger in Paekākāriki by changing the designation of two 'EV only' P60 parks.
 - 28.3 Endorses the change of parking to perpendicular alignment to support EV charging infrastructure.

Report prepared by	Approved for submission	Approved for submission
Vanessa Crowe	Nicki Williams	Sean Mallon
Sustainable Communities Coordinator	Acting Group Manager Strategy and Planning	Group Manager Infrastructure Services

ATTACHMENTS

- Appendix 1 Cost of chargers and timeline
- Appendix 2 Sites and design of standard 'EV only' signage and ground marking
- Appendix 3a Results of survey to residents
- Appendix 3b Results of survey to EV drivers

Appendix 1: Projects costs and timeline

Organisation	Contribution	Overall percentage
Electra (Project Lead)	\$80,000	14.7%
Kāpiti Coast District Council	\$40,000	7.3%
Horowhenua District Council	\$40,000	7.3%
ChargeNet NZ	\$130,000	25.7%
SUBTOTAL	\$300,000	55.0%
EECA Co-funding	\$245,000	45.0%
GRAND TOTAL	\$545,000	100.0%

Timeline**First 90 days (August – October 2018)**

- a. locations selected, and formal community consultation
- b. electricity connections requested
- c. EV Charger Units ordered
- d. branding of units arranged
- e. detailed site plans drawn up

Following 90 days (November 2018 – January 2019)

- a. electricity connections arranged
- b. charging units and associated gear delivered on site and installed (civil works and electrical works)
- c. electrical testing, inspection, and livened
- d. location added to Charge Net NZ billing network and public maps

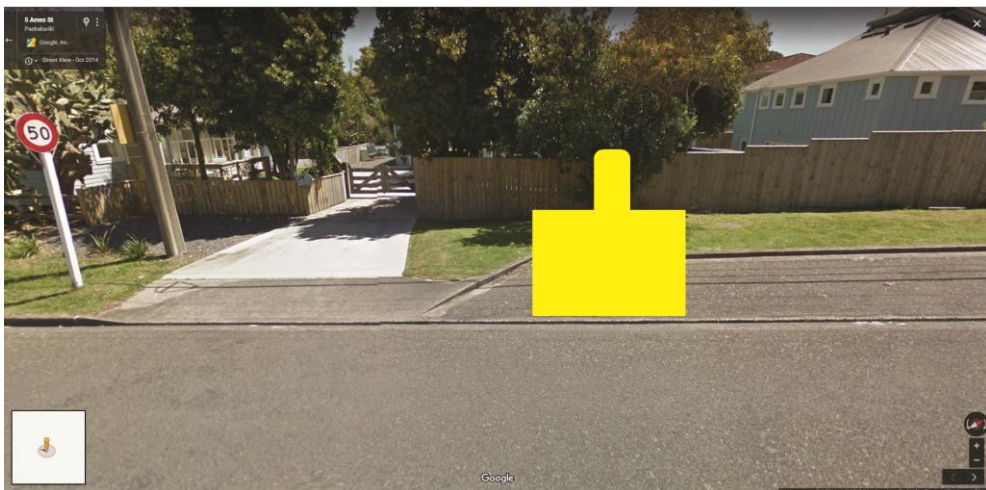
Subsequent 90 days (February – April 2019)

- a. promotion and public launch of sites (Facebook and local newspaper media release)
- b. contingency for installation in case of unforeseen delays

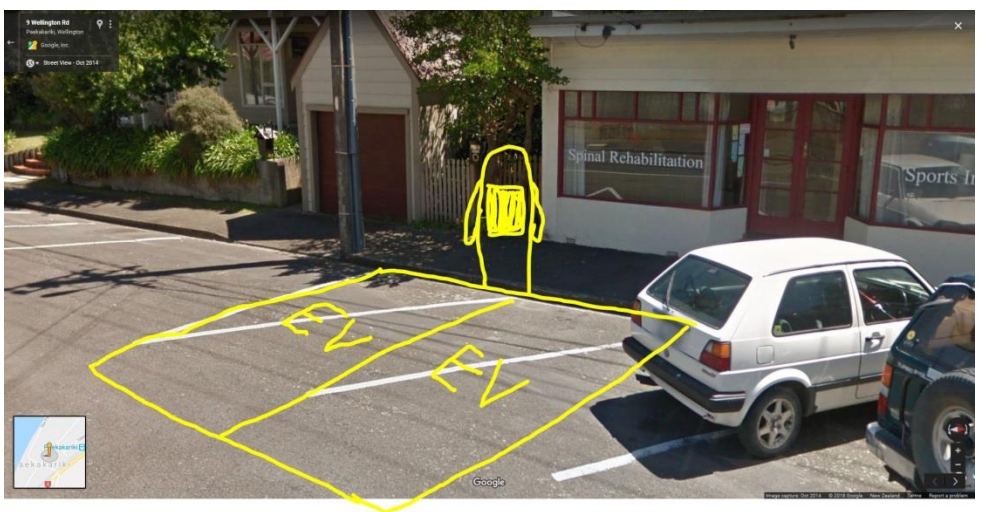
Appendix 2: Sites for chargers and signage



19 Beach Road



2 Ames St



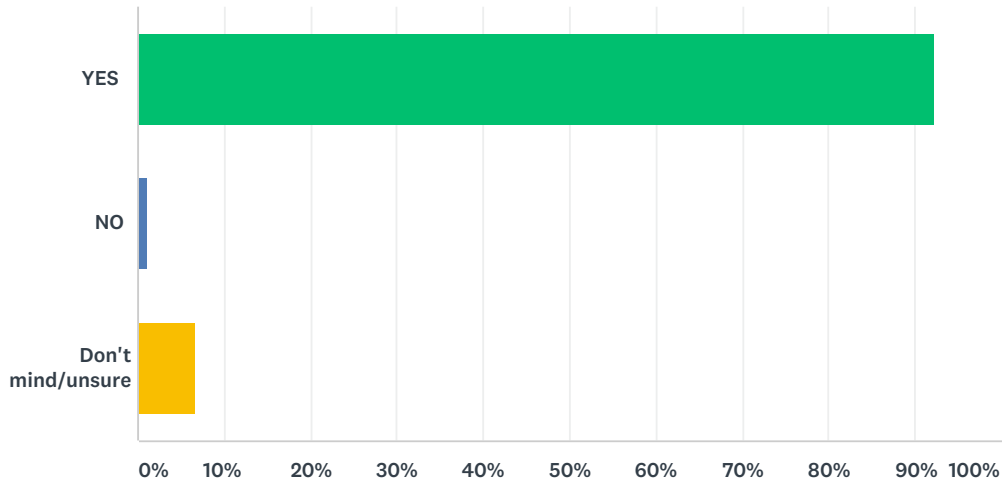
9 Wellington Road



Charging signage and visualisation of EV Charger

Q1 Do you want an EV charger in Paekākāriki?

Answered: 91 Skipped: 1

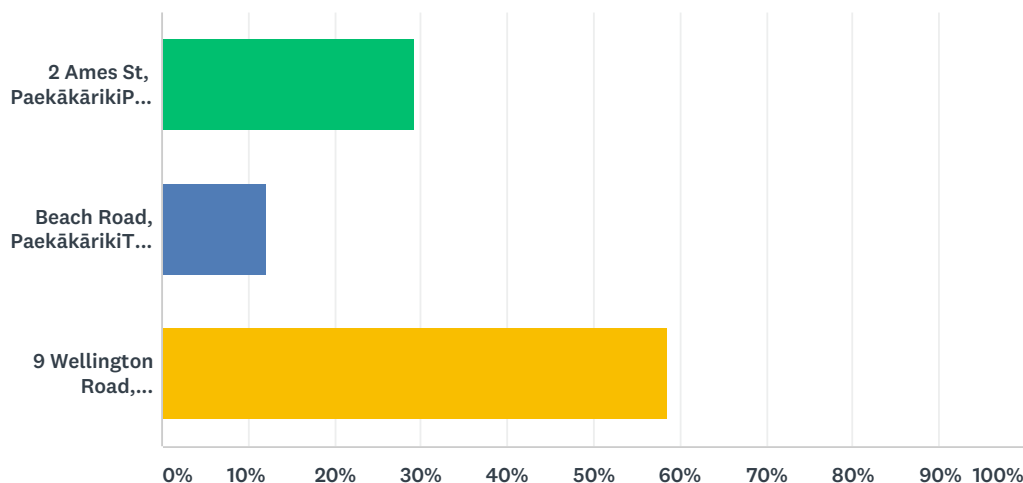


ANSWER CHOICES	RESPONSES	
YES	92.31%	84
NO	1.10%	1
Don't mind/unsure	6.59%	6
TOTAL		91

#	ANY COMMENTS OR QUESTIONS?	DATE
1	I have an EV, and given the range of the Leaf (the most popular EV on the road, this would make a huge difference to encourage others to purchase for commuting trips to Wellington City)	9/17/2018 4:18 PM
2	Depends how you define Paekākāriki's boundaries. Could include the Highway, Fisherman's table etc.	9/16/2018 12:04 PM
3	2 would be good	9/16/2018 7:50 AM
4	Yes but I haven't got a EV yet	9/13/2018 7:36 AM
5	The charging station will serve a very small proportion of people and take up space that could be used by amenities serving more people. To serve a larger number of cars these spaces will need to be multiplied, becoming an eyesore.	9/13/2018 6:32 AM
6	Excited about this initiative. Well done	9/12/2018 8:38 PM
7	This will attract EV drivers into Paekakariki	9/12/2018 8:05 PM
8	Please keep Beach Rd clear of any loss of carparking for residents	9/11/2018 6:59 PM

Q2 Where would you prefer to see an EV fast charger installed?
 Installing a fast charger requires the following things: adequate power, lighting, accessibility, a perpendicular carpark, visibility & safety. Location is important - a well positioned charger makes a difference to both drivers and local business. Here are some options:

Answered: 82 Skipped: 10



ANSWER CHOICES	RESPONSES
2 Ames St, PaekākārikiPositioning the charger here will keep premium parks on Beach Road free for all drivers. The parking layout needs to be changed to a perpendicular (or right angle) park - this will require cutting into the berm to reconfigure the parking layout.Suggested parking restrictions: 'P60', 'EV only' for one or two parks (the second park enables drivers to queue for the charger).	29.27% 24
Beach Road, PaekākārikiThis site is super accessible to our shops and cafes. The parking layout needs to be changed from an angle park to a perpendicular one - to avoid losing a park through changing the layout, the shape of the adjacent 'Peace Garden' will change. Suggested parking restrictions: 'P60', 'EV only' for one or two parks (the second park enables drivers to queue for the charger).	12.20% 10
9 Wellington Road, PaekākārikiPositioning the charger here will keep premium parks on Beach Road free for all drivers. Changing the parking layout to perpedicular just requires repainting the lines. While further away from the shops it is accessible to the tennis courts, bowling club, library and public toliets. Suggested parking restrictions: 'P60', 'EV only' for one or two parks (the second park enables drivers to queue for the charger).	58.54% 48
TOTAL	82

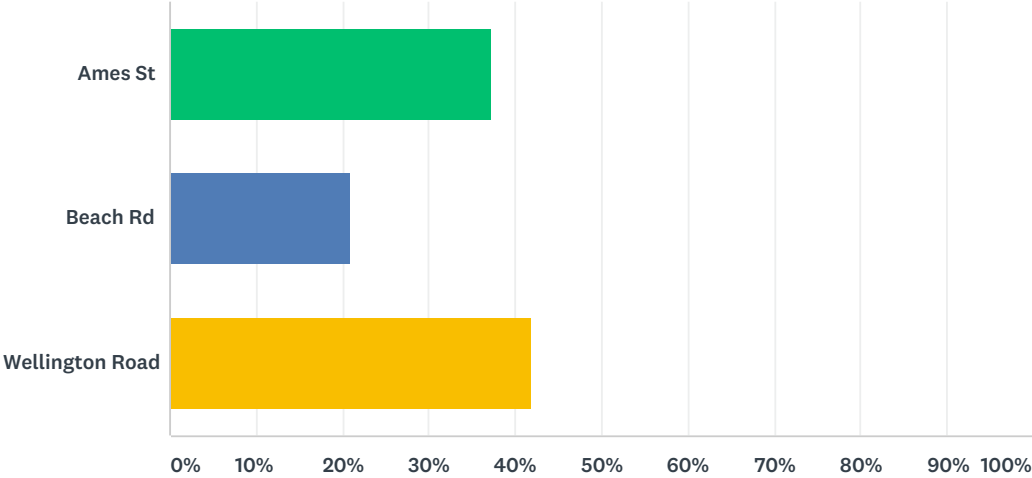
#	WOULD YOU PREFER SOMEWHERE ELSE? ANY OTHER COMMENTS OR QUESTIONS?	DATE
1	Two parks to allow queuing and label EV CHARGING only please.	9/19/2018 10:22 PM
2	The charger has two different cables, one on each side and most cars can only use one or the other, ergo two parks is critical to ensure all vehicles can park on the side that is relevant to them.	9/19/2018 9:56 PM
3	Robertson Rd	9/19/2018 7:25 PM
4	We get short of parks on Beach rd for the shops. Somewhere off Bech rd but easily seen from the shops.	9/17/2018 9:36 PM
5	The charging unit needs to come with cables attached to be the most useful to the most drivers. Don't just invest in the unit.	9/17/2018 4:18 PM
6	9 Wellington Road (2 car parks)	9/17/2018 11:58 AM

Electric Vehicle Charger site for Paekākāriki

7	I don't think it's possible to get a location that perfectly meets everyone's needs at the same time. If the aim is to support RV uptake goals without inconveniencing other driver visitors or householders, the @lan's location across the road would seem the best. It is purpose designed for refueling and could be complemented by another station on the other side of the road at Fisherman's table or Paraparaumu. It wouldn't take away two parks from an already very busy Beach Road, and wouldn't be an annoyance for people living next to the other proposed sites.	9/16/2018 12:04 PM
8	Parking in the village already a premium for locals. Beach road is a stupid idea. End of Robertson road is close to shops and rarely parked in. Freedom campers sometimes squat there for days. Wellington road option is also at a premium with locals living on the dune having to park their cars down there. Sometimes in make do parks half on the road.	9/13/2018 4:50 PM
9	Tennis court car park area is another good option. Beach road is not suitable as it is to close to fire hydrant, fire service would not be able to access water if a charging fault caused a car fire.	9/13/2018 1:32 PM
10	or Ames st	9/13/2018 1:16 PM
11	Robertson Rd, there are always parks there, it's a short walk to the shops via Wellington Rd or next to the train tracks and it doesn't use up parks near the shops which are at a premium often	9/13/2018 12:11 PM
12	Not Beach Road: leave those premium parks free for general use. Two parks is definitely best, to allow for queueing. Perpendicular parks not needed; parallel parks, as at Z Vivian St, are fine. As are angled parks!	9/13/2018 10:00 AM
13	Station car park	9/13/2018 7:36 AM
14	What about at railway station car park?	9/13/2018 6:53 AM
15	All the other ugly infrastructure is in Paraparaumu, it should go there	9/13/2018 6:32 AM
16	Would be best put at the station car park.	9/12/2018 11:23 PM
17	Parking is at a premium in the village and shouldn't be reduced. Ames St is useful for the hall. Wellington Road has least impact.	9/12/2018 10:12 PM
18	Roberson road	9/12/2018 8:53 PM
19	Two parks if off beach road. If on beach road, only one Park	9/12/2018 8:40 PM
20	I would welcome it in any of the locations but think that if it's not on Beach Road it would be less of a problem for access to the shops at this point as those shops are very busy and an empty charging park may cause resentment	9/12/2018 8:38 PM
21	Eventually it would also be good to have one near the railway station	9/12/2018 8:05 PM
22	what about Robinsons Road	9/12/2018 7:46 PM
23	Robertson road where the recycle bins used to be	9/12/2018 6:56 PM
24	Ames street is the detour for sh1, so is not really a good option	9/12/2018 6:55 PM
25	lan's old BP over SH1 might be good once transmission gully us complete.	9/12/2018 6:53 PM
26	lans	9/11/2018 6:59 PM

Q3 Site options

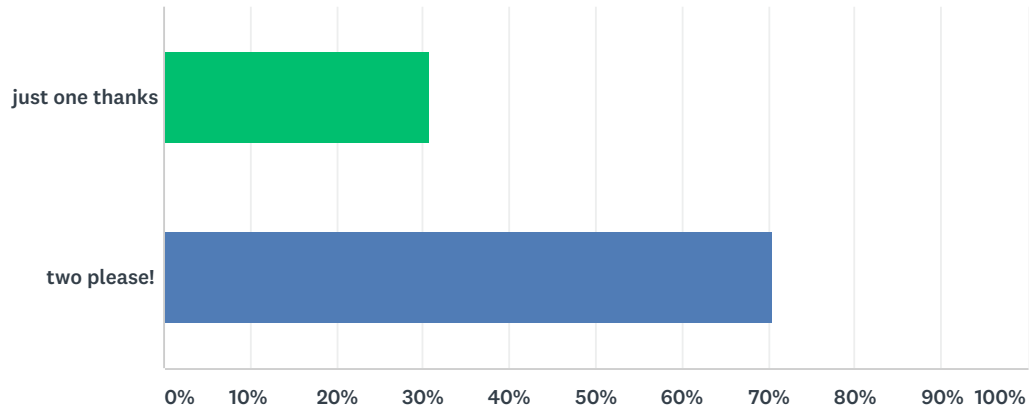
Answered: 43 Skipped: 49



ANSWER CHOICES	RESPONSES	
Ames St	37.21%	16
Beach Rd	20.93%	9
Wellington Road	41.86%	18
TOTAL		43

Q4 How many 'EV only' parks?

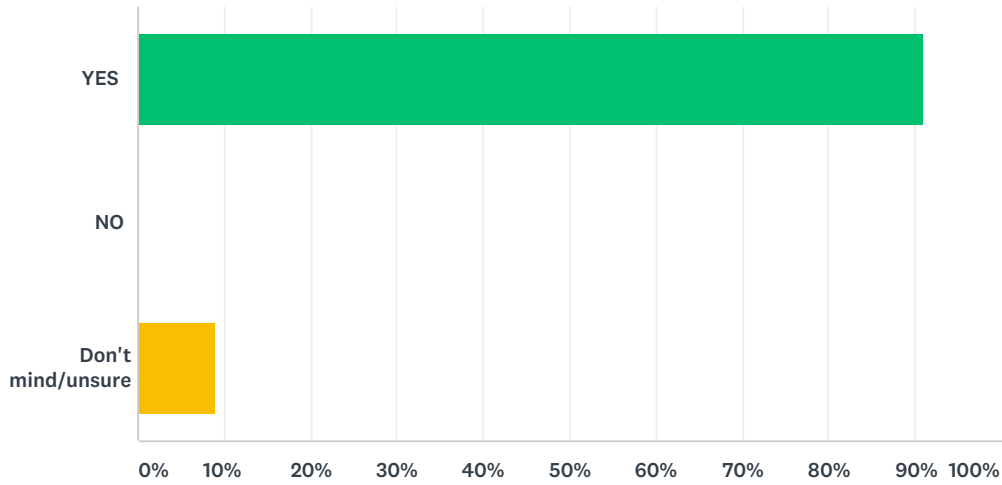
Answered: 88 Skipped: 4



ANSWER CHOICES	RESPONSES
just one thanks	30.68% 27
two please!	70.45% 62
Total Respondents: 88	

Q1 Do you want an EV charger in Paekākāriki?

Answered: 22 Skipped: 1

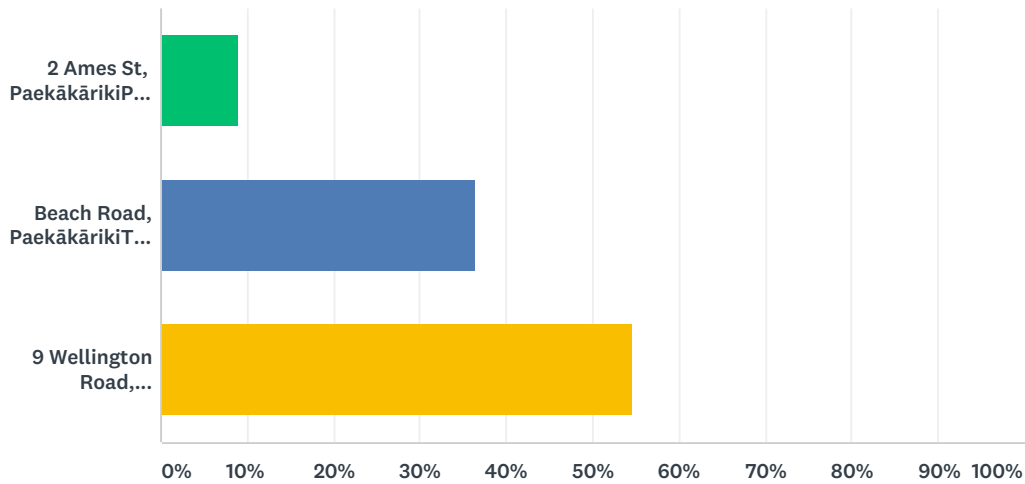


ANSWER CHOICES	RESPONSES	
YES	90.91%	20
NO	0.00%	0
Don't mind/unsure	9.09%	2
TOTAL		22

#	ANY COMMENTS OR QUESTIONS?	DATE
1	I nearly wasn't able to take the kids to Raumati Marine Gardens a few weeks ago because the Porirua charger is quite busy, so having one between Porirua and Paraparaumu would be great.	9/17/2018 3:45 PM
2	Definitely want a charger!	9/17/2018 10:59 AM
3	Where ever provides the easiest access without disruption to any business etc.	9/17/2018 10:49 AM
4	Put by shops. Otherwise, will be weird in a few years when there's lots of EVs and yet you have to walk all the way back to the shops if you charge.	9/17/2018 9:57 AM

Q2 Where would you prefer to see an EV fast charger installed?
 Installing a fast charger requires the following things: adequate power, lighting, accessibility, a perpendicular carpark, visibility & safety. Location is important - a well positioned charger makes a difference to both drivers and local business. Here are some options:

Answered: 22 Skipped: 1

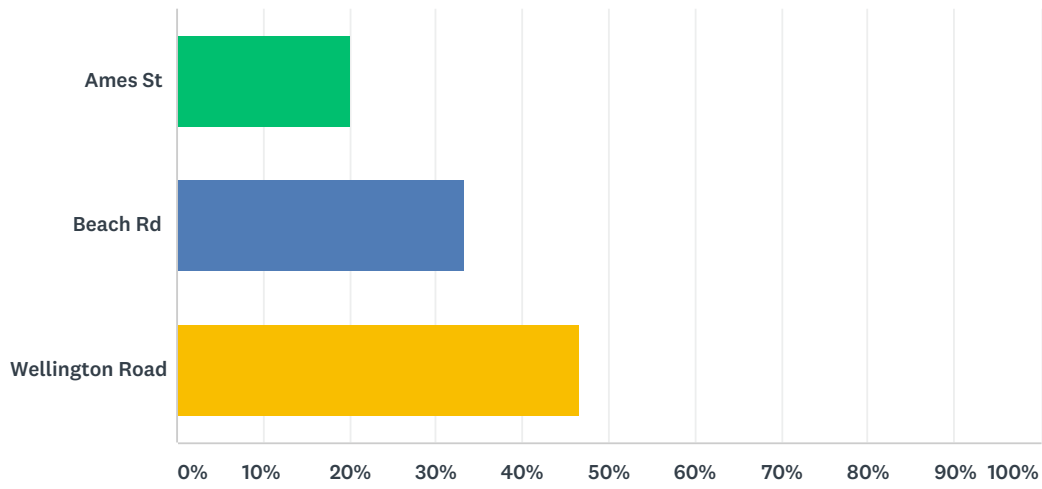


ANSWER CHOICES	RESPONSES
2 Ames St, Paekākāriki Positioning the charger here will keep premium parks on Beach Road free for all drivers. The parking layout needs to be changed to a perpendicular (or right angle) park - this will require cutting into the berm to reconfigure the parking layout. Suggested parking restrictions: 'P60', 'EV only' for one or two parks (the second park enables drivers to queue for the charger).	9.09% 2
Beach Road, Paekākāriki This site is super accessible to our shops and cafes. The parking layout needs to be changed from an angle park to a perpendicular one - to avoid losing a park through changing the layout, the shape of the adjacent 'Peace Garden' will change. Suggested parking restrictions: 'P60', 'EV only' for one or two parks (the second park enables drivers to queue for the charger).	36.36% 8
9 Wellington Road, Paekākāriki Positioning the charger here will keep premium parks on Beach Road free for all drivers. Changing the parking layout to perpendicular just requires repainting the lines. While further away from the shops it is accessible to the tennis courts, bowling club, library and public toilets. Suggested parking restrictions: 'P60', 'EV only' for one or two parks (the second park enables drivers to queue for the charger).	54.55% 12
TOTAL	22

#	WOULD YOU PREFER SOMEWHERE ELSE? ANY OTHER COMMENTS OR QUESTIONS?	DATE
1	By placing near the shops, a user can easily nip out and move the car when charge is finished. Downside is higher probability of being ICE'd. Probably 2 Ames St is the best compromise for shop proximity	9/18/2018 4:10 PM
2	needs to be visible but not take up existing parks	9/17/2018 1:51 PM
3	Sh1 heading south by the coffee shop. There is plenty of space and you wouldn't have to cross sh1 to go across horrific intersection to paekakariki	9/17/2018 11:57 AM
4	Don't put it right in front of the shops or normal cars will park there, blocking the charger.	9/17/2018 10:59 AM
5	We always plan ahead. If we need a coffee we can grab it before we charge.	9/17/2018 10:49 AM
6	Beach Road. Put by shops. Otherwise, will be weird in a few years when there's lots of EVs and yet you have to walk all the way back to the shops if you charge.	9/17/2018 9:57 AM

Q3 Site options

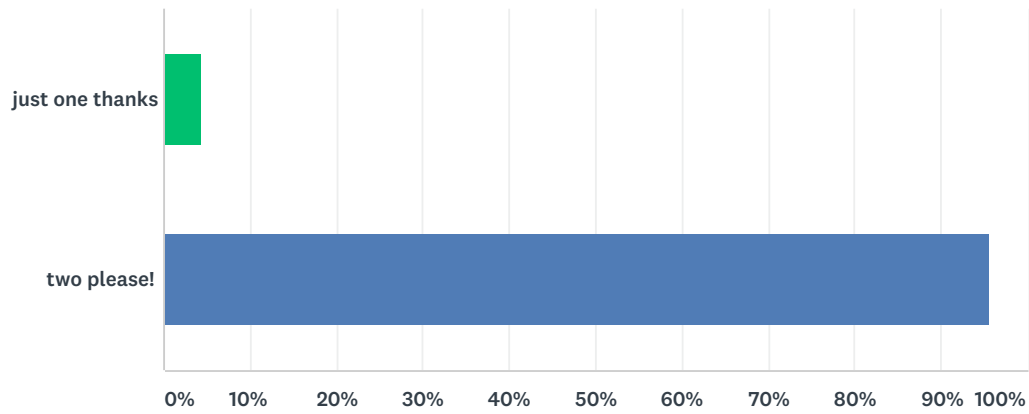
Answered: 15 Skipped: 8



ANSWER CHOICES	RESPONSES
Ames St	20.00% 3
Beach Rd	33.33% 5
Wellington Road	46.67% 7
TOTAL	15

Q4 How many 'EV only' parks?

Answered: 23 Skipped: 0



ANSWER CHOICES	RESPONSES
just one thanks	4.35% 1
two please!	95.65% 22
Total Respondents: 23	