

# BCP Council electric Vehicle Charging Infrastructure Consultation Summary

# Introduction

The Council conducted a 6-week public consultation on EV charging from 21<sup>st</sup> August to 1<sup>st</sup> October 2023 with the following aims:

- To identify the scale of EV ownership and prospective ownership across the area.
- To assess the demand for local public EV charge points.
- To generate interest in community EV charger sharing.
- To identify 'barriers' to transitioning to EV's from petrol/diesel vehicles.
- To assess interest in community club car electric vehicle hire.
- To identify locations where there is a need for publicly available EV charge points and electric community car club vehicles.

In total, 365 consultation on-line surveys were completed. There were 194 suggested locations provided on the public EV drop pin map, and 64 suggested EV car club locations provided on the electric community car club drop pin map.

The below summary shares the headline results (topline frequency and percentages) for each of the survey questions, with an accompanying high-level analysis.

A summary of the results for the suggested public EV and electric community car club locations is also provided. A high level 'cluster' analysis for both has also been undertaken.

# Consultation survey results

1. Do you/your household have access to (own, lease or drive) and EV (Electric Vehicle) or plug-in hybrid? (Select one)

Yes (186) 51.0% No (179) 49.0%

The proportion of respondents were evenly split between those that currently had access to an EV or plug hybrid and those that did not.

2. What type of vehicle is your EV or plug-in hybrid? (Select all that apply)

Car (181) 97.3% Van (3) 1.6%

Other (3) 1.6%

Of those respondents that had access to an EV (or plug-in hybrid), nearly all were car drivers. There were a small number of small van drivers and electric bike users (other) that also completed the survey.

# 3. Do you need to charge your van at various locations across the BCP Council area?

Yes (2) 66.7%

No (1) 33.3%

There was a low response from van drivers to the survey. Two out of the three van drivers declared a need to recharge across the area. This is a consideration in terms of supporting van drivers transition to EV technology, to help to remove the barriers of range anxiety and locating a public EV facility, close to scheduled appointments (trades people and delivery drivers).

# 4. How often do you charge your EV or plug-in hybrid?

More than once a day (2) 1.1%

Once a day (20) 10.8%

4 - 5 times a week (25) 13.4%

2 - 3 times a week (66) 35.5%

Once a week (52) 28.0%

Once a fortnight (17) 9.1%

Once a month (2) 1.1%

Less than once a month (2) 1.1%

Most EV owners charge their vehicle several times a week. From this, we can infer that significant distances are being travelled in EVs every week, but EVs being charged will be of various battery ranges, and these may be top-up charges in the main rather than full recharges.

### 5. Do you have access to an EV charge point at home?

Yes (125) 67.9%

No (59) 32.1%

Approximately two thirds (2/3) of respondents that currently have access to an EV, have access to a home charge point. This leaves a sizeable proportion of respondents who rely on charging facilities away from the home.

Community EV sharing schemes help electric car drivers access EV chargers by borrowing them from others while they aren't in use. This helps members of the community who may not have access to their own EV charge point to charge their vehicle and encourages everyone to swap to an EV more quickly. Homeowners are reimbursed for electricity cost plus some profit. One example of a community charging scheme operating nationally that enables electric vehicle charger sharing is CoCharger.

6. With the above information in mind, would you consider providing your home EV charge point for community use?

Yes (40) 32.0%

No (54) 43.2%

Unsure / Don't know (31) 24.8%

When considering the responses to questions 4, 5, and 6 in combination, it can be inferred that a considerable number of private home charge points are only being used once a week or less. There are already a sizeable number of EV drivers with their own private charge point, who would consider making it available through a Community EV charging scheme, with potential for further uptake by others through targeted promotions and incentives. The inclusion of a Community EV sharing scheme within the PEVIS, would provide an opportunity for many drivers those that don't have access to off street parking within the conurbation, to gain access to charging infrastructure.

Future update of EVs by existing drivers

7. Which one of following options best describes your future plans for owning/leasing an electric vehicle?

I plan to own or lease an electric vehicle within the next two years (27)

I plan to own or lease an electric vehicle within the next five years (60)

34.3%

I do not plan to own or lease an electric vehicle within the next five years

50.3%

(88)

The survey provided valuable information on the plans of drivers for transitioning to EVs (drivers that don't currently have access to an EV). The PEVIS will cover the period up to 2030. 49% of respondents stated they plan to own or lease an EV within the next 5 years, which is within the lifetime of the short term PEVIS. A longer-term EV strategy will form part of the Council's new Local Transport Plan (LTP4) expected early in 2025. This will have a wider scope to include workplace charging, EV for logistics, Public Transport etc. The longer-term strategy will support the 50% of respondents that do not plan to own or lease an EV within the next 5 years.

# 8. Which of the following do you feel are main barriers preventing you from transitioning to an electric vehicle more quickly? (select all that apply)

The cost of leasing or buying an electric vehicle (94)	64.8%
The cost of running and maintaining an electric vehicle (38)	26.2%
The range of an EV is not sufficient for my needs (60)	41.4%
Unable to install an EV charge point at my home. (41)	28.3%
Lack of public EV charge points close to where I live (60)	41.4%
Other (please specify below) (48)	33.1%

Most of the barriers to EV ownership are beyond the control of BCP Council (e.g., upfront cost, environmental/ethical concerns about manufacturing process etc). However, the short term PEVIS will be able to help consider and address the significant barriers for drivers that are unable to install an EV charge point at their home and address the lack of public EV charge points where drivers need them. This supports the need for the PEVIS and to secure LEVI funding to deliver the required infrastructure.

# 9. How do you plan to charge your electric vehicle?

I plan to install a home electric vehicle charge point (12)	48.0%
I plan to use a community charging scheme (such as CoCharger) (2)	8.0%
I plan to use public EV charging near to my home (8)	32.0%
Other	12.0%

A high % of respondents said they plan to rely on public charging, to charge their EV, when they transition to EV. As the proportion of properties with off-street parking is relatively high in the BCP Council are, it suggests many respondents live in rented accommodation and can't guarantee their landlord will agree to a home charger. BCP Council therefore need to consider residential charging solutions in areas beyond those with off-street parking. These areas might be perfect for community charging as it provides the convenience of charging close by without having to build on-street/carriageway infrastructure. BCP Council already require new developments to include charging provision, so people don't end up in this situation. Several respondents suggested incentivising landlords to install/allow home chargers.

# 10. What is the furthest you would be willing to travel from home to access a public charge point for an EV?

Less than 5-minute walk from home (55)	20.9%
5 - 10-minute walk from home (138)	52.5%
Over 10-minute walk from home (38)	14.4%
None of the above (32)	12.2%

Nearly three quarters of people are willing to walk up to 10 mins to access public EV charging (73.4%). This supports the draft PEVIS proposal to install charge points in BCP Car Parks located close to residential areas with significant proportions of residents who do not have access to off street parking. The PEVIS should also consider locations for charging hubs close to large employment sites (such as business parks) and leisure destinations (such as retail parks), to enable people to park, charge their vehicle and walk to work or their leisure activity.

# E-Car Club vehicle related questions

11. If there were vehicles located close to your home, would you consider booking and hiring a car club electric vehicle to replace some car journeys or the need for a personal vehicle entirely?

Yes (130)	35.9%
No (171)	47.2%
Unsure / Don't know (61)	16.9%

Over a third of respondents would consider booking and hiring a Car Club vehicle to replace existing personal vehicle journeys, with a further 17% unsure. This shows an enormous potential to change behaviour and assist residents with making a transition to more sustainable transport modes.

It is clear that some residents are unsure about what the Car Club scheme is and how it works. This suggests more education, and greater promotion of the scheme is required. For many respondents, location of car club vehicles is the critical factor. One commentor said they'd be interested in joining, but living in Charminster means accessing the nearest vehicle at Bournemouth Town Hall, which is neither attractive nor feasible.

12. Would the likelihood of you hiring and using a car club vehicle change if the vehicle is electric?

Yes - More likely to use a car club vehicle (135)	37.5%
Yes - Less likely to use a car club vehicle (15)	4.2%
No - Neither more likely nor less likely to use a car club vehicle (186)	51.7%
Unsure / Don't know (24)	6.7%

Nearly 40% of respondents would be more likely to consider using a car club vehicle if it were an EV. The draft PEVIS aspires to electrify the current BCP Car Club fleet and to expand the fleet with further EVs.

# 13. How many cars/vans does your household run?

0 (15)	4.1%
1 (156)	42.6%
2 or more (195)	53.3%

Over half all respondents confirmed that they belong to a household which has two or more vehicles. Question 11 and 13 suggests that the implementation and expansion of an electric car club fleet could help to reduce both first and second car ownership levels within the conurbation. The draft PEVIS proposes to install public EV charging points in residential areas (on carriageway) where there is a lack of residential off-street parking. The provision of an electric car club bay, dovetailed with a public EV charging bay and powered by a shared fast charge point, would promote a reduction in the demand for on-street parking. This could in turn create space for further public EV charging points on the carriageway. This concept can also be applied to priority Mobility Hub locations, that are considered within the PEVIS.

# **Demographic questions**

# Are you aged:

Under 16 (-)	-	45 - 54 years (86)	23.9%	75 - 84 years (11)	3.1%
16 - 24 years (3)	0.8%	55 - 64 years (96)	26.7%	85+ years (3)	0.8%
25 - 34 years (22)	6.1%	65 -74 years (48)	13.3%	Prefer not to say (20)	5.6%
35 - 44 years (71)	19.7%				

# What is your sex? (Gender)

Female (126)	35.2%
Male (198)	55.3%
Prefer not to say (34)	9.5%

Is the gender you identify with the same as your sex registered at birth? (Trans)

Yes (309) 86.3%	
e write in gender identity below (-)	No, p
er not to say (49) 13.7%	

# What is your sexual orientation? (Sexual orientation)

Straight / Heterosexual (259) 72.89	6 Bisexual (9) 2.5%
Gay or Lesbian (13) 3.7%	Other (specify below if you wish) (2)
Asexual (-)	Prefer not to say (73) 20.5%

Are your day-to-day activities limited because of any physical or mental health conditions or illnesses, lasting or expected to last 12 months or more? (**Disability**)

Yes - limited a lot (21)	5.8%
Yes - limited a little (36)	10.0%
No (278)	77.2%
Prefer not to say (25)	6.9%

Do you or someone in your household currently hold a Blue Badge?

Yes (45)	12.5%
No (292)	81.1%
Prefer not to say (23)	6.4%

An additional question was added into the demographics part of the survey relating to Blue Badge holders. The results show that 12.5% of respondents reported that someone in their household was a Blue Badge holder. This will be an important consideration for the PEVIS, to ensure that public EV charging equipment, bay layout and back-office systems consider the needs of users with accessibility needs.

# What is your ethnic group? (Ethnicity)

0.3%	Asian / British Chinese (1)	0.6%	Mixed White & Asian (2)		White English / Welsh / Scottish / Northern Irish / British (292)	
	Any other Asian background	0.3%	White Irish (1)	81.6%		
0.3%	(please specify below if you wish) (1)	0.3%	Mixed White & Black Caribbean (1)	Prefer not to say (41) 11 5% Mixed White & Bla		
0.3%	Any other ethnic group (please specify below if you wish) (1)	0.3%	Any other Black / African / Caribbean background (please specify below if you	3.9%	Any other White background (please specify below if you wish) (14)	
-	White Gypsy or Irish Traveller (-)		wish) (1)	0.8%	Black / British Caribbean (3)	

# What is your religion or belief? (Religion)

No religion (164) 46.2%	Buddhist (5)	1.4%	Sikh (-) -
Christian (Church of	Hindu (-)	-	Any other religion or belief
England, Catholic, Protestant and all other 36.1%		(please specify below if you 1.1% wish) (4)	
Christian denominations)	Muslim (2)	0.6%	Prefer not to say (51) 14.4%
(128)			

Are you currently pregnant or have you returned to work after maternity/ paternity leave in the last 12 months?

Yes (7) 2.0% No (319) 89.1% Prefer not to say (32) 8.9%

# Respondent feedback on draft PEVIS

The BCP Consultation pack included a summary document detailing the priorities, opportunities, and actions for the developing Public Electric Vehicle Infrastructure Strategy. Respondents were invited to provide comments on the draft PEVIS, with an emphasis on providing feedback on missing elements or improvements for consideration by the Council.

There were 189 comments received. All comments were analysed and grouped together into core themes. A summary of the core comment themes is provided below:

# Location of EV charging infrastructure

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### Location of EV charging infrastructure

Many respondents called for multiple EVCPs in a hub location to reduce chances of having to wait around / look for another elsewhere.

There was also interest in locating public EVCPs at destinations, so people can spend time doing things whilst their vehicle charges. For example, shopping, leisure, etc, rather than watching the gauge. We have already considered the safety implications of putting EVCPs in remote locations, but we have generally worked on the assumption that people will charge in a car park they were already planning to use, rather than travelling to a location specifically to charge.

Most people are willing to walk up to 10 mins for charging. It might be worth considering where people park for work – if they're prepared to travel up to 10 mins to charge, may be prepared to park a little further away to charge up and move car at lunch (or connect car at lunch and remove at end of day).

### Quantity and type of EV charging

A common theme of the consultation feedback was in relation to the quantity and type of public EV charging infrastructure required within the conurbation. Many comments

referenced a lack of existing public EV charge points in the BCP Council area, and supported the aspiration to deliver a significant uplift in provision through the PEVIS. In terms of the type of charging infrastructure that people would like to see provided, there were requests for:

- Fast charge points up to 22kwh, that could charge more than one vehicle at a time.
- Banks of Fast charge points in car parks close to where people work/spend leisure
- Strategically located Rapid/Ultra Rapid charge points (although lower in number than Fast charging provision).

Respondents were divided on what speed of charge should be used (people either wanted rapid or they wanted slow), but there was a consensus that facilities for residential areas without access to off street parking were necessary.

# The design of future charging infrastructure

There were a number of comments relating to ensuring the PEVIS considers the provision of charging infrastructure in the future that caters for Type 2 connectors.

Feedback was received requesting charge point infrastructure to be in the carriageway and not on the footway, to reduce clutter and improve/maintain space for pedestrians.

The Council need to consider systems and policies to prevent vehicles from continuing to park in EV bays for pro-longed periods once they have finished charging. This seems to be a current frustration for a number of local EV users.

A number of comments related to ensuring steps are taken to provide a public EV charging solution which is easy and simple to use at all public charging points. Users do not like having to use a number of different charge point Apps to access and pay for charging (anecdotes were provided from outside of the BCP Council area). Contactless payment at all charge points was a reoccurring theme.

There were a few requests for public lamp post charging points to be considered in areas that do not have off street parking. This contrasts with other comments received relating to accessibility issues caused by trailing cables. In BCP many lampposts are situated to the rear of pavements.

A number of respondents were unsure if they'd want to allow their home charger to be used for community charging. This suggests that the PEVIS should consider some way of educating users as to what Community Charging is and how it works.

There seems to be a general ambivalence towards the car club – people are divided on whether they'd be interested in joining and at least one commentator admitted that they weren't really sure what it involved. As with community charging, there is a need for more education, and possibly more visibility of the scheme. One commentor said they'd be interested in joining, but living in Charminster means accessing the nearest vehicle at Bournemouth Town Hall isn't feasible, due to distance and time barriers.

### **Tariffs**

Several respondents complained that each charging provider being paid via their own card/app is annoying and a contactless payment solution would encourage use. An immediate action for the Council, is the need to make clear to the public that they can use contactless rather than individual charging apps to pay for rapid chargers in the existing BCP network. The Council should specify contactless payment options in any future procurement exercises associated with the provision of public EV charge points, to be delivered as part of future Council contracts.

Many respondents complained about having to pay for parking while charging. There is an assumption that BCP Council are earning significant sums of money from public EV chargers and that this should recoup any money that would have been gained from parking fees. This is not the case, but the Council could consider options to support EV drivers as well as continuing to manage expectations in the future.

### **Equalities**

Several respondents said that EVCPs needed to be more accessible for disabled users. However, none went into further detail, so in the absence of additional information, the Council should continue working to PAS 1899 (best practice industry standard).

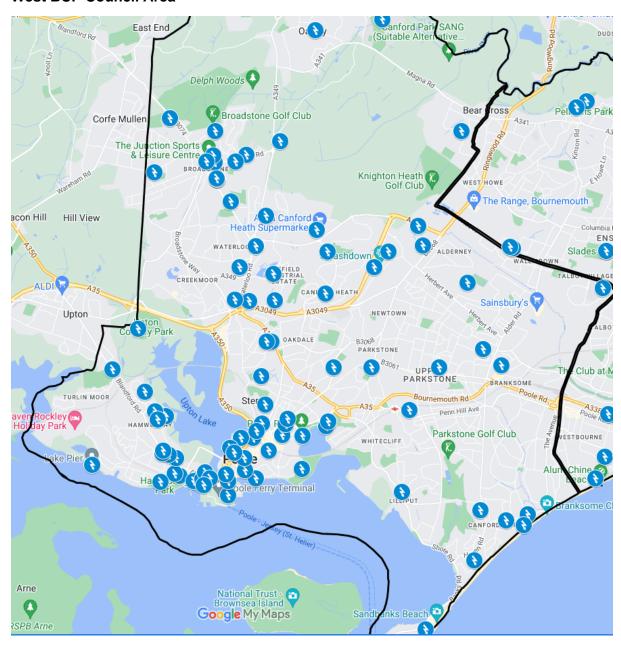
# Safety

A number of respondents expressed concerns about safety in poorly lit and remote car parks, especially for people with disabilities. Areas of elevated vehicle crime were also mentioned as a possible risk. User safety is an important consideration and needs to be carefully considered and addressed by the Council in collaboration with current and future EV infrastructure delivery partners.

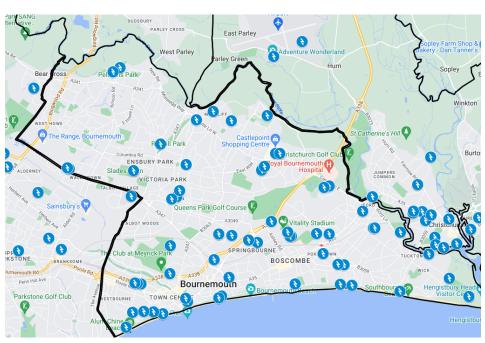
# **Mobility Hubs**

There were a number of positive comments provided which supported the idea of Mobility Hubs. No negative comments were received. To provide a flavour of the comments received, one respondent stated that Mobility Hubs "would help make BCP a wonderful place to live. It would be useful to have car clubs in more locations and in easy reach" of residents' homes.

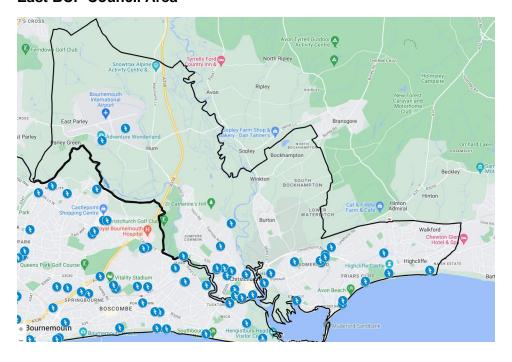
# Suggest Locations for public EV charging infrastructure – public map pins West BCP Council Area



### **Central BCP Council Area**



# **East BCP Council Area**



A high-level cluster analysis has been undertaken for suggested public EV charge point locations. Table 1 provides a list of 'cluster' sites for the BCP Council Area. A cluster is defined as two or more requests within a 5-minute radius. The outputs of Table 1 will be

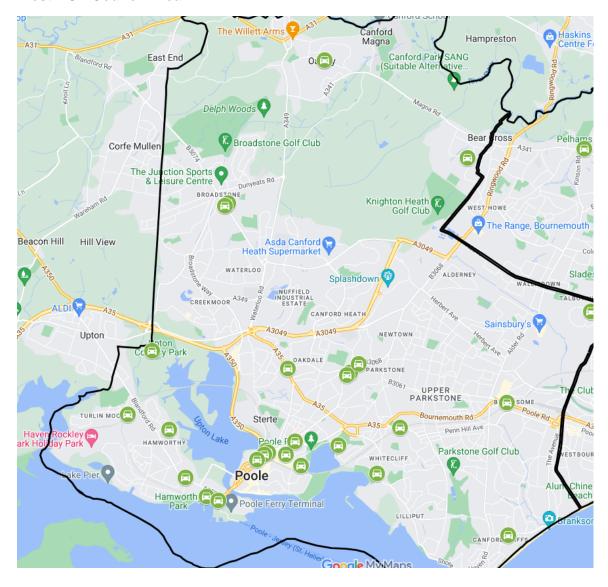
considered when updating the draft PEVIS. Some of the suggested locations are already being progressed through the existing delivery of the BCP Council public EV charge point contract with JoJu/Mer (see the 'Notes' column in Table 1).

Table 1 – High level Cluster analysis of suggested locations for public EV charging infrastructure – BCP Council EV consultation

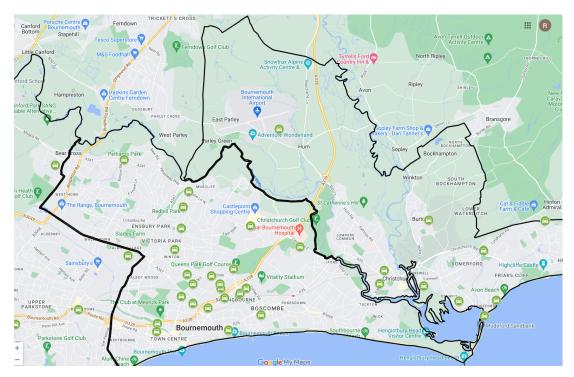
BCP Council Area	Location	Postcode	Notes
	Broadstone - Wentworth Dr/Tudor Rd	BH18	1 x Fast installed at Station Approach – BCP Phase 1.
	Broadstone - Lower Blandford Rd shops	BH18	Charge points planned for BCP Storey Lane car park - BCP Phase 1.
	Hamworthy - area around Ferry Terminal/Norton Way	BH15	
	Poole Old Town	BH15	EVCPs planned in Prosperous Street and Lagland Street – BCP Phase 1.
W/ (	Poole Hospital Car Park	BH15	
West	Dolphin Shopping Centre	BH15	2x charge points planned - BCP Phase 1.
	Hamworthy - Cornerstone Academy/Liberal Club	BH15	
	Canford Cliffs - Western Rd	BH13	EVCPs planned in Western Rd and Ravine Rd car park – BCP Phase 1.
	Fleets Corner	BH17	
	Tower Park	BH12	
	Poole Park	BH15	
	Durley Chine/West Cliff Rd	BH2	2 x fasts installed in Durley Rd car park – BCP Phase 1.
	Queens Rd Car & Coach Park	BH2	
	Bournemouth Pavilion	BH1	
	Pelhams Park	BH10	
Central	Winton - Wimborne Rd shops	BH9	Charge points planned in Wimborne Rd and Cranmer Rd car park.
Central	Kings Park	BH7	2x charge points installed, Rapid hub planned - BCP Phase 1.
	Castlepoint	BH8	
	Mallard Rd retail park	BH8	
	Littledown Leisure Centre	BH7	Rapid hub planned - BCP Phase 1.
	Pokesdown shops	BH5	
	Mayors Mead car park	BH23	Charge points planned here – BCP Phase 1.
	Christchurch Retail Park	BH23	
	Bournemouth Airport	BH23	
East	Somerford Rd	BH23	
	Highcliffe Castle Car park	BH23	
	Steamer Point car park	BH23	EVCPs planned here – BCP Phase 1.
	Avon Beach/Avon Run Rd car parks	BH23	2x charge points already installed in Avon Run car park - BCP Phase 1.

# Suggested locations for EV car club vehicles – public map pins

# **West BCP Council Area**



### **Central and East BCP Council Areas**



A high-level cluster analysis has also been undertaken of the suggested electric car club locations. Table 2 provides a list of 'cluster' sites for the BCP Council Area. There were no clusters (two or more requests within a 5-minute radius) in the East of the BCP Council area. The outputs of Table 2 will be considered when updating the draft PEVIS and shared with the BCP Car Club operator, Co-wheels.

Table 2 – High level Cluster analysis of suggested locations for electric car club vehicles – BCP Council EV consultation

BCP Council Area	Location	Postcode
	Broadstone - Higher Blandford Rd shops	BH18
	Hamworthy - area around Ferry Terminal/Norton Way	BH15
	Poole Old Town	BH15
West	Poole Hospital Car Park	BH15
	Dolphin Shopping Centre	BH15
	Hamworthy - Cornerstone Academy	BH15
	Parkstone Heights Recreation Ground	BH14
	Durley Chine/West Cliff Rd	BH2
	Queens Rd Car & Coach Park	BH2
Central	Bournemouth Pavilion	BH1
Central	Pelhams Park	BH10
	Area south of Queens Park	BH8
	Springbourne	BH1