

Engaging with the taxi trade- the switch to electric vehicles

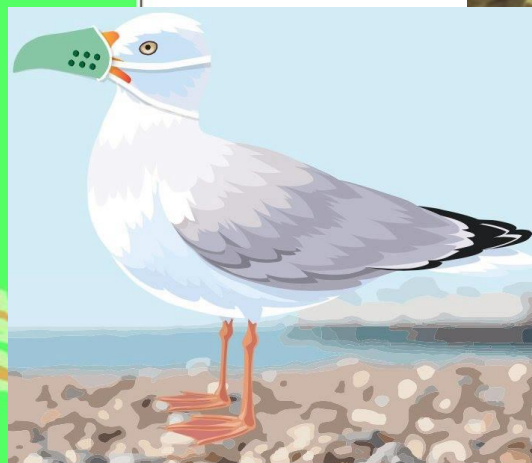
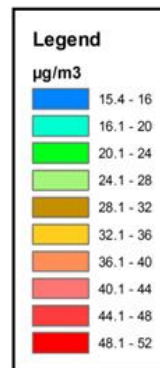


Paul Nicholls
Brighton and Hove City Council
14 January 2019



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- Brighton and Hove city centre air quality



Kilometers



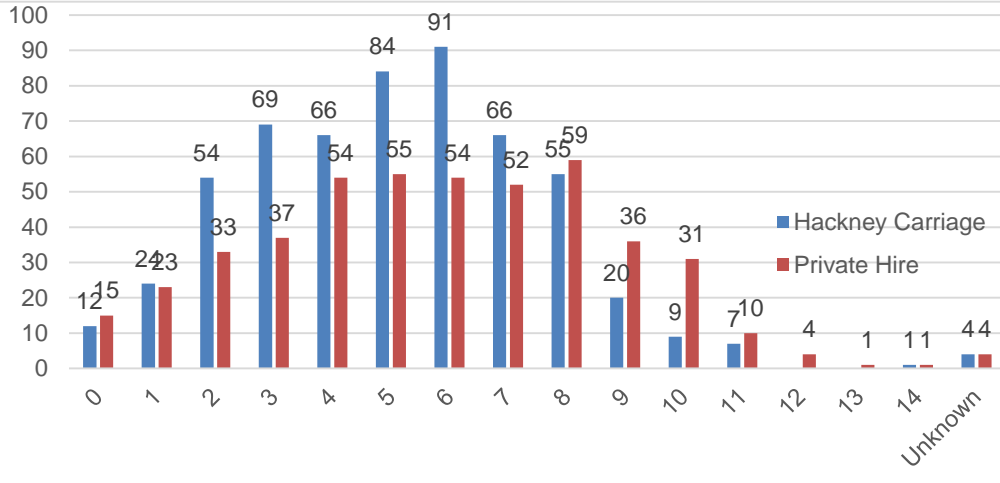
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In Support of Air Quality Improvement

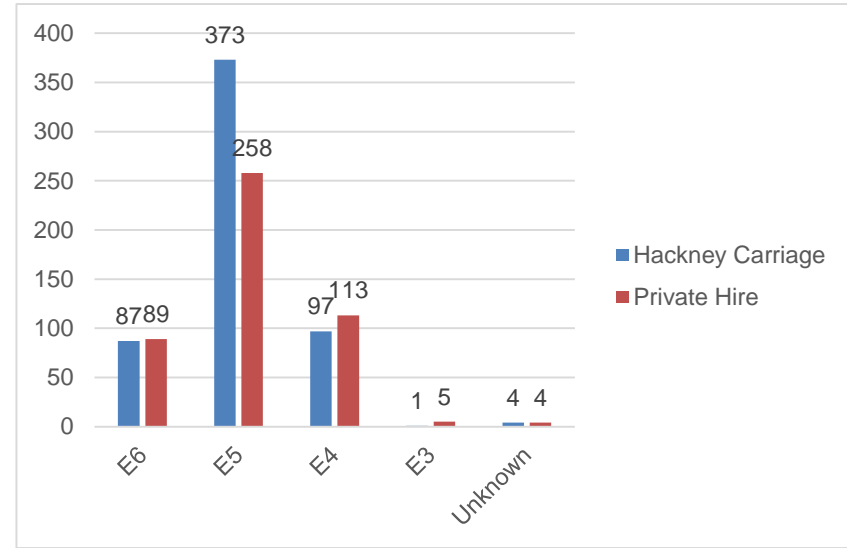
- Parking permits 50% discount for low emission vehicles (tax band a or b) in 2005
- First public EV fast charging points (17 on and off street) installed in 2009 CIVITAS funded
- Air Quality Board
- Ultra low emission zone (Euro 6 buses only by 2024)
- Planning regs 10% new car parks spaces to include EV chargepoints
- Air Quality Management Area
- Council vehicle fleet management
- Successful bid to OLEV for 200 on street lamp post charging points for areas with no off-street parking



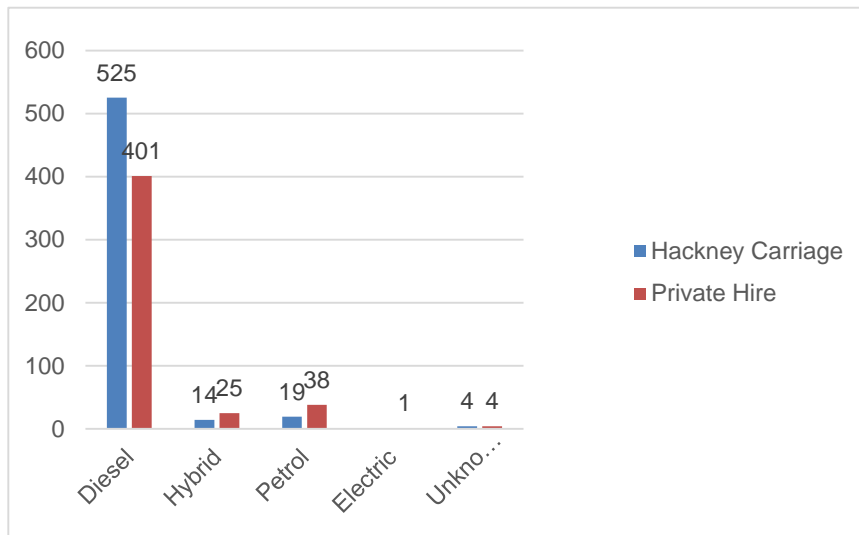
Taxi fleet analysis



Age of vehicle



Euro Standard



Fuel Type



Engagement with taxi trade

- A range of measures to reduce taxi emissions including updates to licencing policy
- Raise awareness of engine idling- signs in all ranks

**Cut engine
Cut pollution**



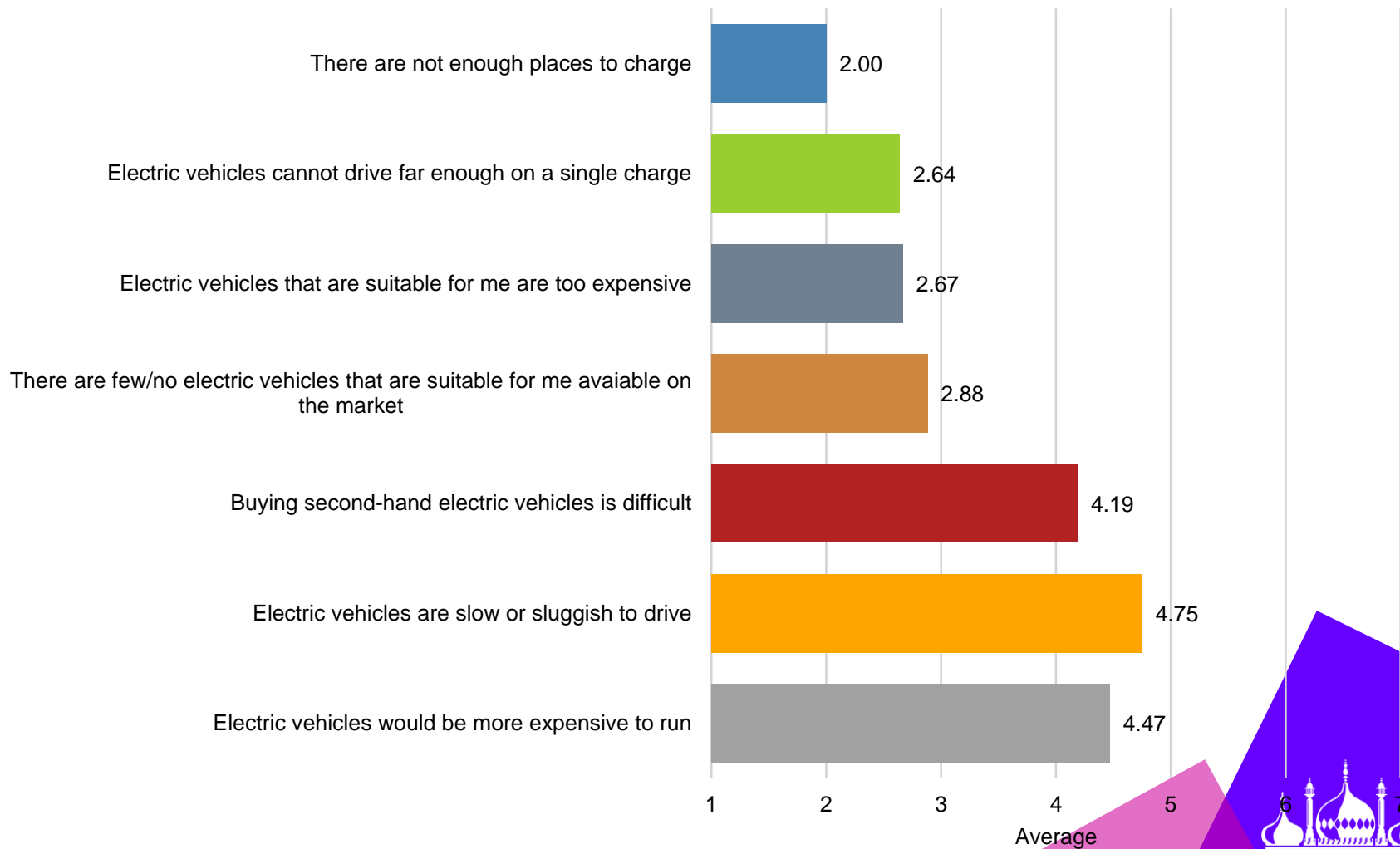
Support EV uptake

- Engage with EV drivers in the city electricbrighton.com
- Series of taxi forum and other meetings about electric taxis since December 2017
- Taxi driver surveys about attitudes to EVs
- Offer of 'telematic' data working with Electric Blue to establish potential savings, emission benefits and potential chargepoints



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What are the biggest issues that might prevent you from purchasing an electric vehicle? Please list them in order of priority, with the biggest issue at the top.



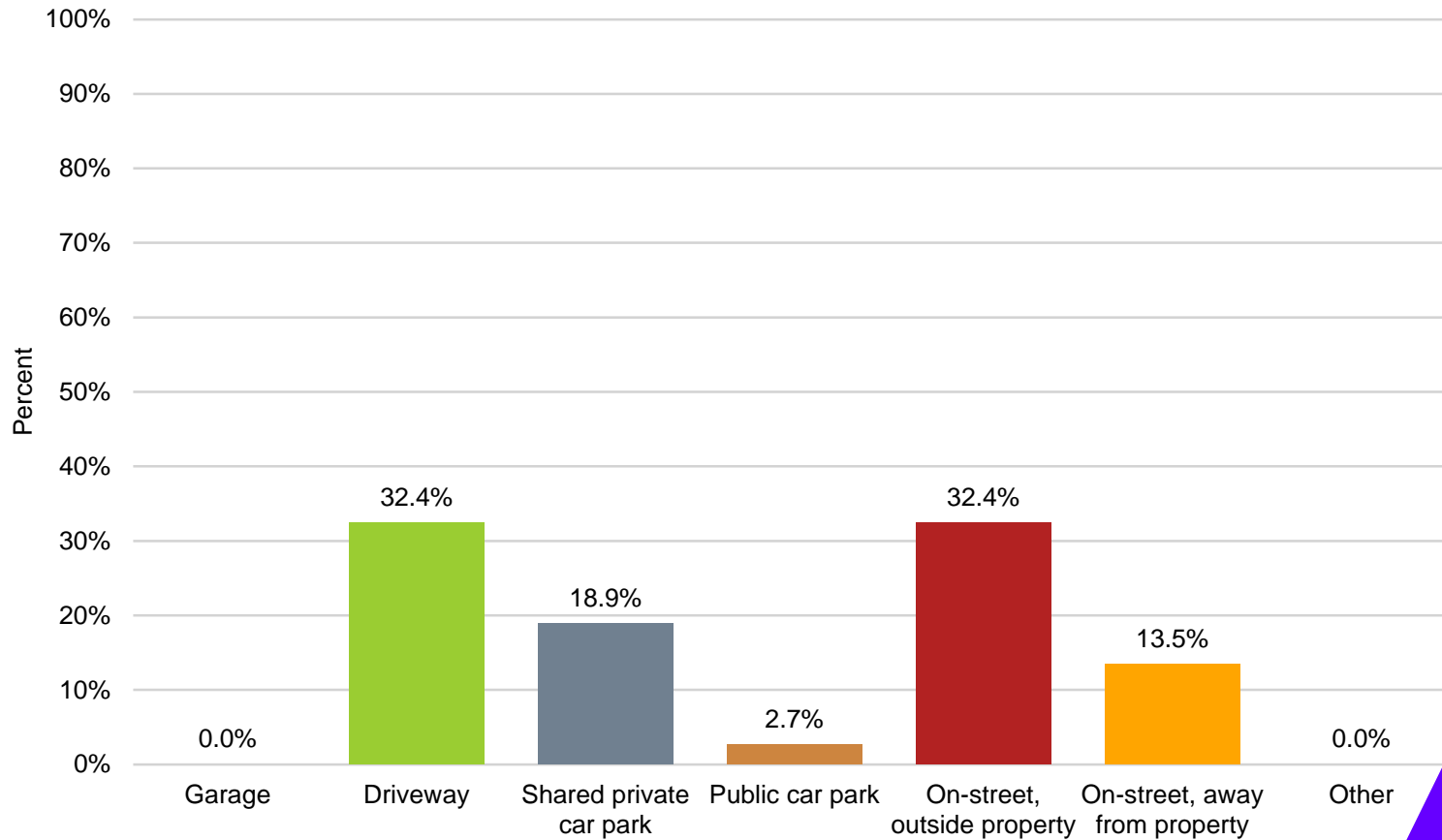
If you build it, they will come.....

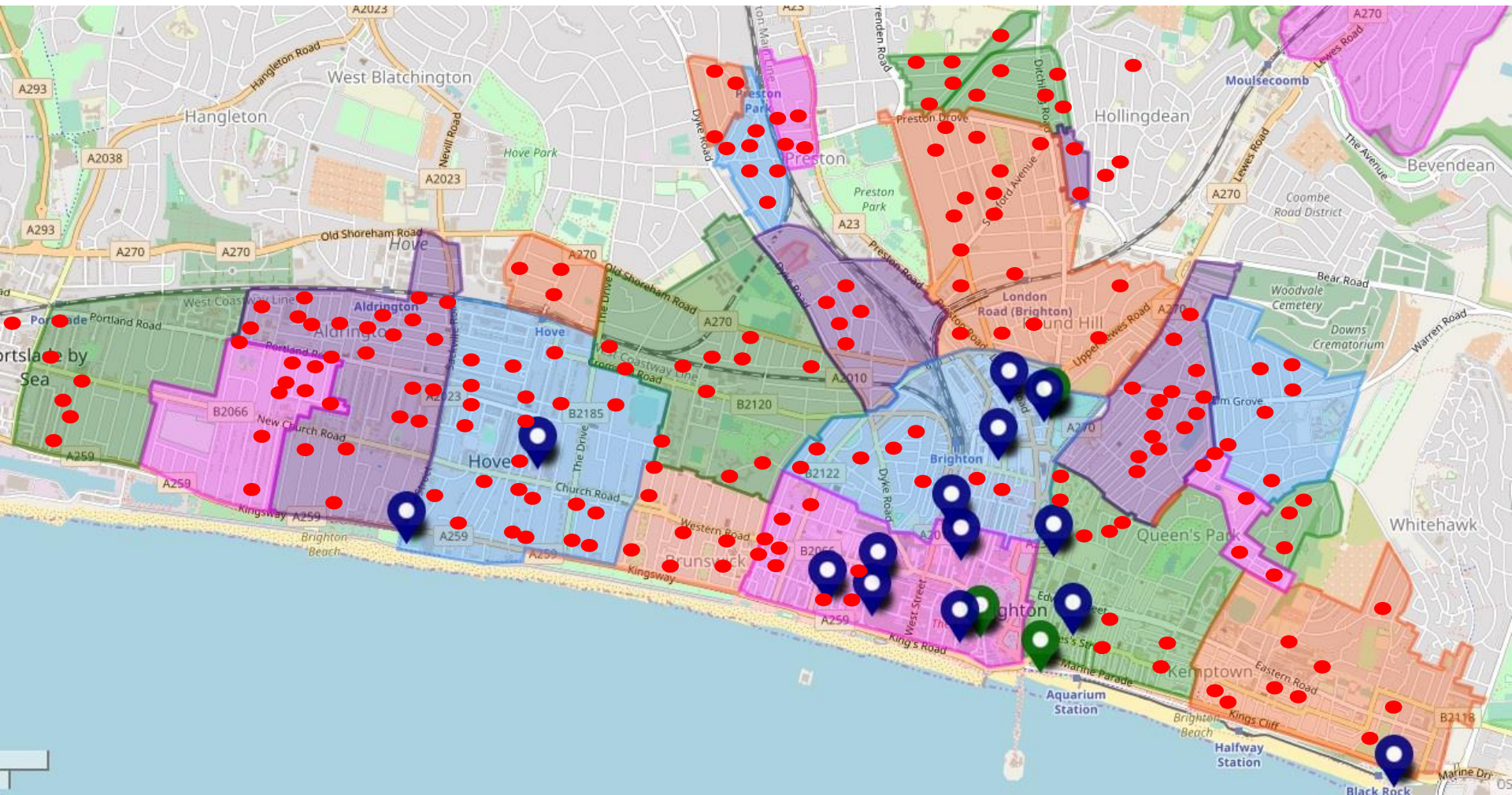
- Build what...slow, fast, rapid chargers?
- Where should they be located?
- Is there enough grid capacity to put them there?
- Who is going to build them (private sector / procurement / public funds)?
- How do you make sure they will work reliably?
- How do you ensure electric vehicles can access them (parking and tariff)?
- How long do we have before we need to build them?



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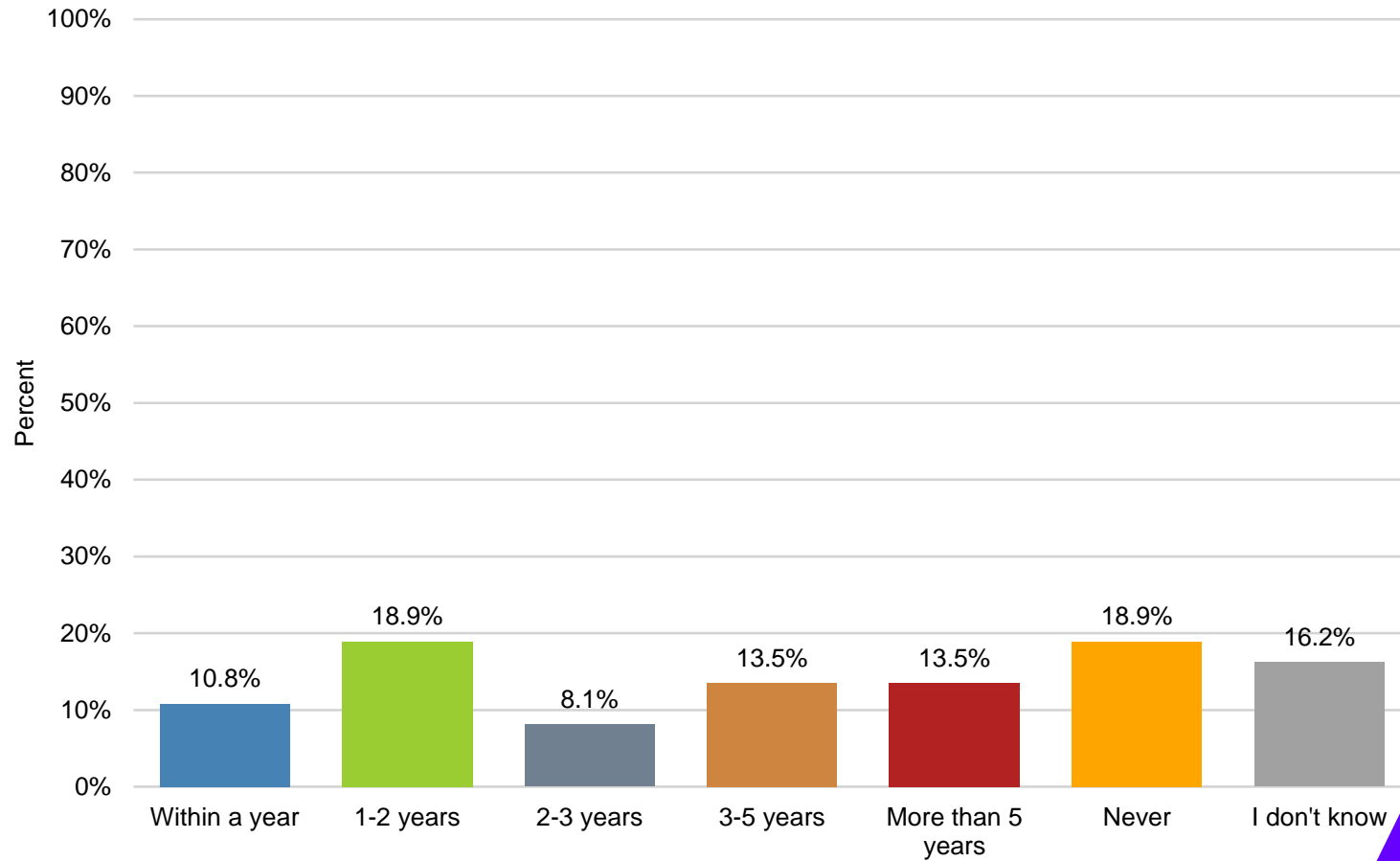
Where is this vehicle normally kept overnight?





Map showing lamp column charging point locations

When do you think you may purchase or lease a plug-in vehicle? (e.g. an electric or plug-in hybrid)



Range anxiety

- A total of **2,116** separate trips were recorded for all vehicles. Of these, a total of **8** trips would have required a top-up charge.
- A total of **103** stops were recorded for all vehicles where the vehicles were inactive between 15 and 45 minutes, allowing for an 80% Rapid Charge top-up.

Cost comparison

Annualised savings of £2,045 per taxi on fuel

Emissions savings

Emission type	Annualised saving with 1% electric taxi fleet	Annualised saving with 10% electric taxi fleet	Annualised saving with 50% electric taxi fleet
CO2	11,450kg	114,500kg	572,500kg
CO	10.4kg	104kg	520kg
NOx	3.4kg	34kg	170kg
THC	1.66kg	16kg	80kg



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“I was very sceptical at the start of this assessment as I did not believe that it would be possible to change to an electric vehicle. I thought it was the council just trying to bring in more regulations. However after seeing the data I can clearly see that it could be possible and that it wouldn’t affect my life too much if the chargers were available.

I would love to try an EV for a month to see how it would work. If there was finance available to help me buy an EV that would mean it could be affordable I would change over now. I will be telling other drivers about this experience and thank the council for giving me the opportunity to be involved”.

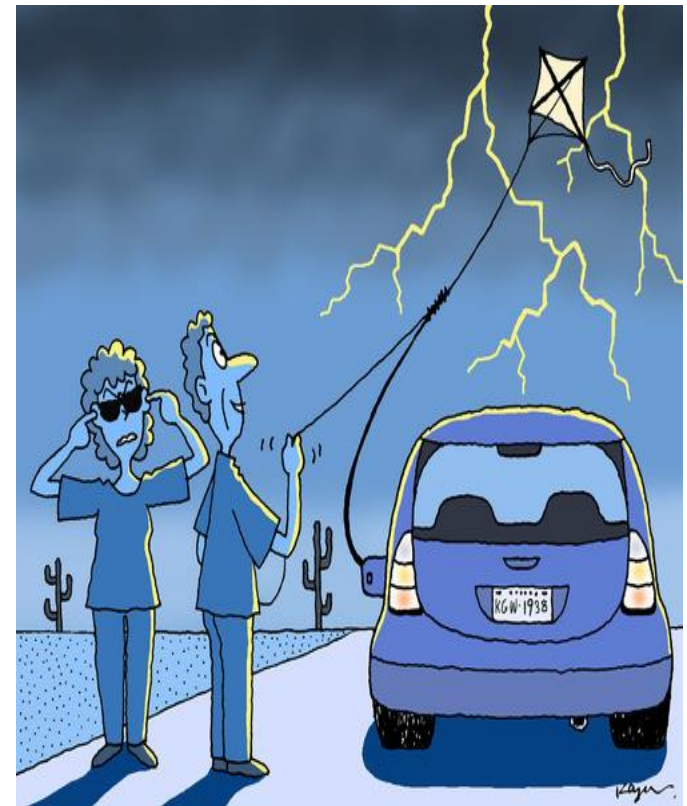
- Individual taxi driver following assessment



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What would help?...

- Long term Framework for EV charging points
- Work with power companies to establish citywide where we have sufficient capacity in the network for rapids



- Simple booking system (for taxis only) to maximise use of infrastructure
- Tariff structure that deters overstaying when charged
- Charge point innovation, battery storage, wireless
- Standardisation /apps / Europe wide?
- Reliable network that meets customer needs
- Information sharing –

More get-togethers like this!



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Thank you....any questions?



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