Appendix 1 - Report: Supporting the transition to lower emission vehicles

energy saving trust

# East Sussex taxi & private hire survey

**Final report** 



### Overview

This report contains a summary of the results from the East Sussex engagement survey, a fleet profile for Eastbourne & Lewes and recommended next steps to encourage the uptake of electric vehicles. The report is split up into the following sections:

- 1. <u>Fleet profile</u>
- 2. Characteristics
- 3. Driving patterns
- 4. Opinions on electric vehicles (EVs)
- 5. <u>Key recommendations</u>

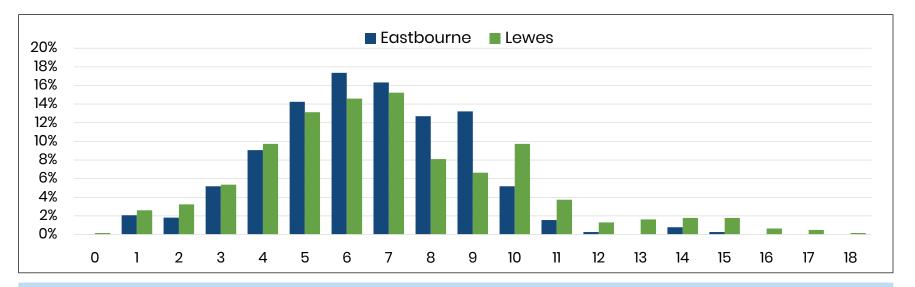


## Section 1 Fleet profile (Lewes & Eastbourne only)

How old are vehicles?

What fuel types make up the total fleet? Which vehicle models are most popular?

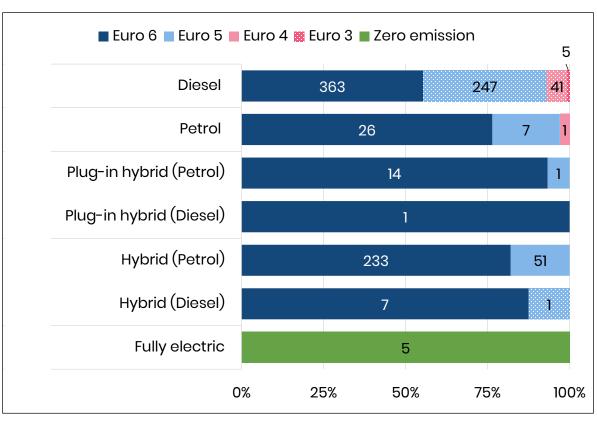
### Age profile by licensed location (Lewes & Eastbourne only)



- Four in five vehicles (80%) are over 5 years old.
- > The average age of all vehicles is just over 7 years old.
- > One in five vehicles (21%) in Lewes are over 10 years old, compared to 8% in Eastbourne.

## Fuel types and ULEZ compliance

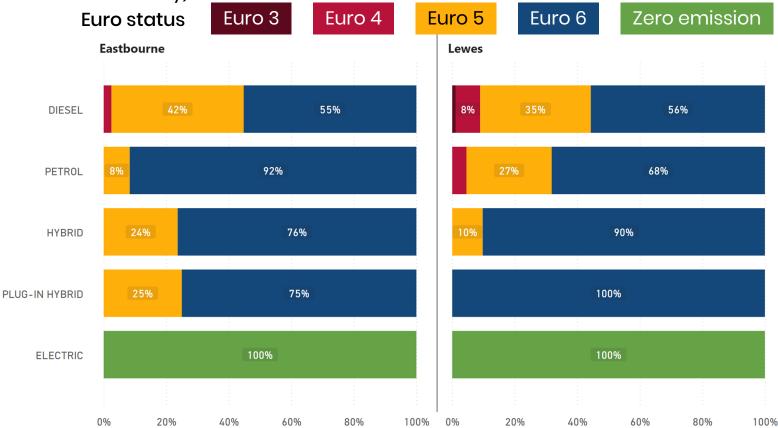
(Lewes & Eastbourne only)



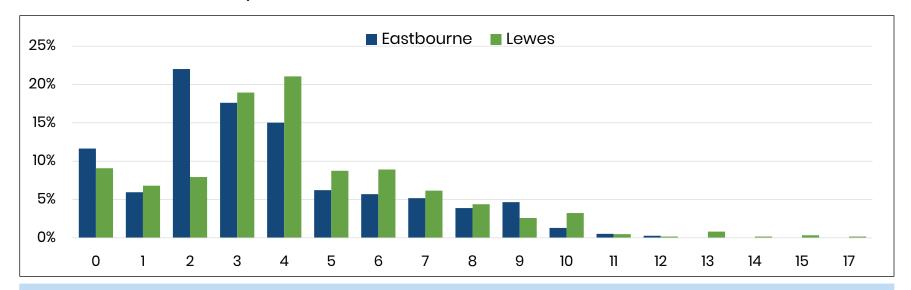
- Data shown applies to vehicles licensed by
   Lewes & Eastbourne only. The other authorities did not provide vehicle details.
- Nearly one in three vehicles (29%) would not be compliant with London's Ultra Low Emission Zone (ULEZ).
- Currently only five fully electric vehicles.

## Euro status by licensing authority

### (Lewes & Eastbourne only)



### Age when purchased by current owner (Lewes & Eastbourne only)



- Two in five vehicles (40%) in Eastbourne were less than 3 years old when acquired by their current owner (as estimated using the last change to the vehicle logbook or "V5C").
- > Vehicles in Lewes appear to be slightly older when acquired by their current owner.

# Popular vehicles (Lewes & Eastbourne only)

### Total vehicles (by make) licensed by each authority

Most popular vehicles by licence type

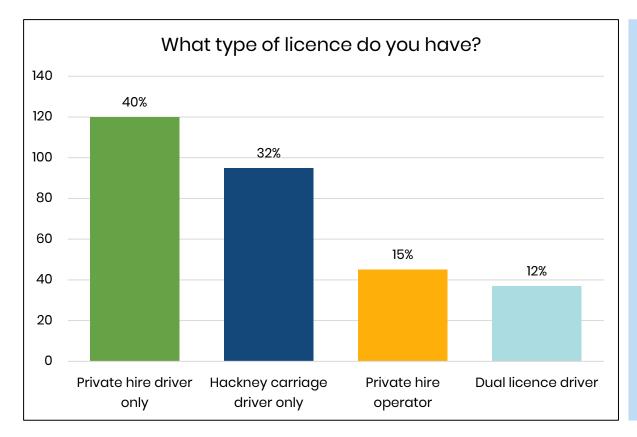
Make	Eastbourne	Lewes	Total ▼
<sup>⊞</sup> TOYOTA	143	73	216
<sup>⊕</sup> SKODA	59	65	124
■ MERCEDES-BENZ	34	71	105
<sup>⊕</sup> FORD	12	42	54
VOLKSWAGEN	13	39	52
<sup></sup>	19	28	47
<sup> </sup>		41	41
<sup> </sup>	7	18	25
<sup>⊕</sup> AUDI	1	13	14
<sup>⊕</sup> BMW	3	10	13
Total	291	400	691

Private Hire	No. licensed	Hackney Carriage	No. licensed
Toyota Prius Hybrid	79	Toyota Prius Hybrid	16
Skoda Octavia	75	Skoda Octavia	15
Mercedes E-Class	73	Toyota Auris Hybrid	14
Toyota Auris Hybrid	58	Ford Mondeo	14
Renault Master	41	Hyundai Ioniq Hybrid	12

## Section 2 Characteristics

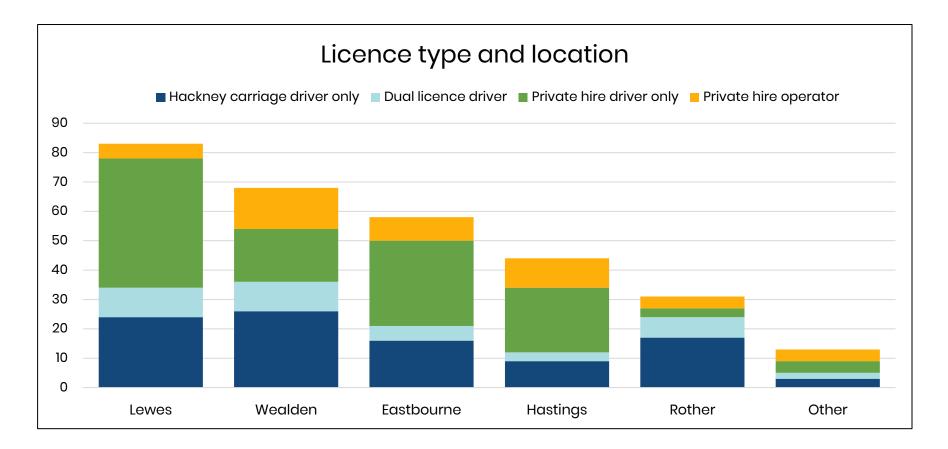
Who responded to the survey? What vehicles do they drive or operate?

### Licence types

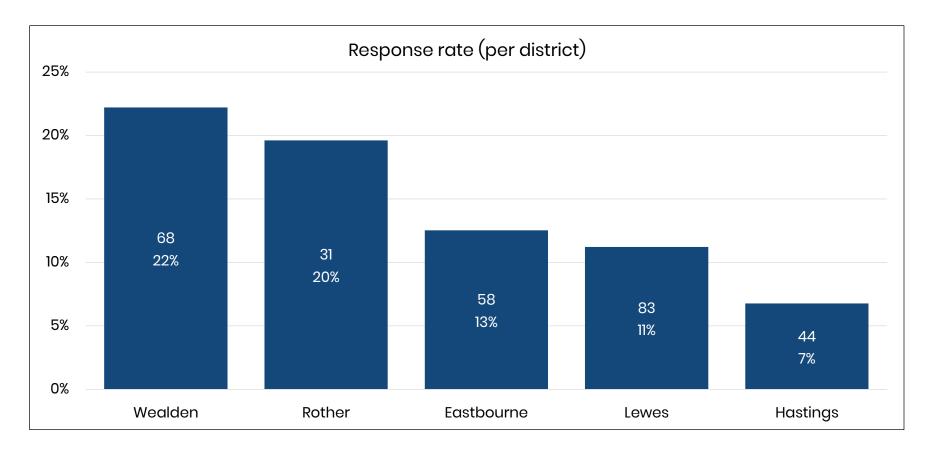


- > 297 responses
- Estimated 13%
   response rate\*
- 85% of responses were from drivers
- More than four in five operators (84%) also selected they have a driver licence

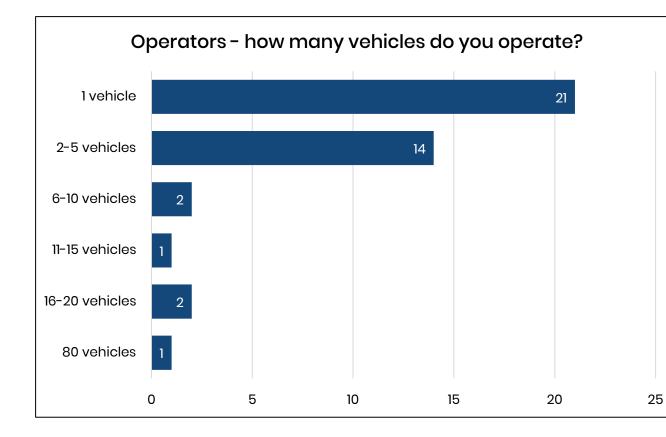
\* Based on an estimated 2,317 drivers licenced in 5 districts across East Sussex.



### Response rates

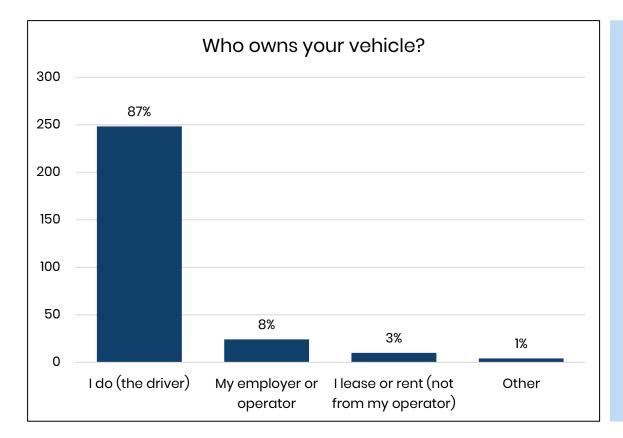


### **Operators** – fleet size



- 21 operators who responded are running just one vehicle
- Collectively, those who responded to the survey are operating 209 vehicles
- 9 of these operators (20%) have minibuses on their fleet.

## Who owns your vehicle(s)?

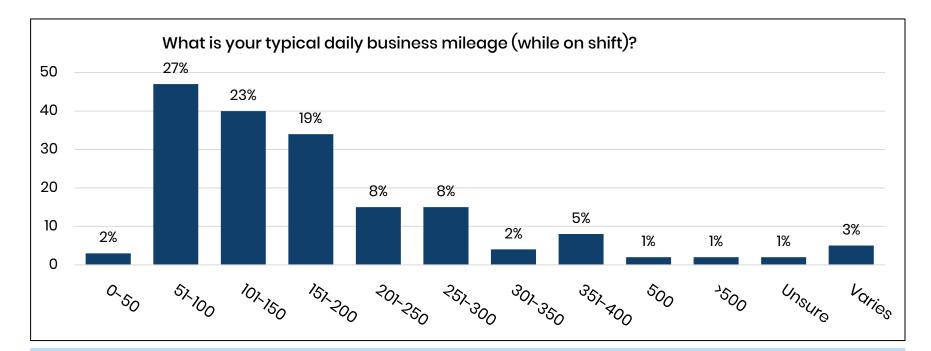


- Vehicle ownership impacts who will be responsible for, or able to make, decisions about switching a vehicle to an electric vehicle (EV).
- High driver ownership (87%) shows that understanding drivers' opinions and barriers will be key to transitioning the trade to cleaner vehicles.

# Section 3 Driving patterns

How far are vehicles travelling, and where? Where are vehicles kept while not on shift? Popular taxi ranks

## Daily mileage - drivers



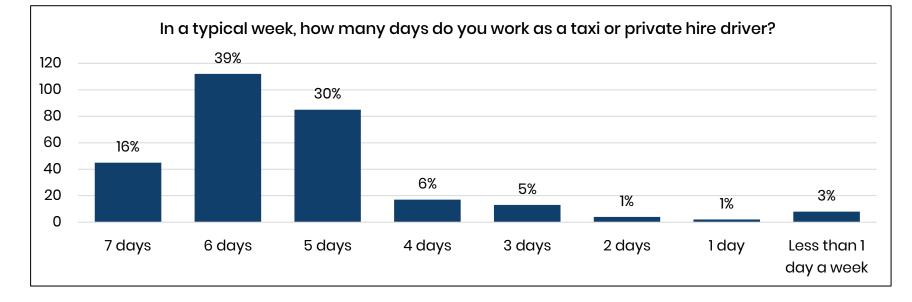
- > The average (median) daily mileage while on shift is between 101-150 miles
- > 70% of drivers travel less than 200 miles in a typical shift

## Working days & annual mileage

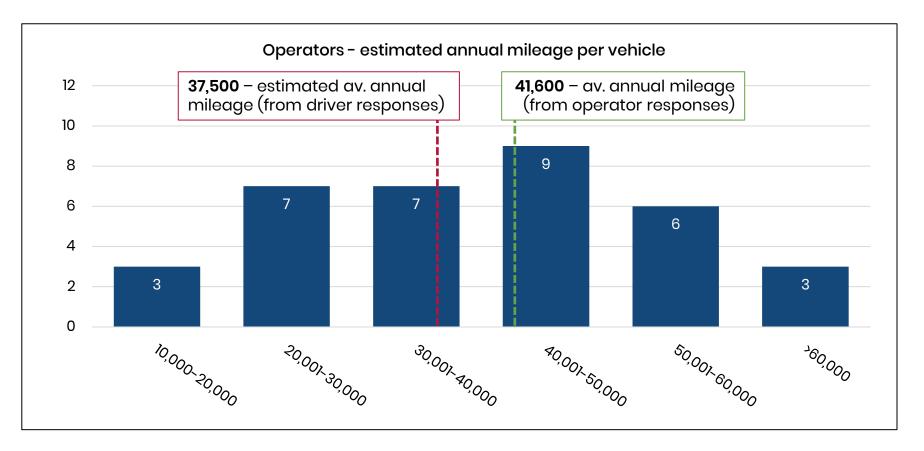
> More than four in five (85%) work as a taxi or private hire driver at least 5 days a week

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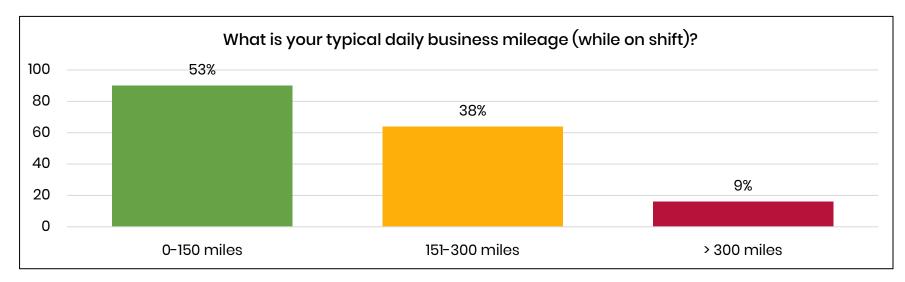
Estimated average annual mileage of 37,500 miles based on an average of 6 working days a week (over 50 weeks) and 125 miles per day.



### Annual mileage – operators



## Charging required during shifts



#### Based on an average EV range of 150 miles:

53% would likely not need to charge during their shift

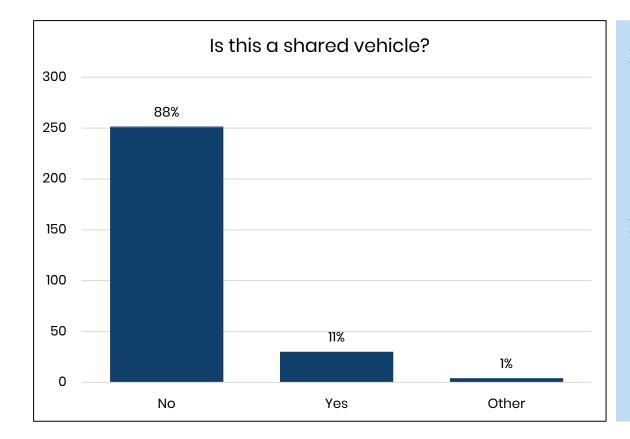
38% would likely need one full recharge during their shift 9% might need two or more full recharges during their shift

## Rapid charging – 50 kW

30 minutes plugged into a 50 kW rapid chargepoint could add roughly 50-75 miles of additional range to these EVs

Vehicle	Range added using a 50 kW chargepoint (in miles)			
	60 min	45 min	30 min	15 min
Skoda Enyaq iV 80	135	101	68	34
MG MG5 EV Long Range	143	107	71	36
Ford Mustang Mach-E ER	123	92	62	31
Tesla Model 3 Performance	152	114	76	38
Citroen e-SpaceTourer M	98	73	49	24
Peugeot e-Rifter Long	107	80	53	27

### Shared vehicles

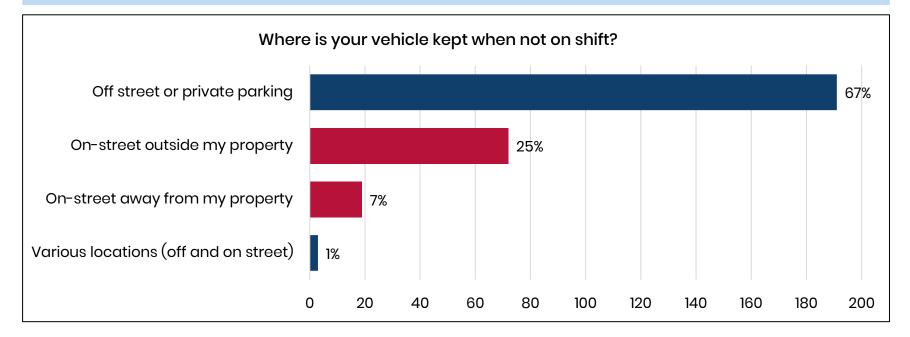


- Shared vehicles may regularly be used by another taxi driver or for an entirely different purpose (e.g. the driver's personal use).
- Shared use will affect the overall mileage and time available for charging a vehicle outside of a shift

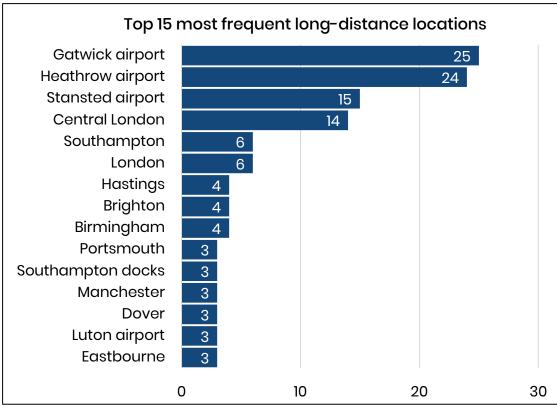
   both impact how easy it is to switch a vehicle to an EV.

## Parking while off-shift

- > One in three (32%) park their vehicle in a **public location** while not on shift.
- > These drivers would be likely to rely on slow public charging nearby.



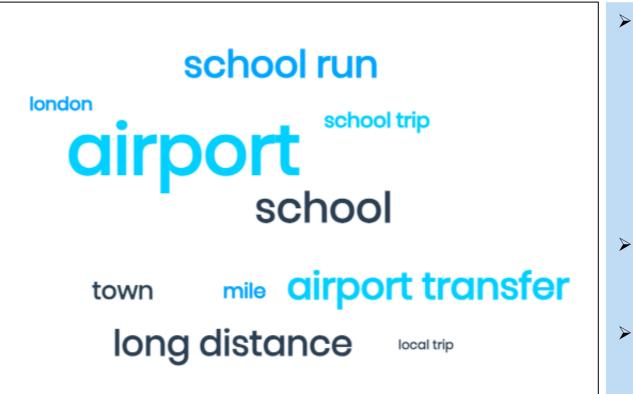
## Frequent long-distance fares



- 107 unique locations (top 15 shown here).
- Major London airports dominated responses to this question.
- From 29 August 2023, the London Ultra Low Emission Zone (ULEZ) will expand to cover Greater London. This will affect drivers with non-compliant vehicles\* travelling to Heathrow Airport.

\*Vehicles must be a minimum of either Euro 4 petrol or Euro 6 diesel to be <u>compliant</u> with the London ULEZ.

## What kind of trips do you do?



252 responses provided. This was an open text question. The word cloud shown here pulls out common words that were provided.

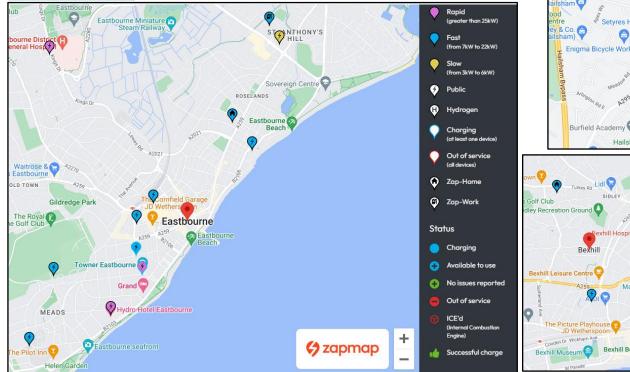
- "Airport" or "airport transfer" were mentioned 88 times.
- "School" or "school run" were mentioned 49 times.

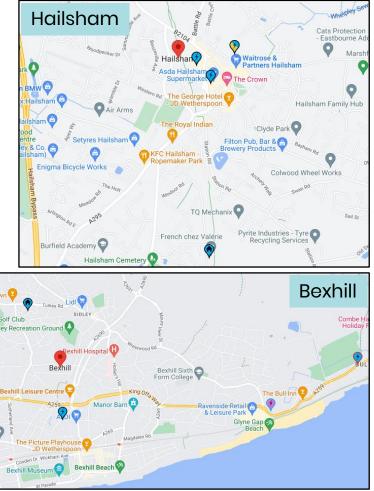
### Popular taxi ranks – top 15 sites

Taxi rank	Mentions	Taxi rank	Mentions
Old Orchard Road, Eastbourne	23	Newhaven Railway Station	10
High Street, Hailsham	19	George Street, Hailsham	9
Bolton Road, Eastbourne	16	Croft Road, Crowborough	8
Havelock Road, Hastings	14	Broad Street, Seaford	8
Devonshire Road, Bexhill on Sea	12	Dacre Road, Newhaven	8
Town Hall Square, Bexhill on Sea	11	De La Warr Parade, Bexhill on Sea	7
Station Approach, Seaford	11	Hastings Train Station	6
Queens Road (Priory Meadow)	11	Another rank not listed (various)	71

# Existing infrastructure via Zapmap

### Eastbourne



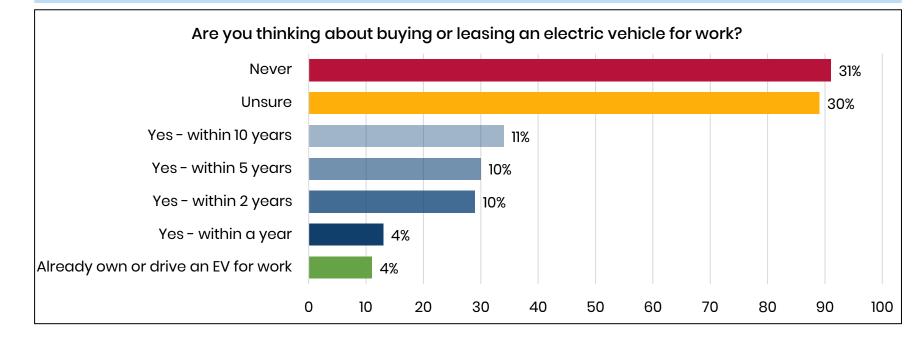


## Section 4 Opinions on EVs

Benefits or challenges for existing EV drivers What's preventing others from switching? What would encourage them to switch?

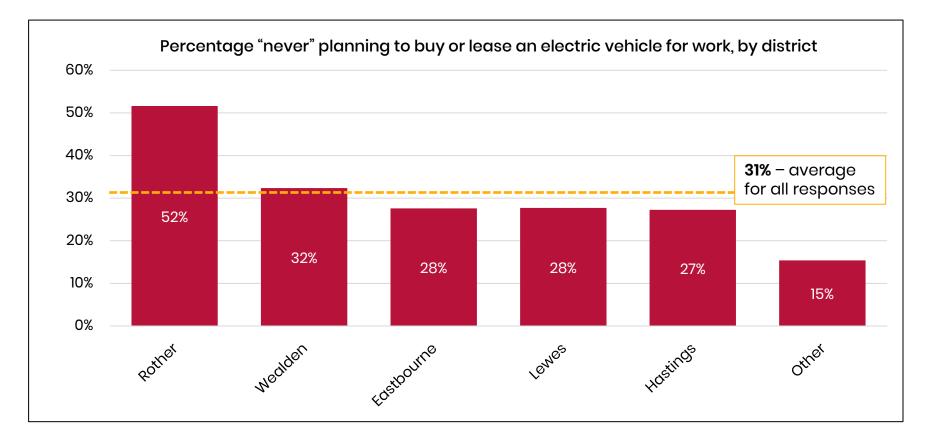
### Plans to switch to EV

- > One in three (36%) plan to switch to an EV in the next 10 years or sooner.
- > Nearly one in three said they will never make the switch to an EV.



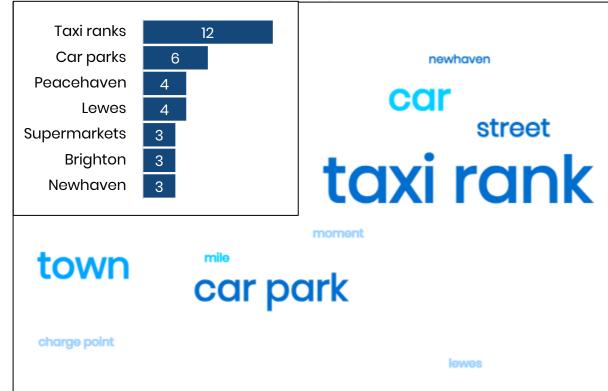
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### Plans to switch by district



## Suggested chargepoint locations

Where would you like to see chargepoints installed?



III responses
provided. This was
an open text
question. The word
cloud pulls out
common words that
were provided.

The inset chart is based on summarised responses to identify key themes from the open text responses.

# Have you experienced any benefits or challenges from switching to an EV?

> 11 respondents to the survey are already operating an EV.

#### Good – 7 comments

- Considerable savings
- Extended age limit [Lewes DC]
- Avoid paying ULEZ or road tax
- Much easier to drive
- Quieter and cleaner
- Customers are more comfortable

#### Bad - 4 comments

- "If you can find a charge point working, it's nearly always occupied and slow at charging"
- Downtime at charging stations
- Issues with hybrid or plug-in hybrid vehicles: limited battery size

### 111 general comments – recurring themes:

### CHARGEPOINT AVAILABILITY

- "Lack of investment in charging infrastructure is the biggest barrier to switching to EV".
- Regular queues of drivers waiting to charge at existing chargepoints.
- "Waiting around for charging points to become available will be a costly exercise".
- Live in a flat so cannot charge at home overnight public infrastructure "is just not there".
- From an operator who currently operate 57 hybrid vehicles: Unlikely EVs will work for them as "few would have access to charging at home".

### RANGE

- EVs are good for local, short distance jobs but not for long distances.
- True mileage of EVs are lower than the manufacturers' claims.
- The range of an EV minibus is about 100 miles can't cover my school run both ways.

Continued on next page.

## 111 general comments – recurring themes (cont.):

### COST TO PURCHASE (& RUN)

- Suitable EVs (i.e. with long enough range or larger vehicles) are too expensive.
- Cost of charging at public chargepoints is increasing.
- "Will have to spend a fortune every 2-3 years on replacement batteries."

### LOCAL ISSUES

- Several mentioned knowing drivers who switched to an EV and have since switched back to petrol.
- Affordable EVs (e.g. Hyundai Ioniq, Nissan Leaf) may not meet council rules on boot space.
- Working as a taxi driver for over 24 years I have seen a big drop in work.
- "Needs to be huge discounts for taxi drivers and charging points for taxi drivers only."
- "The current age limit within Rother... does not make it cost effective to own an EV!"

## Section 5 Key recommendations

Suitable EV alternatives Next steps & recommendations

### Suitable EV alternatives

The following EVs have been identified as suitable alternatives to vehicles that are currently popular among taxi and private hire drivers in East Sussex (based on data for Eastbourne & Lewes):

Vehicle model	Potential EV alternative	Used vehicle cost*	<b>Range</b> (from <u>EV Database</u> )
Skoda Octavia / Ford Mondeo	MG MG5 EV	£12k - £34k	205 miles
Toyota Prius / Auris	Nissan Leaf	£5k - £35k	145-210 miles
Mercedes E-Class	Tesla Model 3	£19k - £54k	235-300 miles
Renault Master	Citroen eSpaceTourer / Vauxhall Vivaro-e Life Combi	£26k - £35k £23k - £36k	115 miles

\*Used vehicle costs sourced from <u>AutoTrader</u> based on vehicles nationally available as of 31 October 2023. These costs are illustrative and will vary depending on location and availability at the time of searching.

### Key recommendations & Next steps



### Provide independent advice to drivers and operators

- Raise awareness of the current EV market e.g. suitable models available, their typical range, how long they take to charge and their realistic running costs.
- Provide advice on how and where to purchase second-hand EVs, such as visiting reputable dealerships.
- Provide guidance on using Zap-Map and other chargepoint location websites.



### Build confidence in local charging infrastructure

- Build a better understanding of where the one in three drivers without access to offstreet parking are based across East Sussex.
- Engage with private chargepoint operators and council colleagues responsible for EV charging infrastructure to ensure:
  - Drivers without access to off-street parking have access to reliable slow public charging,
  - Rapid charging is widely available in popular destinations and close to key taxi ranks and rest-stops.

## Key recommendations & Next steps



### **Explore opportunities for financial support**

- Raise awareness of existing grants available for purchasing EVs and associated charging infrastructure. For example: <u>Plug-in grant for Taxis</u>, <u>EV Chargepoint grant for</u> <u>renters and flat owners</u>, <u>Workplace Charging Scheme</u>.
- Explore introducing additional financial incentives for taxi and private hire drivers to support the business case of switching to an EV. This could include:
  - Extending (or removing) age limits for EVs to enable drivers to purchase more affordbale second-hand vehicles
  - Grants or subsidies to purchase new or second-hand EVs
  - Cheaper charging at public chargepoints

### Further engagement with drivers & operators

Based on 297 responses to the survey:

- 24% would attend an <u>online</u> workshop (34% said maybe)
- 15% would attend an <u>in-person</u> workshop (33% said maybe)