

EV Charger Usage

EDTCE Informal Scrutiny – EV
Charging

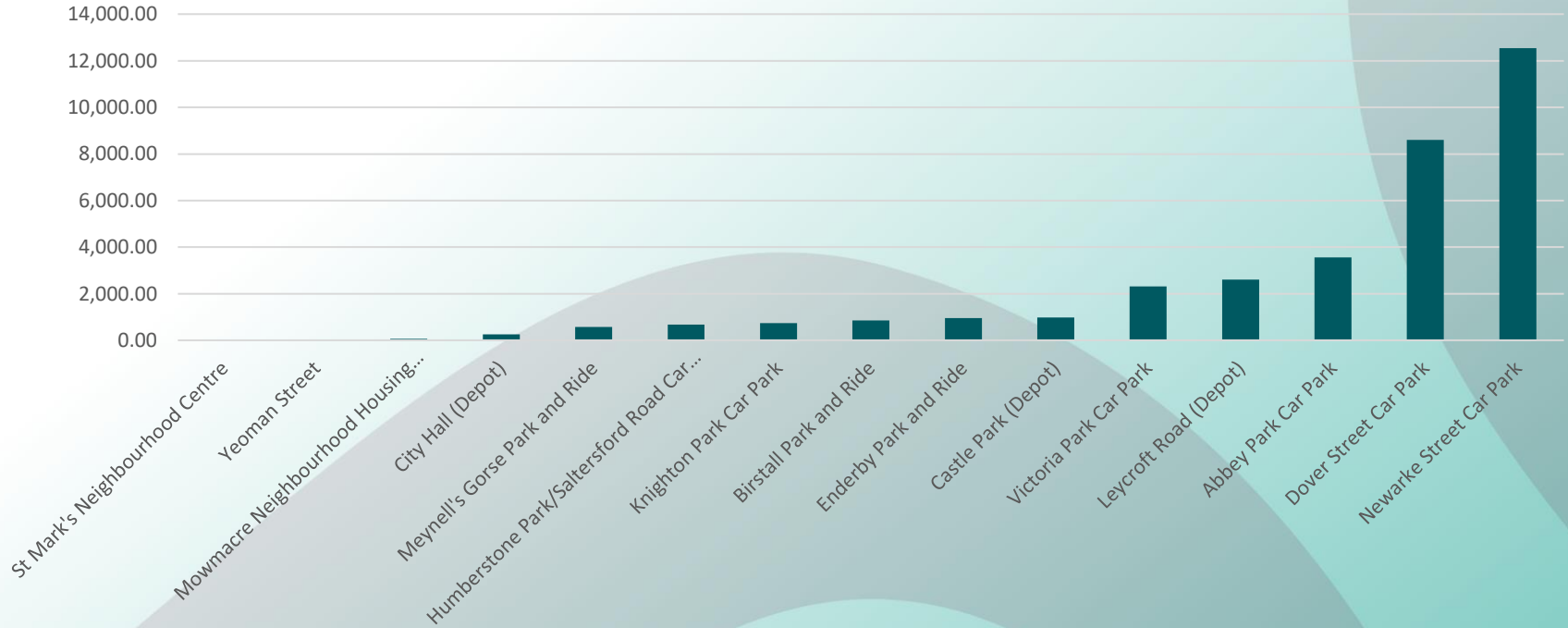
Measuring Usage

- Usage from the two operators working within Leicester is recorded differently
 - Blink – records based on kWh
 - Char.gy – records based on charging sessions and overall utilisation
- Blink chargers are mostly found in car parks and similar sites, Char.gy are lamp columns and residential chargers.
- Direct comparison therefore difficult, but environmental comparison possible

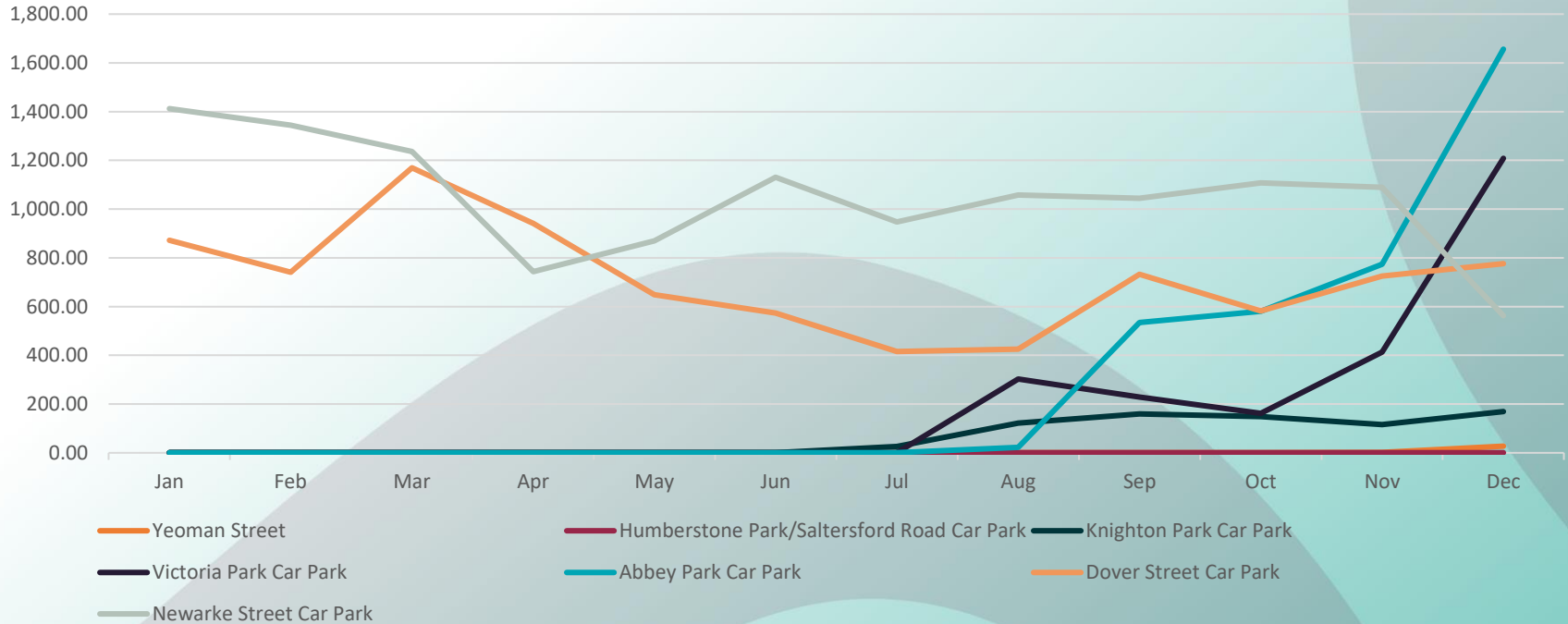
Blink usage - 2023

- 36,135 kWhs across all sites.
- Not all sites active for the whole year – some did not come online until June/July.
- Highest – Newarke St, with over 12,500 kWhs.
- Lowest – St Mark's Neighbourhood Centre, followed by Yeoman Street.
- Highest usage in December, but notable increase over the year.

Usage by charger location



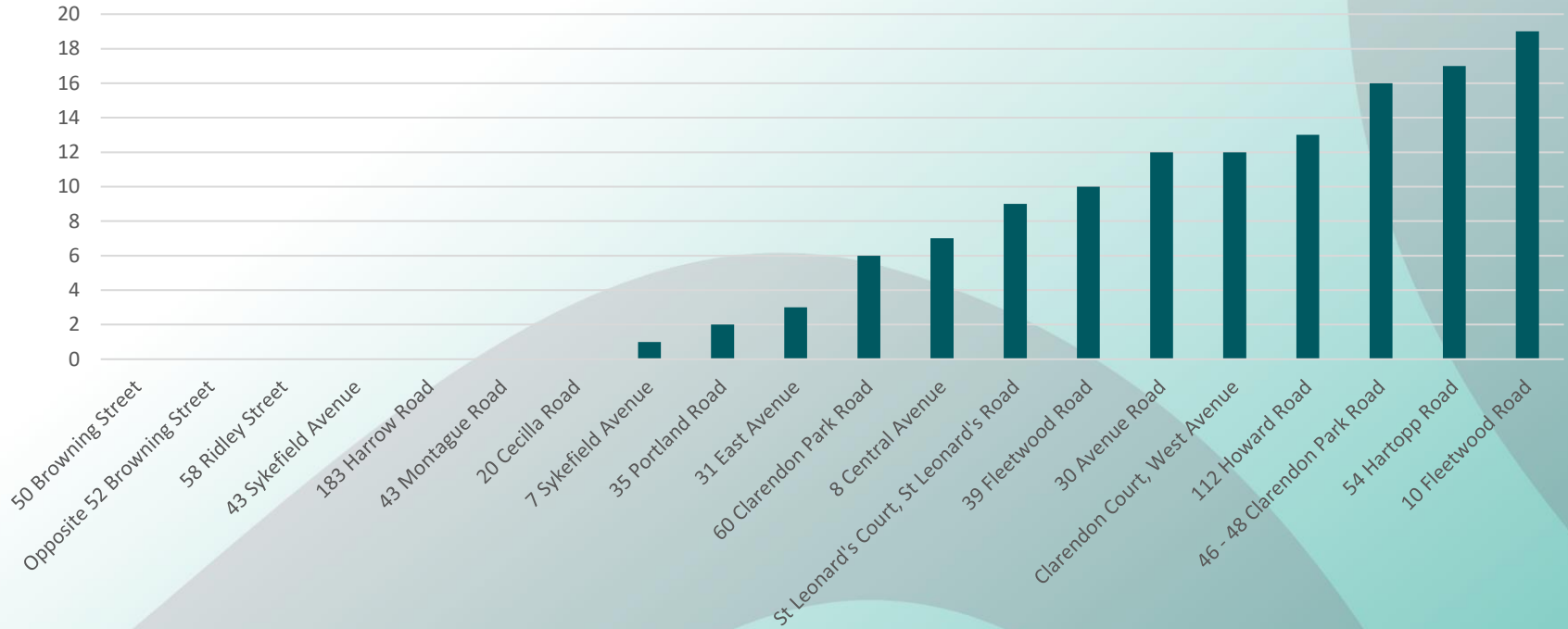
Usage by location, by month (car parks)



Char.gy usage – March 2024

- Much shorter data window.
- Currently 20 discrete chargers on the network, mostly lamp column chargers or other low volume residential options.
- 127 total charging sessions in March.
- 7 sites with no charging sessions at all.
- 10 Fleetwood Road the busiest charger, but 54 Hartopp Road where vehicles spent the most time.

Charging cycles by charger location



Findings

- Destination chargers are used much more than residential chargers.
- Charger usage appears to be steadily increasing but subject to major fluctuations.

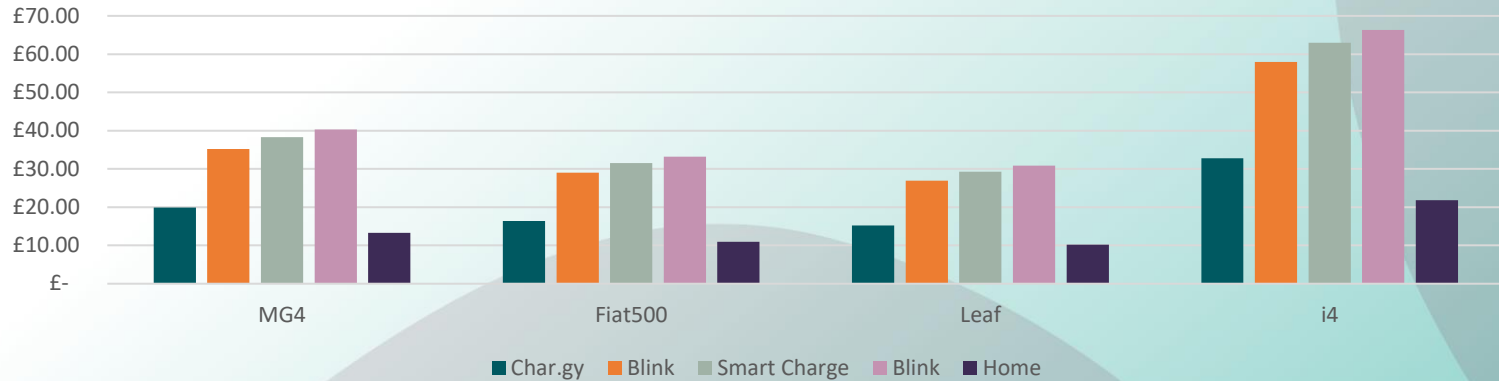
Costs

- Indicative charging costs for locations included in the adjacent table.
- Representative home tariff also included, for balance.
- Cheapest public option is about 30% more expensive than home charging, and is only available off peak (overnight)
- Next slides shows indicative costs based on select vehicles.

Provider	Type	Example	ppkwh
Char.gy	Lampcolumn	Off Peak	£ 0.39
Char.gy	Lampcolumn	Peak	£ 0.60
Blink	Fast	Dover Street	£ 0.69
Blink	Rapid	Abbey Park	£ 0.79
Geniepoint	Rapid	Morrison's	£ 0.75
Smart Charge	Ultra Rapid	Fosse Park	£ 0.75
Home domestic charge			£ 0.26

Comparison tables

Charging costs per Tariff



Model	Capacity	Range (miles)	Char.gy		Blink		Smart Charge		Blink		Home	
			£	0.39	£	0.69	£	0.75	£	0.79	£	0.26
MG4	51	323	£	19.89	£	35.19	£	38.25	£	40.29	£	13.26
Fiat500	42	186	£	16.38	£	28.98	£	31.50	£	33.18	£	10.92
Leaf	39	168	£	15.21	£	26.91	£	29.25	£	30.81	£	10.14
i4	84	367	£	32.76	£	57.96	£	63.00	£	66.36	£	21.84

Pence per mile cost

Model	Capacity	Range (miles)	Char.gy		Blink		Smart Charge		Blink		Home	
			£	0.39	£	0.69	£	0.75	£	0.79	£	0.26
MG4	51	323	£	0.06	£	0.11	£	0.12	£	0.12	£	0.04
Fiat500	42	186	£	0.09	£	0.16	£	0.17	£	0.18	£	0.06
Leaf	39	168	£	0.09	£	0.16	£	0.17	£	0.18	£	0.06
i4	84	367	£	0.09	£	0.16	£	0.17	£	0.18	£	0.06

Petrol comparison			Low		Medium		High	
			£	1.41	£	1.52	£	1.55
3 Series	59	550	£	83.19	£	89.68	£	91.45
			£	0.15	£	0.16	£	0.17