

Harrogate
BOROUGH COUNCIL



North Yorkshire
County Council

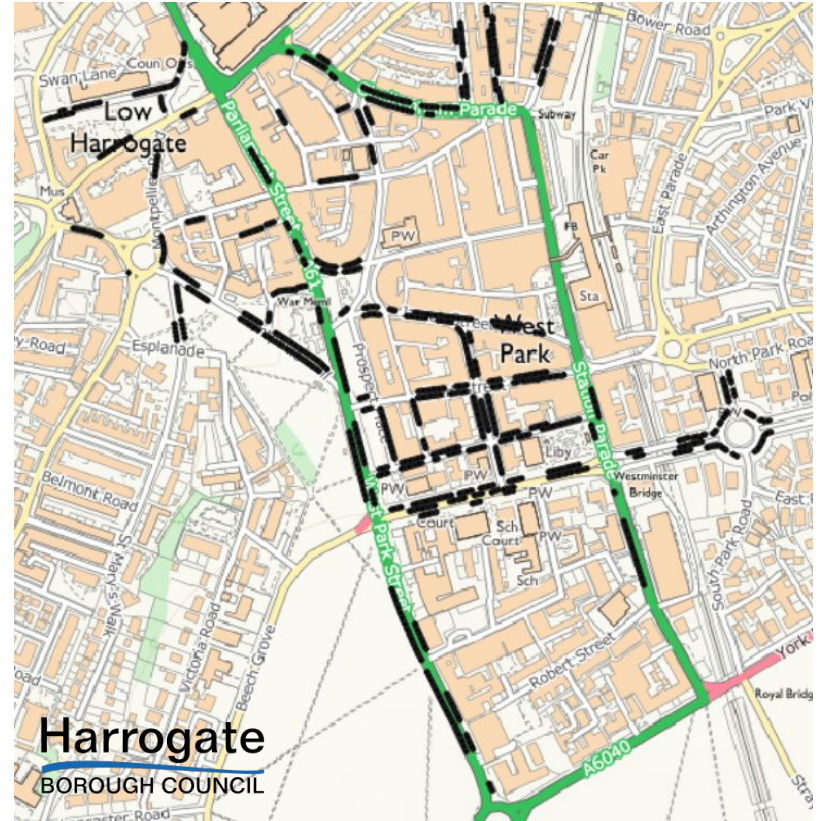


appyway

Harrogate smart parking system

Harrogate smart parking system

- 2,058 sensors (on-street & off-street)
- 3 base stations
- Scheidt & Bachmann barrier integration

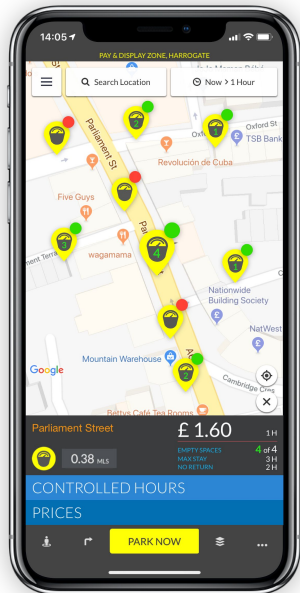


How it works

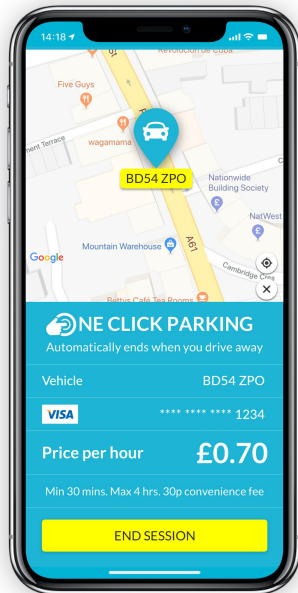
- Mobile app showing motorists parking locations, restrictions, tariffs and live availability
- Automatically charge users at the end of the stay for the exact time parked



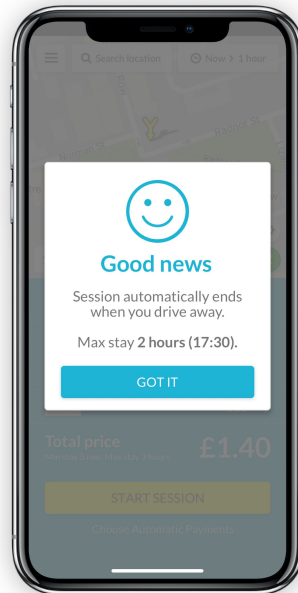
Transforming the user experience with frictionless parking



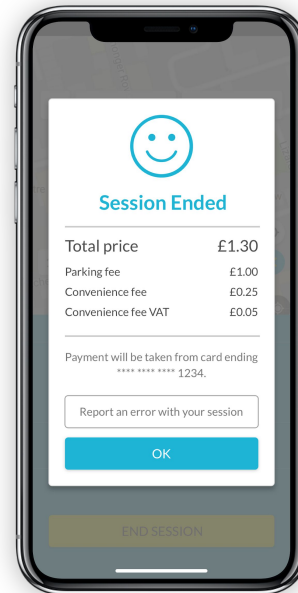
1



2



3



4

Savings and Benefits

Increase in park parking duration

- ↑ 6 min longer on-street
- ↑ 22 min longer off-street

Equivalent to **2.4%** revenue increase per year at 10% average adoption

Reduced transaction costs

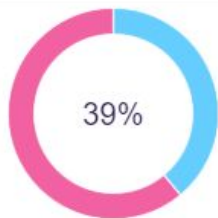
Lower cash management and card payment processing fees vs P&D

8% transaction processing cost saving per payment

Reduction in payment avoidance

2% greater proportion of payment sessions above 30 min minimum tariff

Drivers pay for entire duration of their stay



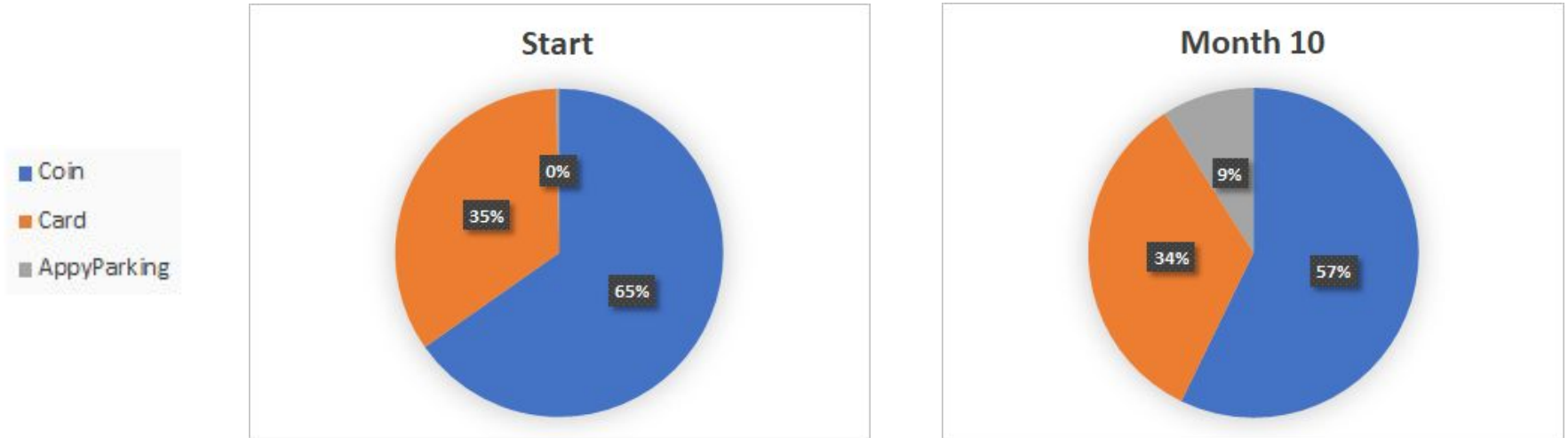
Staying longer in town

+6 min stay ≈ £3.39* additional spend.
Equivalent to £396,000 annual economic benefit.

**Hart et al 2014 ESRC Town Centre Customer Experience*

Payment split before and after AppyParking

- Reduction in coin payments
 - Over 70,000 less coin transactions processed so far



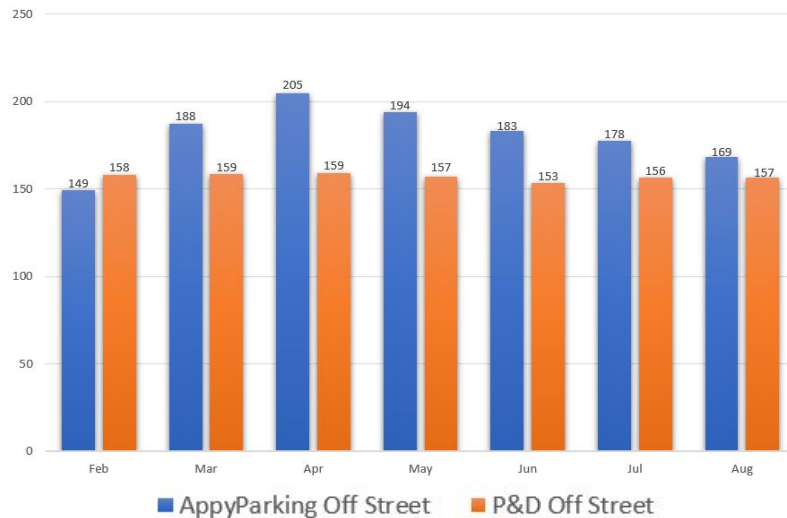
Increased Paid Parking Durations | More Time Spent in Harrogate

Average On-Street Paid Parking Duration



- AppyParking sessions on average **6 minutes** longer
- Equivalent to **1.4% revenue increase** per year at 10% adoption

Average Off-Street Paid Parking Duration



- AppyParking sessions on average **23 minutes** longer
- Equivalent to **1% revenue increase** per year at 10% adoption

Parking Insights Dashboard

Enrich digitised kerbside restrictions with real-time parking occupancy information



- 2-3 mile communication range
- Easy install low profile design
- 8-10 year battery life
- Low Power Wide Area Network (LPWAN)



Revenue monitoring and optimisation

Demand, tariff and restriction planning

Optimise productivity of enforcement

Integrate with Rideshare and EV

Insights | Distribution of Parking Duration

Understanding demand for parking at a detailed and accurate level

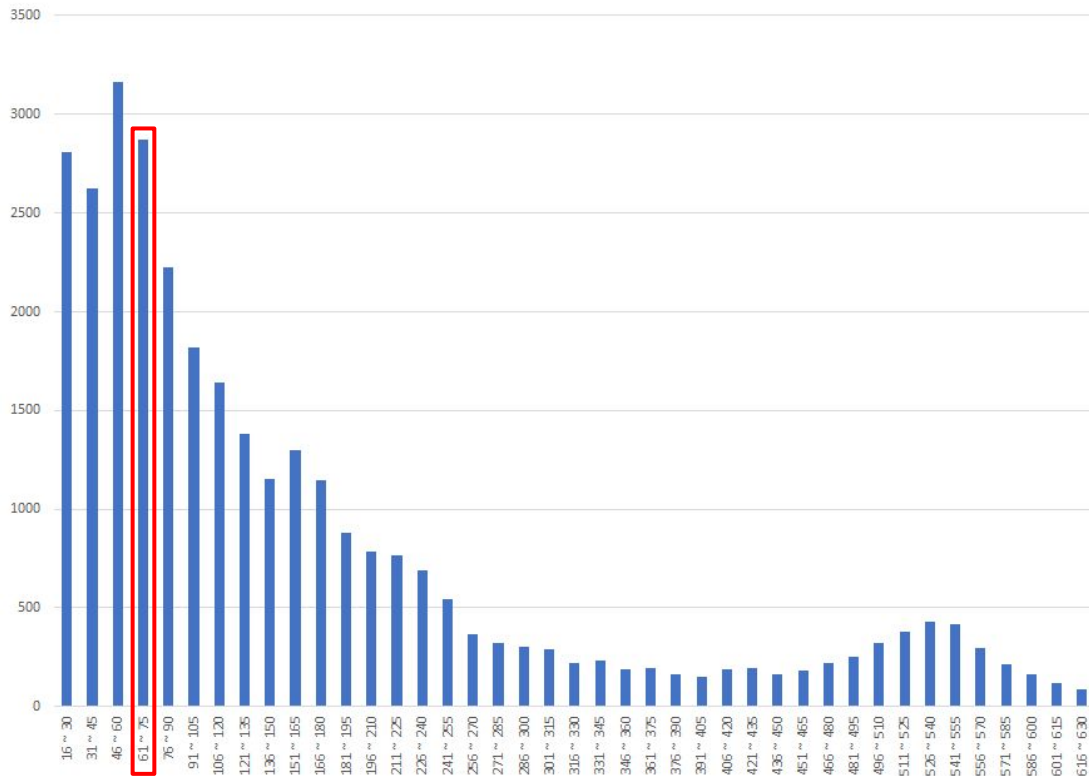
Example: representing actual length of stay in 15 minute bands.

Shows parking demand skewed to shorter stays.

2nd most common parking duration band is **61~75 minutes**.

Identified potential revenue opportunity for charging in smaller tariff increments.

Off-street parking duration distribution

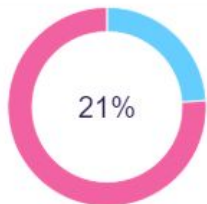


Better Customer Experience

Improving the user experience & supporting the high street

User feedback suggests the introduction of AppyParking is delivering an experience that supports a positive vision for the local high street and economy.

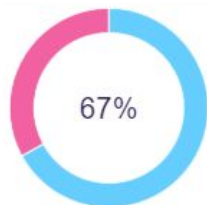
People using the AppyParking app to find and pay for parking reported:



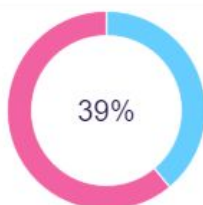
Saving time finding a parking space



Enjoyed the convenience



Less stressed compared to using a pay & display machine



Staying longer in town as a result



AppyWay Digital TROs

Global Mobility Problem for Cities

Cities are under immense pressure to accommodate new demands on the kerb.

- Today's economic, environmental and consumer needs
- Transport is changing
- Tomorrow's accessible kerbside essential for sustainable mobility.



Current kerbside customer experience



No reliable kerbside maps



Confusing Signage and Suspensions



Paper receipts are issued from P&D machines



No payment hub means lots of parking apps

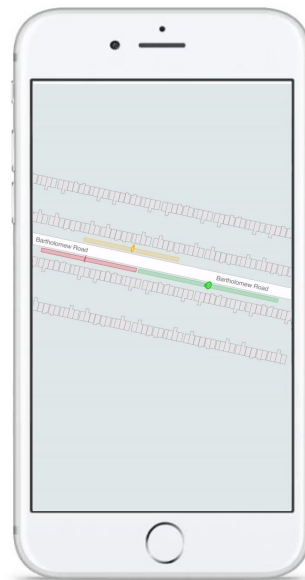


Parking is an enforcement led business model



How will mobility fleets understand the rules?

Digital platform to manage the kerbside



KERBSIDE MANAGEMENT PLATFORM FOR SMART CITIES

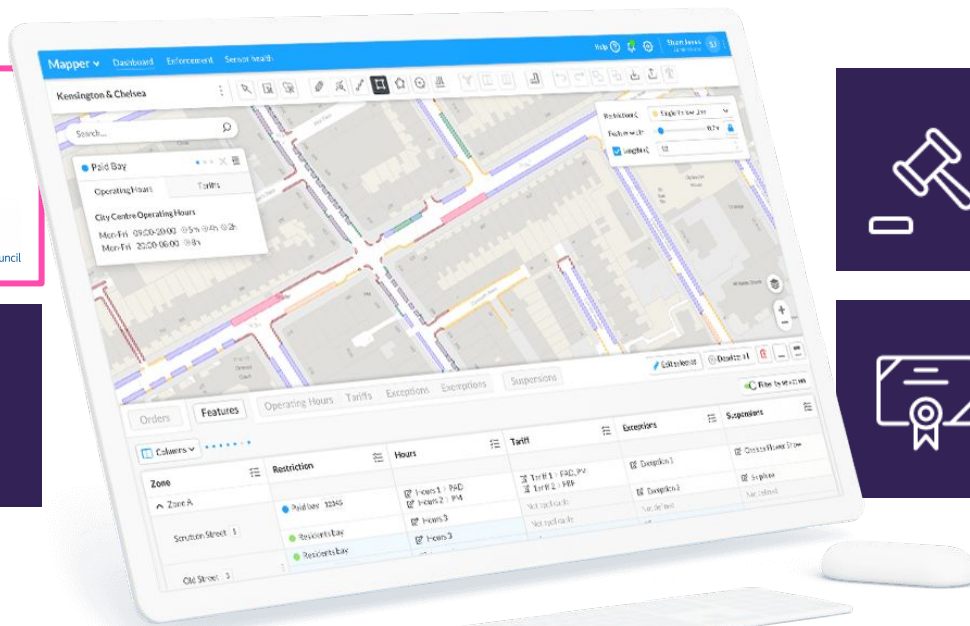
DATA FOR INTELLIGENT MOBILITY APPLICATIONS



Digital TROs | The foundation for smart parking



Streamline process for making and editing kerbside restrictions.



Lead and promote compliance. Create positive changes to TRO legislation.



Common data format ready for Alliance for Parking Data Standards.

Digitised, standardised Traffic Orders

83% more efficient than current systems and processes.

Integrated with Public Consultation

Streamlined
back office portal



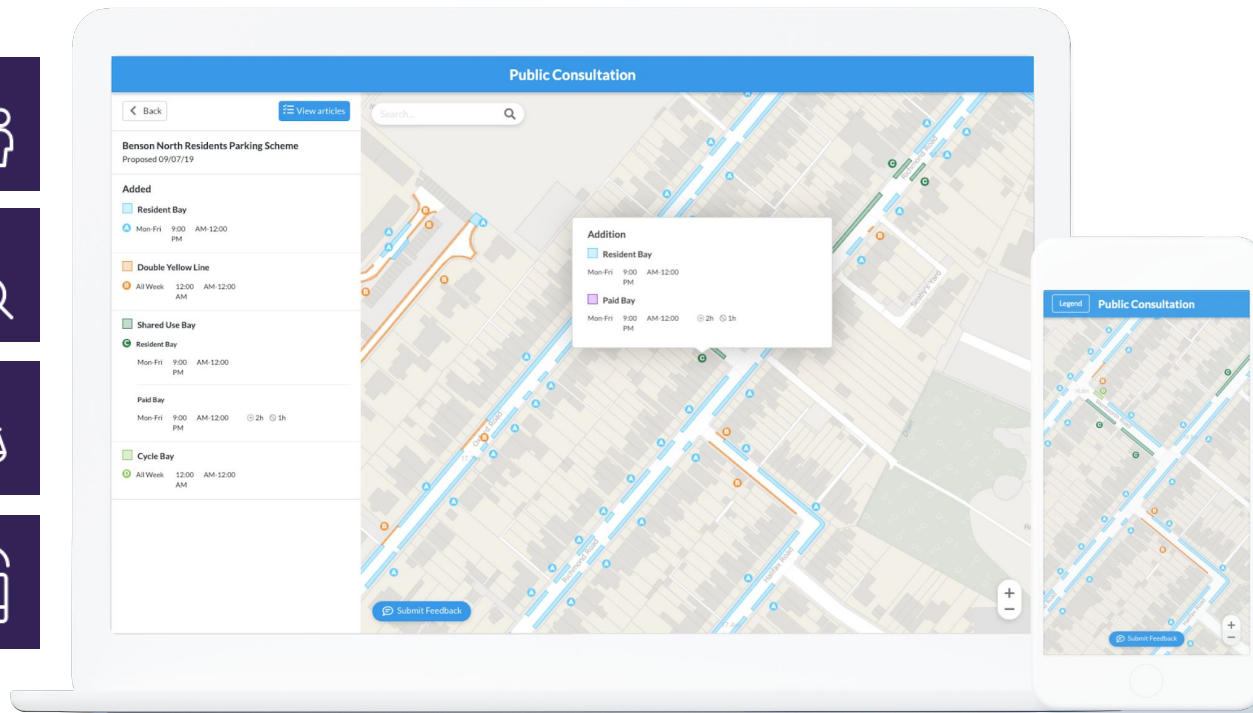
Clear representation
of changes



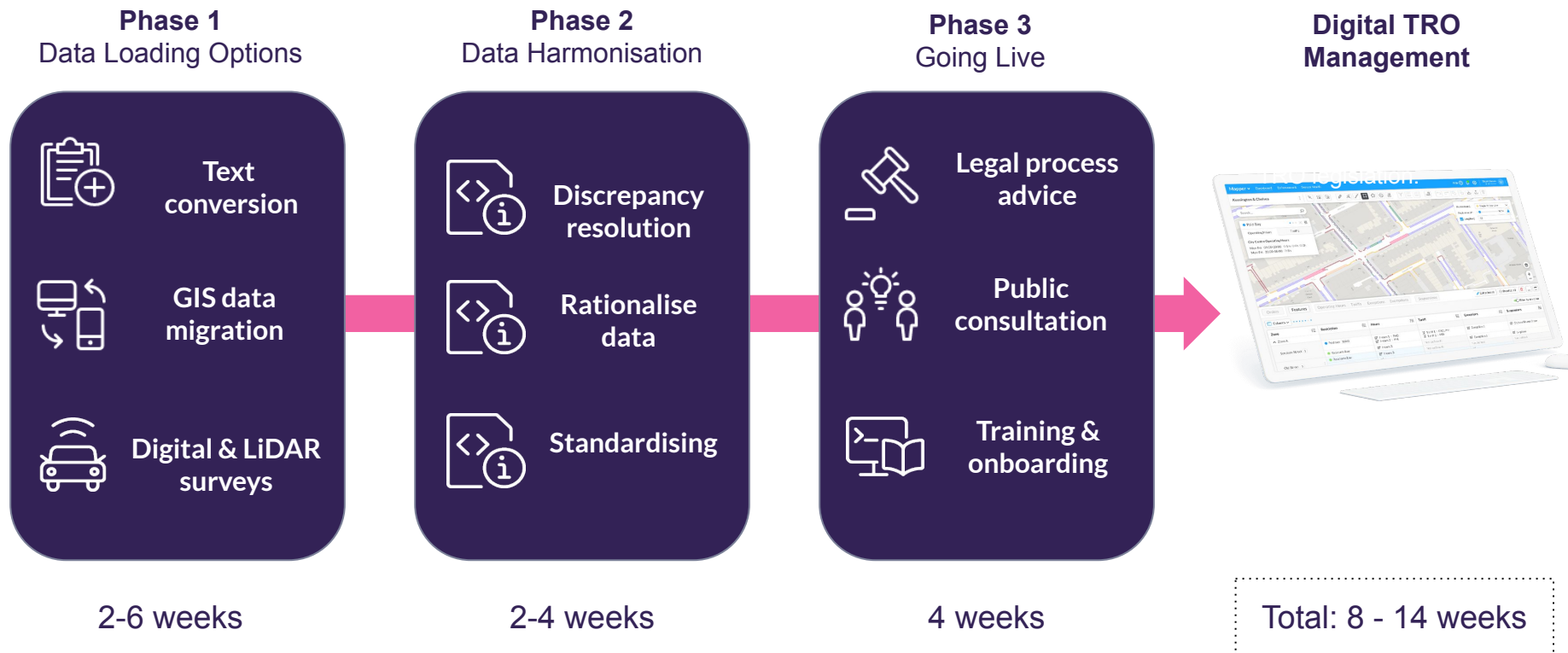
Supports current and
future legislation



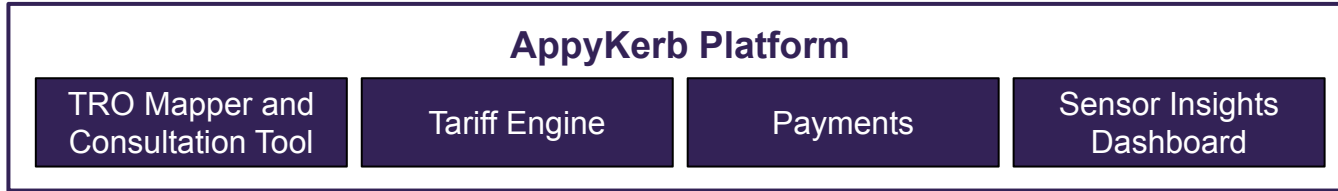
Cross platform offers
On-street viewing



Fully managed transition to digital TROs



Open and shared data

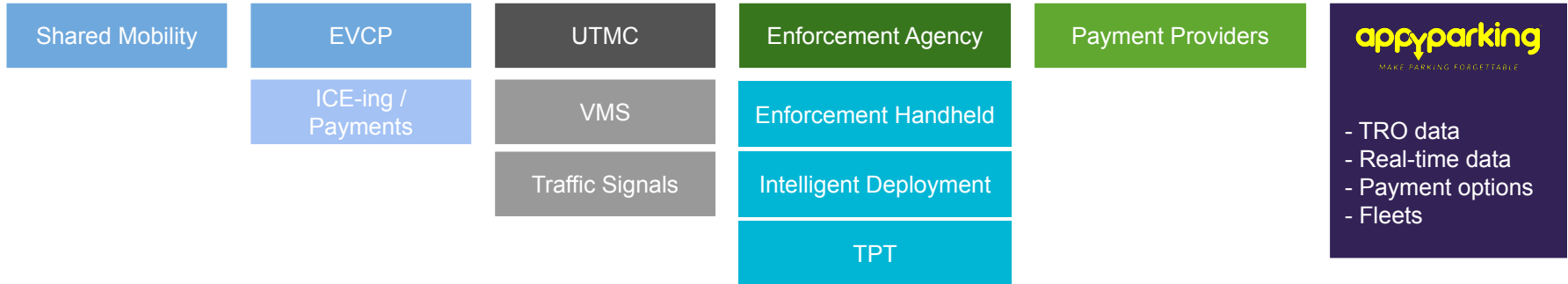


- Local Authority Back Office:
- Compliance
 - Reporting
 - Customer Service
 - Refunds

Open Data Standardisation [APDS]

--- AppyWay Data Hub ---

Open APIs & Integration



Imperial Integration

1. Cashless Parking Interface

Imperial handheld software automatically checks the VRN against those who have paid on the AppyWay system

2. Intelligent Enforcement

- **Sensor Duration Overstay Interface**

Inform enforcement manager of parking sessions that exceed the max stay to optimise deployment of CEOs. (Potential for false positive)

- **Paid Parking Duration Overstay Interface**

Alert CEO to occupancy overstays associated with an expired parking payment

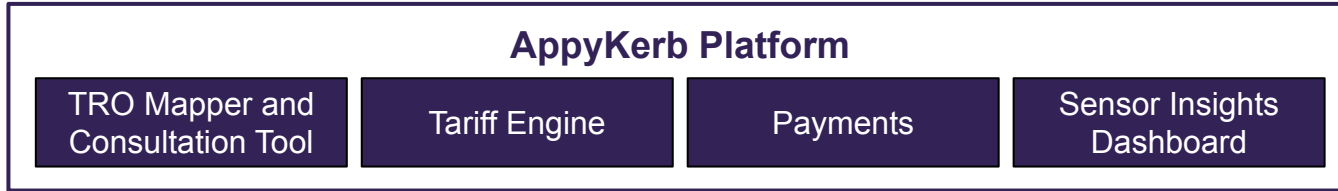
3. Feedback from CEOs

CEOs could report compliance issues, missing signs, faded lines etc

Thank you



Open and shared data

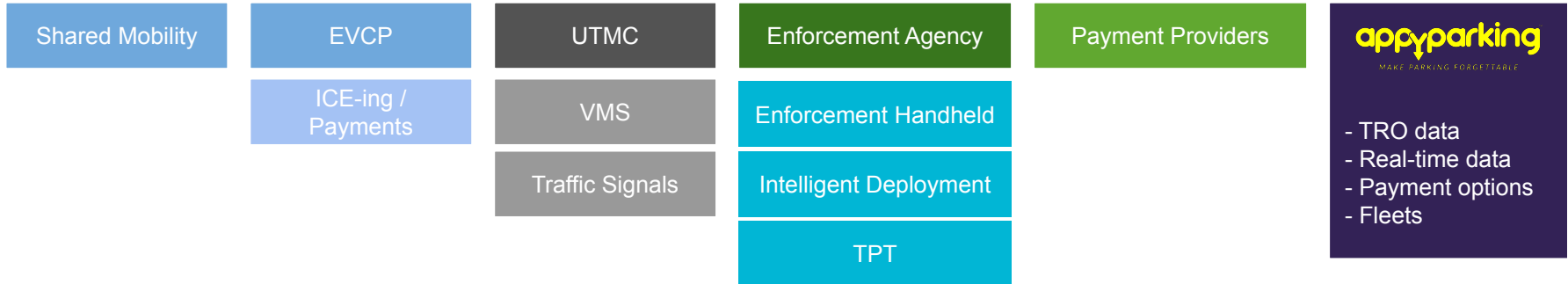


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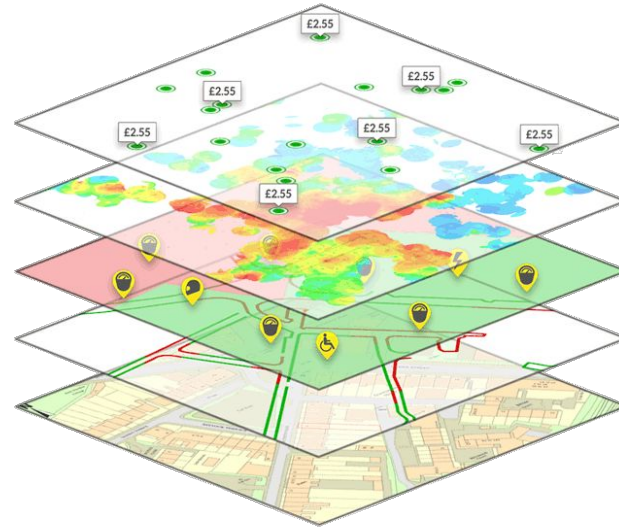
--- AppyWay Data Hub ---

Open APIs & Integration



Digital platform to manage the kerbside

One common data format ready for APDS



Payments

Heat Maps

Kerb Access

TRO's

Base Map

KERBSIDE MANAGEMENT PLATFORM FOR SMART CITIES

DATA FOR INTELLIGENT MOBILITY APPLICATIONS

