Car IQ | Pay

VISA

Cardless Fleet Payments

How Car IQ is re-inventing the fleet payment process

February 2025

Businesses give their drivers fleet cards to pay for fuel, but what if they could pay using the vehicle instead? Are there benefits to paying with the vehicle?

Introduction

We look at Car IQ, a US fintech who is enabling fleets to make the switch. Car IQ's technology is combining vehicle and payment information in new and innovative ways to improve the fleet payment experience and combat growing fraud trends. Continue reading to discover the capabilities and benefits of this approach.
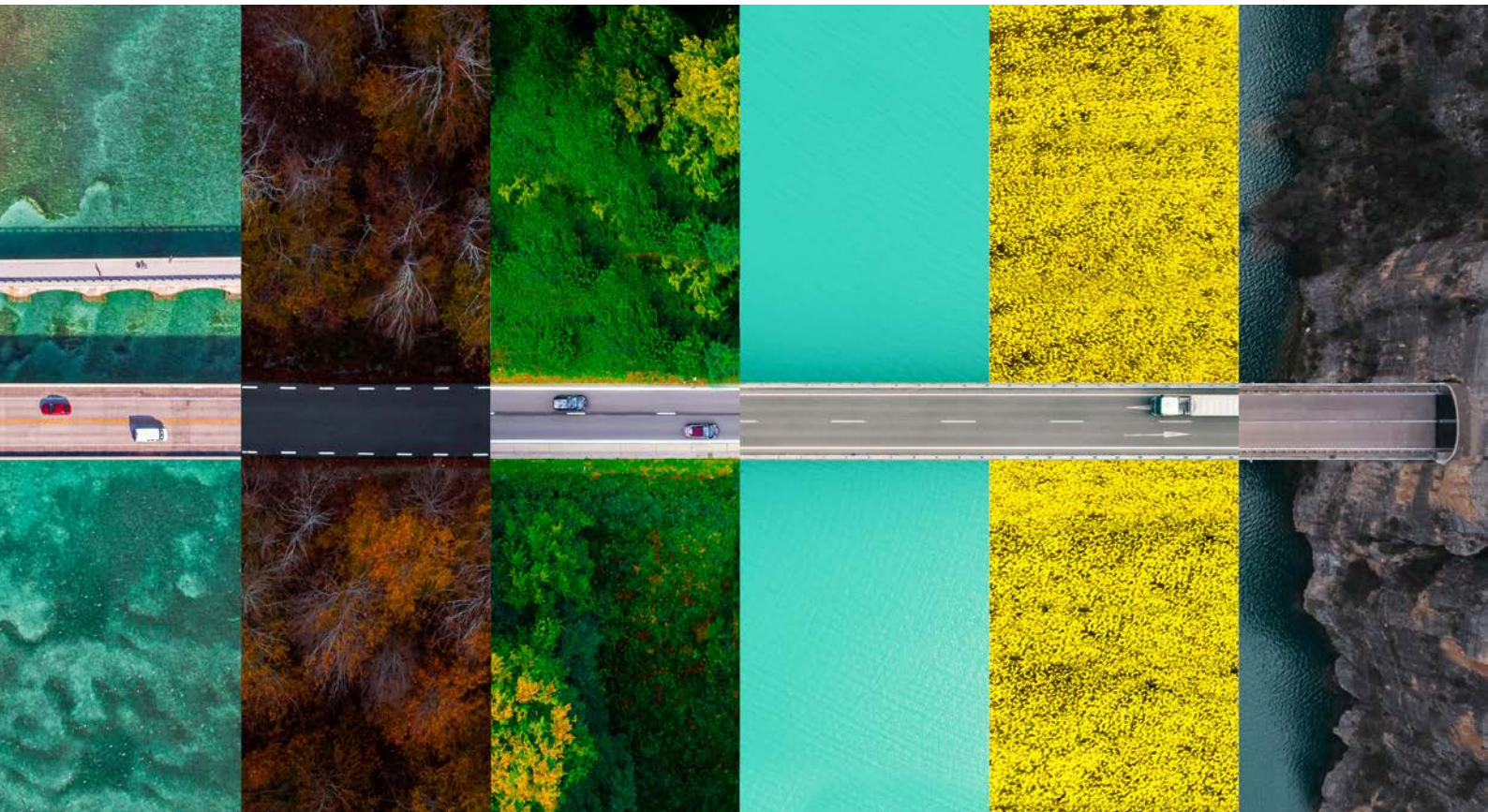
Growth of vehicle telematics creates new payment possibilities for fleets

For decades, businesses have relied on fleet cards to keep their drivers and vehicles moving while managing expenses. At a glance, fleet cards look similar to standard credit cards, but they include supplemental features to provide additional security, control and data.

Traditionally, fleet cards require drivers to manually enter information about the vehicle and driver, which can be used to validate the payment transaction and generate reports. This method can be prone to inaccuracies due to the reliance on manual entry of IDs and odometers.

However, a new paradigm in fleet payments is emerging through the integration of telematics. Vehicle telematics utilizes sensor data from the vehicle to provide a continuous stream of accurate information, including real-time location, fuel levels, and tank capacity. Penetration of telematics is growing rapidly. Berg Insight reports that the number of active telematics/ fleet management systems deployed in commercial fleets in North America was nearly 20 million in 2023, expected to rise to over 27 million by 2027, growing at over 12% per year.[1] Currently, an estimated 80% of all new vehicles already have embedded telematics installed. Originally focused on heavy vehicles, telematics is now penetrating the mainstream, with vehicles of all sizes offering some form of cellular connection.

As telematics becomes standard, new opportunities for improving fleet payment processes arise. Access to real-time data on vehicle location, odometer readings, fuel levels, and battery status opens up the possibility for payments to be directly connected to the vehicle, enabling businesses to facilitate more secure and data-rich fleet payment transactions.

_____

[1] Berg Insight https://media.berginsight.com/2021/02/08132132/bi-fmam10-ps.pdf

Installed base of active fleet management units (Americas 2019-2024)

Million units
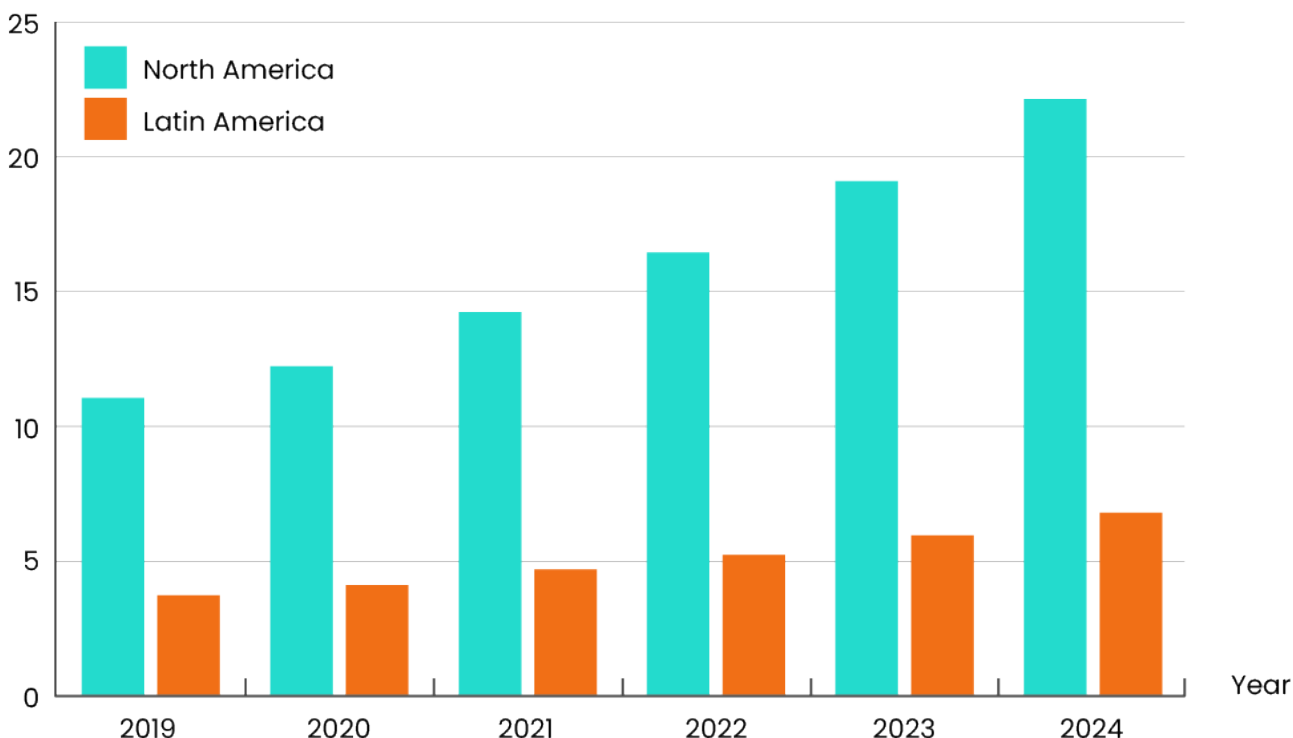
Car IQ is changing the way fleets pay

With traditional fleet card use still largely disconnected from telematics data, Car IQ has addressed this gap by creating a vehicle-embedded fleet payment solution that utilizes real-time vehicle data to initiate, authorize, and validate fuel transactions. This innovation not only 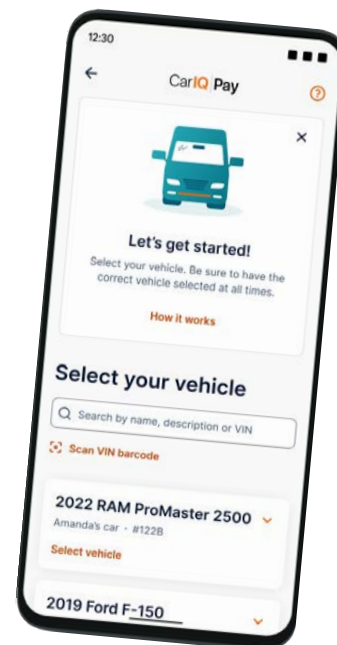enhances transaction accuracy but also streamlines operations, paving the way for a more efficient and secure payment ecosystem in fleet.

Unlike traditional fleet cards that distribute cards to drivers, Car IQ issues payment credentials directly to the car, removing the need for a plastic card. Drivers can then pay directly from the vehicle's infotainment screen or from the Car IQ mobile app.

> **Unlike traditional fleet cards that distribute cards to drivers, Car IQ issues payment credentials directly to the car**

With their vehicle-issued payment credential, Car IQ not only streamlines the payment process but also enhances security and transparency. Car IQ allows for automated transactions based on real-time data, minimizing human error and reducing the risk of fraud. The system provides businesses with a central application, enabling access to vehicle data, spend, and receipts. Businesses can manage merchants and set spending controls, issue and revoke payment credentials for each vehicle, and improve reconciliation processes. Since payments are always directly attached to the correct vehicle, data accuracy is improved. The automated consolidation of transaction and telematics data leads to better overall management of the fleet and related expenses, transforming the way businesses approach vehicle ownership and operational efficiency. A case study conducted by Car IQ showed a company benefitted from a 13.6% decrease in annual fuel spend, eliminating 12% of transactions identified as fraud.[2]

---

[2] Car IQ Case Study: Amenity Collective. https://www.CarIQpay.com/post/amenity-collective-cuts-fraud-and-fuel-costs#:~:text=By%20switching%20to%20Car%20IQ,%20Amenity

How does it work?

When a driver pulls up to a gas station, Car IQ automatically performs a number of checks through its telematics integration.

For example:
- Is the correct vehicle at the gas station?
- What is the fuel tank size of the vehicle?
- What is the current level of fuel in the tank?
- Does the vehicle need fuel?
- Are there available funds in the account to pay for the fuel?
- What is the account's recent transaction history?

If the appropriate security clearances are passed, then Car IQ enables the pump in one of two ways:

- Car IQ authorizes the fuel transaction directly through the merchant's cloud network; or
- Driver taps to pay with their own smartphone, using a Visa tokenized payment credential.

In both cases, there is no need for a driver to enter a code at the pump. When the driver finishes fueling, they can simply drive away, with the receipt sent automatically to their smartphone and to their fleet manager's online dashboard.

After the fuel is dispensed, Car IQ scans the vehicle again to identify the amount of fuel it received and compares it to what the pump says was dispensed. Any inconsistencies between existing fuel in the tank, tank size, and amount of fuel pumped is flagged immediately. The information available before, during, and after fueling results in the mitigation of fraud, misuse, and abuse.

More secure fleet payments

Many traditional fleet cards are particularly vulnerable to fraud because they still rely on the magnetic stripe on the back of the card rather than EMV chip technology.[3] This allows third parties, including organized criminals, to clone and skim cards easily. Businesses can potentially lose millions through multiple fraudulent transactions.

> **Visa has been at the forefront of the move to more secure fleet payments.**

Visa has been at the forefront of the move to more secure fleet payments, not just by rolling out fleet cards which use EMV chips, but also through advanced security features such as tokenization (which does not require physical cards to be present).

Since Car IQ dispenses completely with plastic cards, using their technology to authorize a secure payment, the driver is taken out of the payment decision making process, allowing the security of a machine payment that is controlled by the actual needs of the vehicle.

First, Car IQ looks at the vehicle to confirm location and validity. Next, they look at the driver. A business using Car IQ can send credentials to any driver with a smartphone, granting them the ability to initiate transactions for specific assigned vehicles. Access can also be revoked immediately if required. For
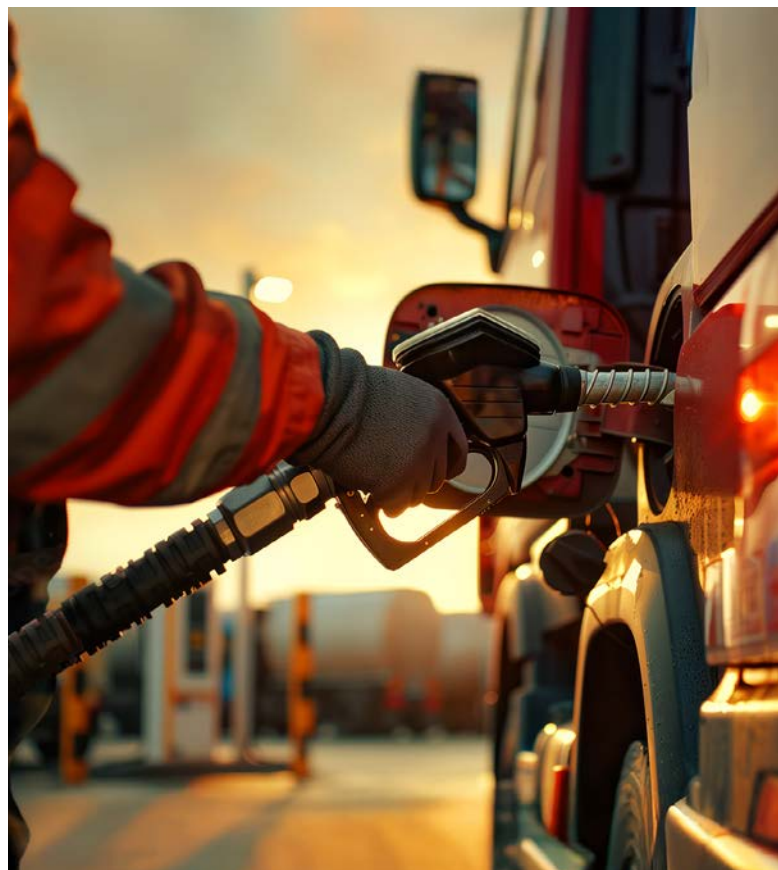
businesses on the move or with high turnover, such as those using seasonal or part-time drivers, this eliminates the trouble of getting fleet cards out to new drivers or recovering them when employment ends. Cards are not left lying around in dashboard compartments or drawers where they can be easily picked up and misused. The app validates the driver and ensures the correct driver information is attached to the transaction.

_____

[3] Magnetic Stripe Card: Definition, How it Works, Types, and Examples - SuperMoney https://www.supermoney.com/encyclopedia/magnetic-card-stripe
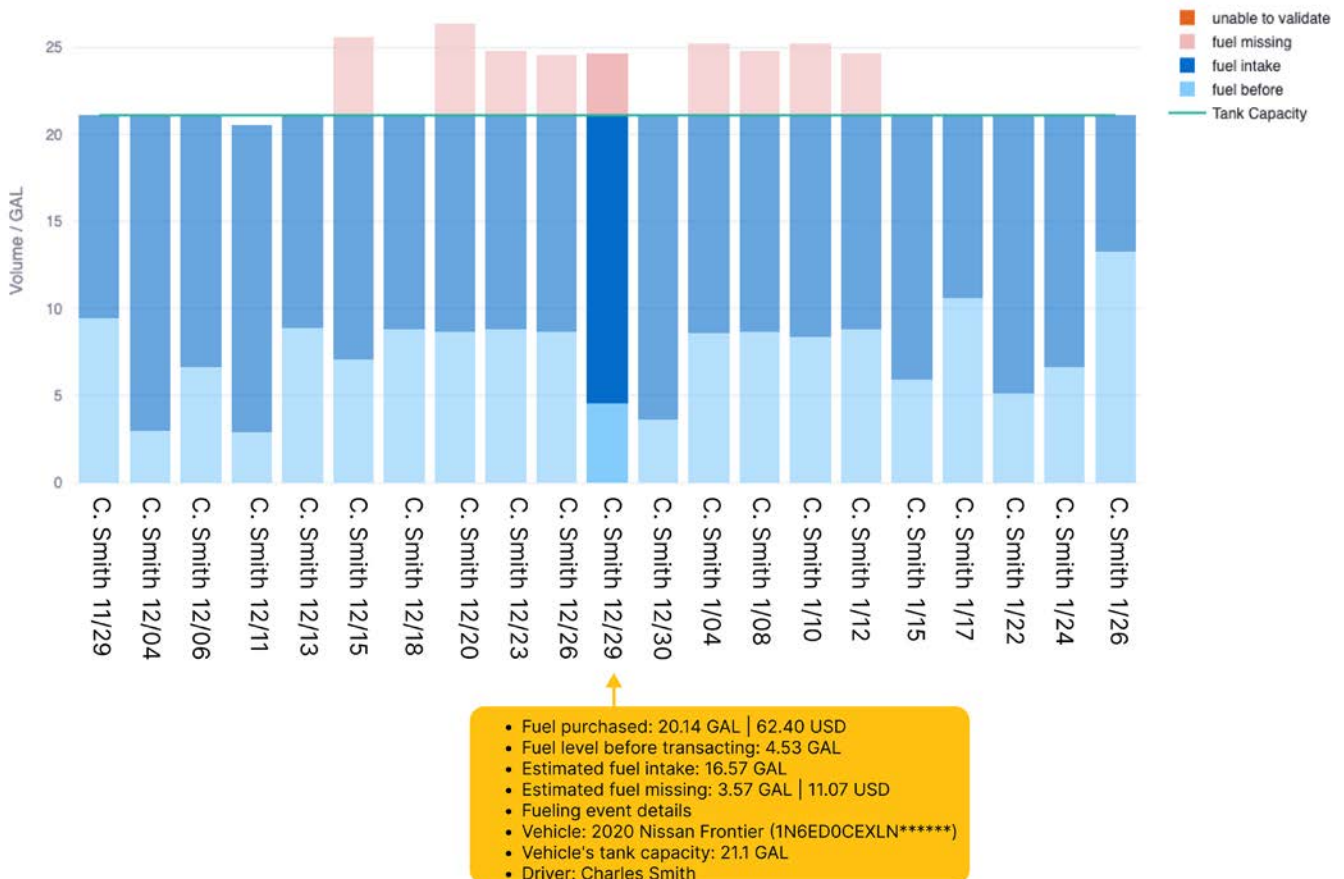
New ways to tackle fraud

Car IQ prevents several of the most common types of fleet card fraud. For example, if a driver tries to use a fleet card to refuel an unauthorized vehicle, the transaction is blocked. Car IQ uses location data from the vehicle telematics to confirm that a valid company vehicle is present where the fueling is taking place. If the vehicle is not present, the driver won't be able to initiate a transaction, and refueling cannot proceed. Fraud is prevented, and a clear message is sent to drivers - and fraudsters - that unauthorized refueling is not tolerated or allowed.

Car IQ can also spot fraud behaviors that would often be missed by businesses using traditional fleet cards. This is done by combining and comparing information from the vehicle and the payment transaction. Car IQ knows the fuel tank capacity of each vehicle, and the level of fuel in the tank before and after each fueling. If the payment transaction is for 30 gallons and the tank has only received 20 gallons, there is a clear indication that some fuel has been diverted to other uses. With Car IQ, businesses can spot this type of fraud much more easily than with fleet payment data on its own.

In the example shown, Car IQ identifies a recurring pattern of missing fuel and can confirm which driver was responsible.

Fueling Behavior Analysis

- Fuel purchased: 20.14 GAL | 62.40 USD
- Fuel level before transacting: 4.53 GAL
- Estimated fuel intake: 16.57 GAL
- Estimated fuel missing: 3.57 GAL | 11.07 USD
- Fueling event details
- Vehicle: 2020 Nissan Frontier (1N6ED0CEXLN******)
- Vehicle's tank capacity: 21.1 GAL
- Driver: Charles Smith

Supporting drivers in remote locations

Previous attempts to bring together telematics and payments data have struggled due partly to a lack of connectivity in remote areas. Drivers could be delayed due to long wait times for transaction validation. Drawing on extensive experience with fleets in the field, Car IQ has developed a predictive model to address this issue.

Instead of simply waiting for the current location of the vehicle to be confirmed or asking whether a geofence has been broken, Car IQ asks "Is the station reachable from the last time we heard from the vehicle within legal speed limits?" This predictive model helps to prevent good-behaving drivers from experiencing declined transactions simply because they are in a remote area without connection, while continuing to check for suspicious transactions.

Managers can also set tolerances on the platform to allow a certain number of "offline transactions" per vehicle or driver. This means that a full tank's worth of fuel will be authorized despite a lack of connection. The parameters (time, #, locations, which drivers, etc.) are all configured by fleet managers. Car IQ can then verify the transaction after the connection has been regained.

This allows Car IQ to be used in more remote areas, ensuring no interruptions to the business.

Managing fuel costs and fleet effectiveness

With Car IQ, businesses can decide where to purchase fuel. Having the benefit of Visa acceptance, fleet managers can encourage their drivers to use particular gas stations based on price, service or any other criteria. With Car IQ's digitally initiated payments, they even have the ability to dynamically turn off high cost stations within a one mile radius – ensuring that drivers fuel at the most cost effective location. Non-fuel purchases, such as tolls, can also be paid with the vehicle. In the future, Car IQ plans to support a widening range of fleet payments, including vehicle repair, maintenance, parking and insurance.

> **Having the benefit of Visa acceptance, fleet managers can encourage their drivers to use particular gas stations based on price, service, or any other criteria.**

Businesses can use the enhanced data from Car IQ to manage their fleets more effectively. Car IQ customers benefit from more detailed and accurate fleet reports than those provided by many of the other fleet card providers. Vehicle location, odometer reading, fuel tank level, and other information is sent directly to Car IQ from the vehicle. There is no need to rely on drivers manually keying in accurate data at the pump, or ensuring they are carrying the correct card. Managers spend less time trying to guess how their vehicles are being used between fill-ups and are able to concentrate on improving the overall effectiveness of the fleet.

Conclusions

Car IQ's pioneering approach highlights how fleet payments can be made more secure and data-rich by incorporating live vehicle data into a modern payments platform. Innovations include:

- Blocking the most common forms of fuel fraud, by using the vehicle to initiate the payment.

- Detecting and tackling more complex fraud behaviors by comparing information from the vehicle and the payment.

- Initiating transactions with the driver's smartphone.

- Leveraging Visa acceptance to access merchants with the lowest fuel prices.

- Providing better management information, enabling businesses to concentrate on the overall effectiveness of their fleets.

Stopping fraud in its tracks is a game changer, and results in real savings for fleets.

To learn more about how Car IQ can benefit your fleet operation, visit **www.cariqpay.com**

Car **IQ**|**Pay** | **VISA**

About Car IQ

Car IQ is a technology-based payments organization headquartered in San Francisco. Car IQ is a Visa preferred network partner and uses telematics and vehicle data to provide fleets with detailed insights, allowing them to follow every payment and mitigate fraud. Credit Card Services are provided and issued by Lewis & Clark Bank, Member FDIC.

Learn more about Car IQ at www.cariqpay.com.

About Visa

Visa (NYSE: V) is a world leader in digital payments, facilitating transactions between consumers, merchants, financial institutions and government entities across more than 200 countries and territories. Our mission is to connect the world through the most innovative, convenient, reliable and secure payments network, enabling individuals, businesses and economies to thrive. We believe that economies that include everyone everywhere, uplift everyone everywhere and see access as foundational to the future of money movement.

Learn more about Visa Fleet cards at Visa.com.

About KNI Research

KNI (Knowledge Network International www.kn-intl.com) is a global research company specialized in fleet and mobility payments. Our research methods include interviews with businesses and drivers, provider benchmarking, product evaluation and market modelling. We provide detailed data, insight and analysis relating to fleet cards and their usage.