

FACT SHEET

EMV Chip Adoption in the US

The shift to EMV® (Europay, MasterCard, Visa) chip technology is one of the most significant changes to electronic payments in the last 50 years. Often referred to as a “smart” or “chip card,” an EMV chip enables more secure processing than magnetic stripe cards by generating a one-time-use code for each transaction. This feature makes EMV chip card data nearly impossible to counterfeit and a less attractive target for criminals to steal.

EMV Adoption by the Numbers

Visa has seen tremendous momentum in chip card adoption in the run up to October 1, 2015. Already, there are more Visa chip cards issued in the U.S. than in any other country in the world.

As of September 15, 2015:

- More than **150 million** Visa chip cards have been issued in the U.S., an increase of over **655 percent** in the last year alone.
- It is estimated that more than **314,000** merchant locations have been equipped with chip-activated terminals, representing a **470 percent** increase from last fall. Visa expects many more to be enabled over the next few quarters.
- Small businesses are accounting for nearly 50 percent of Visa’s chip payment volume today.
- According to the [Payments Security Task Force](#) (PST), the number of chip cards in the U.S. will grow to 60 percent by year-end, expanding to 98 percent by the end of 2017.
- The PST estimates that about 40 percent of terminals will be capable of accepting chip cards by the end of 2015.



“We’re extremely encouraged by the steady rise in chip cards as the latest figures point to continued momentum toward chip card ubiquity. Every card and merchant terminal that is upgraded to chip in the next few years will be a step closer to better protecting the security of the payments network.”

- Stephanie Ericksen, Vice President of Risk Products, Visa Inc.

What Happens on October 1, 2015

October 1 is an important milestone in the movement to chip technology in the U.S. After October 1, businesses that don’t accept chip card transactions may be responsible for resulting counterfeit fraud. While the liability shift marks a significant turning point in the transition to chip, this sweeping industry initiative will take several years to complete. From experience in other countries, Visa expects it will take an additional 2-3 years for 60-70 percent of transactions to be completed by a chip card and chip terminal, and 4-5 years to reach closer to 90 percent.

Cardholder Authentication

Visa is focused on encouraging and supporting the adoption of EMV chip technology as quickly and efficiently as possible. We support the choices made by banks and merchants regarding their preference for cardholder verification methods, whether it’s PIN or signature. EMV chip technology alone, regardless of cardholder verification method, is the most effective defense against counterfeit fraud.

While there has been a great deal of focus on cardholder verification, more than 60 percent of U.S. payments volume -- including charges of up to \$25 in most merchant categories and up to \$50 in everyday categories such as groceries -- do not require PIN or signature. We expect this trend to continue with chip cards, keeping every day, low-risk transactions fast, convenient, and secure.

Advanced Analytics: the Future of Electronic Payments

Looking beyond PIN and signature, Visa is focused on utilizing advanced analytics to risk score every transaction. The sophistication of products such as Visa Advanced Authorization, which analyzes up to 500 different data elements in real time, continues to increase as we include information such as geo-location, device ID, and IP addresses to more accurately identify and prevent fraud.

Visa is also seeing increased demand for biometric verification, which uses data from a cardholder's fingerprint, palm, voice, iris, or face to verify the validity of a transaction. Biometrics is a more convenient and secure alternative to signatures or PINs, especially as biometrics technologies have become more reliable and available. Biometrics are already gaining momentum in the U.S with more mobile devices using not only chip technology and tokenization to secure payments, but also biometrics through touch ID, replacing the need for a signature or PIN.