Filed by Capital One Financial Corporation (Commission File No.: 001-13300) Pursuant to Rule 425 under the Securities Act of 1933, as amended and deemed filed pursuant to Rule 14a-12 of the Securities and Exchange Act of 1934, as amended

> Subject Company: Discover Financial Services (Commission File No.: 001-33378)

The following is a transcript of a video message to Capital One employees and posted to the Capital One website on February 19, 2024.

Good morning, and welcome to all my fellow Capital One associates.

This is an exciting day in the history, and the future, of Capital One.

Today we are announcing an agreement to acquire Discover Financial Services, a leader in credit cards and global payments.

This is an incredible opportunity to bring together two exceptional companies. Discover and Capital One were each founded just a few decades ago, with a quest to compete against banks that were hundreds of years old. We each have missions to help customers succeed and build a better financial future. It is striking that our journeys have brought us together.

I have admired Discover for many years. Over four decades, they have built a global payments network that connects merchants, small businesses and consumers in the United States and around the world. This is a valuable, and rare, asset. This deal accelerates our longstanding journey to work directly with merchants to leverage our customer base, our technology, and our data to drive more sales for the merchant and great deals for consumers and small businesses.

Discover is a big company, but they're the smallest of the four U.S.-based global payment networks, and this acquisition will add scale to help it compete with the biggest players.

The strategic benefit goes well beyond the network. This deal brings together two credit card and banking franchises, each with a loyal customer following and award-winning customer experiences.

We will also be able to leverage the benefits of Capital One's eleven-year technology transformation, applying it across all of Discover's businesses and the network. With the combined scale we can further invest to create iconic products and experiences at the forefront of the digital revolution in banking and payments.

This opportunity is made possible by Capital One's history of bold strategic choices and our strong financial position. It stands on the shoulders of our investments over many years to build a modern technology company with world class risk management. It is testament to the incredible work done by you–our associates–over many, many years.

The work ahead will be challenging, but that is what we do. At Capital One, we work backwards from where winning is, even if it's way over there—that's where we go. But that's why we're still here today. And that's why we have this opportunity.

This is a transformative opportunity in our quest to change banking for good.

I can't wait to get to work.

Thank you.

Forward Looking Statements

Information in this communication, other than statements of historical facts, may constitute forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include, but are not limited to, statements about the benefits of the proposed transaction between Capital One Financial Corporation ("Capital One") and Discover Financial Services ("Discover"), including future financial and operating results (including the anticipated impact of the transaction on Capital One's and Discover's respective earnings and tangible book value), statements related to the expected timing of the completion of the transaction, the combined company's plans, objectives, expectations and intentions, and other statements that are not historical facts. Forward-looking statements may be identified by terminology such as "may," "will," "should," "targets," "scheduled," "plans," "intends," "goal," "anticipates," "expects," "believes," "forecasts," "outlook," "estimates," "potential," or "continue" or negatives of such terms or other comparable terminology.

All forward-looking statements are subject to risks, uncertainties and other factors that may cause the actual results, performance or achievements of Capital One or Discover to differ materially from any results expressed or implied by such forward-looking statements. Such factors include, among others, (1) the risk that the cost savings and any revenue synergies from the transaction may not be fully realized or may take longer than anticipated to be realized, (2) disruption to the parties' businesses as a result of the announcement and pendency of the transaction, (3) the risk that the integration of Discover's business and operations into Capital One, including the integration into Capital One's compliance management program, will be materially delayed or will be more costly or difficult than expected, or that Capital One is otherwise unable to successfully integrate Discover's businesses into its own, including as a result of unexpected factors or events, (4) the failure to obtain the necessary approvals by the stockholders of Capital One or Discover, (5) the ability by each of Capital One and Discover to obtain required governmental approvals of the transaction on the timeline expected, or at all, and the risk that such approvals may result in the imposition of conditions that could adversely affect Capital One after the closing of the transaction or adversely affect the expected benefits of the transaction, (6) reputational risk and the reaction of each company's customers, suppliers, employees or other business partners to the transaction, (7) the failure of the closing conditions in the merger agreement to be satisfied, or any unexpected delay in closing the transaction or the occurrence of any event, change or other circumstances that could give rise to the

termination of the merger agreement, (8) the dilution caused by the issuance of additional shares of Capital One's common stock in the transaction, (9) the possibility that the transaction may be more expensive to complete than anticipated, including as a result of unexpected factors or events, (10) risks related to management and oversight of the expanded business and operations of Capital One following the transaction due to the increased size and complexity of its business, (11) the possibility of increased scrutiny by, and/or additional regulatory requirements of, governmental authorities as a result of the transaction or the size, scope and complexity of Capital One's business operations following the transaction, (12) the outcome of any legal or regulatory proceedings that may be currently pending or later instituted against Capital One before or after the transaction, or against Discover, and (13) general competitive, economic, political and market conditions and other factors that may affect future results of Capital One and Discover, including changes in asset quality and credit risk; the inability to sustain revenue and earnings growth; changes in interest rates and capital markets; inflation; customer borrowing, repayment, investment and deposit practices; the impact, extent and timing of technological changes; capital management activities; and other actions of the Federal Reserve Board and legislative and regulatory actions and reforms. Additional factors which could affect future results of Capital One and Discover is Annual Report on Form 10-K, Quarterly Reports on Form 8-K, in each case filed with the SEC and available on the SEC's website at http://www.sec.gov. Capital One and Discover disclaim any obligation and do not intend to update or revise any forward-looking statements contained in this communication, which speak only as of the date hereof, whether as a result of new information, future events or otherwise, except as required by federal securities laws.

Important Information About the Transaction and Where to Find It

Capital One intends to file a registration statement on Form S-4 with the SEC to register the shares of Capital One's common stock that will be issued to Discover stockholders in connection with the proposed transaction. The registration statement will include a joint proxy statement of Capital One and Discover that will also constitute a prospectus of Capital One. The definitive joint proxy statement/prospectus will be sent to the stockholders of each of Capital One and Discover in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THE REGISTRATION STATEMENT AND JOINT PROXY STATEMENT/PROSPECTUS WHEN THEY BECOME AVAILABLE (AND ANY OTHER DOCUMENTS FILED WITH THE SEC IN CONNECTION WITH THE TRANSACTION OR INCORPORATED BY REFERENCE INTO THE JOINT PROXY STATEMENT/PROSPECTUS) BECAUSE SUCH DOCUMENTS WILL CONTAIN IMPORTANT INFORMATION REGARDING THE PROPOSED TRANSACTION AND RELATED MATTERS. Investors and security holders may obtain free copies of these documents and other documents filed with the SEC by Capital One or Discover through the website maintained by the SEC at http://www.sec.gov or by contacting the investor relations department of Capital One or Discover at:

Capital One Financial Corporation 1680 Capital One Drive McLean, VA 22102 Attention: Investor Relations investorrelations@capitalone.com (703) 720-1000 Discover Financial Services 2500 Lake Cook Road Riverwoods, IL 60015 Attention: Investor Relations investorrelations@discover.com (224) 405-4555

Before making any voting or investment decision, investors and security holders of Capital One and Discover are urged to read carefully the entire registration statement and joint proxy statement/prospectus when they become available, including any amendments thereto, because they will contain important information about the proposed transaction. Free copies of these documents may be obtained as described above.

Participants in Solicitation

Capital One, Discover and certain of their directors and executive officers may be deemed participants in the solicitation of proxies from the stockholders of each of Capital One and Discover in connection with the proposed transaction. Information regarding the directors and executive officers of Capital One and Discover and other persons who may be deemed participants in the solicitation of the stockholders of Capital One or of Discover in connection with the proposed transaction will be included in the joint proxy statement/prospectus related to the proposed transaction, which will be filed by Capital One with the SEC. Information about the directors and executive officers of Capital One and their ownership of Capital One common stock can also be found in Capital One's definitive proxy statement in connection with its 2023 annual meeting of stockholders, as filed with the SEC on March 22, 2023, and other documents subsequently filed by Capital One with the SEC. Information about the directors and so be found in connection with its 2023 annual meeting of stockholders, as filed with the SEC on March 22, 2023, and other documents subsequently filed by Capital One with the SEC. Information about the directors and executive officers of Discover and their ownership of Discover common stock can also be found in Discover's definitive proxy statement in connection with its 2023 annual meeting of stockholders, as filed with the SEC on March 17, 2023, and other documents subsequently filed by Discover with the SEC. Additional information regarding the interests of such participants will be included in the joint proxy statement/prospectus and other relevant documents regarding the proposed transaction filed with the SEC when they become available.