UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 13, 2016

HORIZON TECHNOLOGY FINANCE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction

of incorporation)

814-00802 (Commission File Number)

27-2114934 (I.R.S. Employer Identification No.)

312 Farmington Avenue Farmington, CT 06032

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (860) 676-8654

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Section 2Financial InformationItem 2.02Results of Operations and Financial Condition

On January 13, 2016, Horizon Technology Finance Corporation (the "Company") issued a press release announcing its investment portfolio update for the three months and year ended December 31, 2015. A copy of this press release is attached hereto as Exhibit 99.1.

The information in Item 2.02 of this Current Report on Form 8-K, including Exhibit 99.1 furnished herewith, is being furnished and shall not be deemed "filed" for any purpose of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to liabilities of such Section. The information in this Current Report on Form 8-K shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Section 9Financial Statements and ExhibitsItem 9.01Financial Statements and Exhibits

(d) Exhibits.

99.1 Press release of the Company dated January 13, 2016.

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: January 13, 2016

HORIZON TECHNOLOGY FINANCE CORPORATION

By: <u>/s/ Robert D. Pomeroy, Jr.</u> Robert D. Pomeroy, Jr. *Chief Executive Officer*

Exhibit Index

Exhibit No.Description99.1Press release of the Company dated January 13, 2016



Horizon Technology Finance Provides Investment Portfolio Update

Achieves Over 20% Portfolio Growth with 2015 Loan Originations Exceeding \$123 Million

98% of Loans Funded in 2015 at Floating Rates; Portfolio Well Positioned to Benefit from Rising Rates

Warrant and Equity Positions in 89 Portfolio Companies

FARMINGTON, Conn., January 13, 2016 – Horizon Technology Finance Corporation (NASDAQ: HRZN) ("Horizon"), a leading specialty finance company that provides capital in the form of secured loans to venture capital backed companies in the technology, life science, healthcare information and services and cleantech industries, today provided a portfolio update for the fourth quarter and year ended December 31, 2015.

"During the fourth quarter, we continued to successfully execute our core investment strategy of directly originating high quality floating rate growth capital loans," said Gerald A. Michaud, President of Horizon. "We funded seven new floating rate loans, further enhancing our ability to generate strong returns and to operate in a rising rate environment. Complementing this success, we continued to experience positive liquidity events from our existing portfolio of loans, equity and warrants."

New Loans Funded

Horizon funded seven new loans in the fourth quarter of 2015 totaling \$18.5 million, and 37 new loans totaling \$123 million for the year. Horizon funded the following loans in the fourth quarter:

- \$4.0 million to an existing portfolio company, a provider of technology-enabled signal detection solutions in global clinical trials of treatments for central nervous system disorders.
- \$4.0 million to a new portfolio company, Skyword Inc., a leading content marketing software and services company.
- \$3.0 million to a new portfolio company, Digital Signal Corporation, a leader in human identification and identity management solutions.
- \$2.5 million to an existing portfolio company, NinePoint Medical, Inc., a developer of medical devices for advanced optical imaging.
- \$2.5 million to an existing portfolio company, The NanoSteel Company, Inc., a leader in nano-structured steel materials design.
- \$1.5 million to an existing portfolio company, a services and software solution provider that helps districts and schools develop and implement personalized learning strategies.
- \$1.0 million to an existing portfolio company, Bridge2 Solutions, Inc., a leading provider of marketing and fulfillment solutions for enterprise loyalty rewards programs.

Liquidity Events

During the quarter ended December 31, 2015, Horizon experienced liquidity events from three portfolio companies, increasing the total number of portfolio companies with liquidity events to 17 for the year. Liquidity events for Horizon may consist of the sale of warrants or equity in portfolio companies, loan prepayments, sale of owned assets or receipt of success fees.

In October, IT Professional Solutions, Inc. prepaid the outstanding principal balance of \$1.8 million on its venture loan, plus interest. Horizon also received a success fee of \$325,000 as a result of the successful sale of IT Professional Solutions during the fourth quarter.

In November, Horizon terminated warrants upon the sale of NexPlanar Corporation in consideration for gross proceeds of approximately \$130,000.

In December, Lotame Solutions, Inc. ("Lotame") prepaid the outstanding principal balance of \$6.3 million on its venture loan, plus interest, end-of-term payment and prepayment fee. Horizon continues to hold warrants in Lotame.

Refinanced Principal Balances, Early Principal Payoffs, and Principal Payments Received

As noted above, Horizon experienced early pay-offs during the fourth quarter of 2015 totaling \$8.0 million, compared to early pay-offs totaling \$16.4 million during the third quarter of 2015. During the fourth quarter of 2015, Horizon received regularly scheduled principal payments on investments totaling \$7.9 million compared to regularly scheduled principal payments totaling \$5.8 million during the third quarter of 2015.

Commitments

During the quarter ended December 31, 2015, Horizon closed new loan commitments totaling \$12.0 million to three companies, compared to the quarter ended September 30, 2015, wherein Horizon closed new loan commitments totaling \$28.0 million to five companies.

Pipeline

As of December 31, 2015, Horizon's unfunded loan approvals and commitments ("Committed Backlog"), all priced at floating interest rates, were \$18.5 million to seven companies, compared to a Committed Backlog of \$22.5 million to nine companies as of September 30, 2015. While Horizon's portfolio companies have discretion whether to draw down such commitments, the right of a portfolio company to draw down its commitment is often subject to achievement of specific milestones and other conditions to borrowing.

Warrant and Equity Portfolio and IPO Activity

As of December 31, 2015, Horizon held a portfolio of warrant and equity positions in 89 portfolio companies, including 76 private companies, which provides the potential for future additional returns to Horizon's shareholders.

On November 12, 2015, Xtera Communications, Inc. (NASDAQ: XCOM), a portfolio company, completed its initial public offering.

About Horizon Technology Finance

Horizon Technology Finance Corporation is a leading specialty finance company that provides capital in the form of secured loans to venture capital backed companies within the technology, life science, healthcare information and services, and cleantech industries. The investment objective of Horizon is to maximize total returns by generating current income from a portfolio of directly originated secured loans as well as capital appreciation from warrants that it receives when making such loans. Headquartered in Farmington, Connecticut, Horizon has regional offices in Walnut Creek, California and Reston, Virginia. Horizon's common stock trades on the NASDAQ Global Select Market under the ticker symbol "HRZN". To learn more, please visit http://www.horizontechnologyfinancecorp.com.

Forward-Looking Statements

Statements included herein may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Statements other than statements of historical facts included in this press release may constitute forward-looking statements and are not guarantees of future performance, condition or results and involve a number of risks and uncertainties. Actual results may differ materially from those in the forwardlooking statements as a result of a number of factors, including those described from time to time in our filings with the Securities and Exchange Commission. Horizon undertakes no duty to update any forward-looking statement made herein. All forward-looking statements speak only as of the date of this press release.

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