UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934

For the month of January 2025

Commission file number: 001-41334

RAIL VISION LTD.

(Translation of registrant's name into English)

15 Ha'Tidhar St

Ra'anana, 4366517 Israel (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ⊠ Form 40-F □

CONTENTS

Attached hereto and incorporated herein is the Registrant's press release issued on January 10, 2025, titled "Rail Vision Receives Purchase Order from One of the Leading Central America Freight Rail Operators."

The first four paragraphs in the press release attached as Exhibit 99.1 are incorporated by reference into the Registrati's Registration Statements on Form F-3 (File Nos. 333-271068, 333-272933, 333-276869, 333-277963 and 333-278645) and Form S-8 (File Nos. 333-265968 and 333-281329), filed with the Securities and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

Exhibit No.

99.1	Press release issued by Rail Vision Ltd. on January 10, 2025, titled "Rail Vision Receives Purchase Order from One of the Leading Cent	ral
	America Freight Rail Operators."	

SIGNATURES

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, thereunto duly authorized.

Rail Vision Ltd.

Date: January 10, 2025

By: /s/ Ofer Naveh

Name: Ofer Naveh Title: Chief Financial Officer

?Rail Vision

Rail Vision Receives Purchase Order from One of the Leading Central America Freight Rail Operators

Ra'anana, Israel, January 10, 2025 — Rail Vision Ltd. (Nasdaq: RVSN) (the "Company"), a technology company at the forefront of revolutionizing railway safety and the data-related market, has received a purchase order for its MainLine product from one of the leading Central America freight operators. This purchase order will support a proof of concept (POC) aimed at demonstrating the MainLine's advanced capabilities in enhancing rail safety and operational efficiency.

The freight operator operates a vast fleet of locomotives across extensive rail networks. Known for its commitment to safety and technological modernization, the freight operator has invested significantly in upgrading its infrastructure, implementing efficient scheduling systems and adopting advanced safety protocols to minimize accidents and environmental risks.

Rail Vision's MainLine product was selected for its ability to provide real-time object detection and classification using state-of-the-art artificial intelligence (AI) and long-range vision sensors. These capabilities align with the freight operator's stringent safety standards and strategic goal of leveraging cutting-edge technology to optimize operations.

This purchase adds to Rail Vision's proven track record with leading freight operators and Class 1 rail operators in the Americas, where its rail safety technologies have already been demonstrated and deployed.

"This purchase order marks another milestone in Rail Vision's efforts to expand its footprint in global markets," said Shahar Hania, CEO of Rail Vision. "We are excited to collaborate with one of the leading freight operators in Central America, showcasing the potential of our MainLine product to address critical safety challenges in the rail industry."

About Rail Vision Ltd.

Rail Vision is a technology company that is seeking to revolutionize railway safety and the data-related market. The Company has developed cutting-edge, artificial intelligence-based, industry-leading technology specifically designed for railways. The Company has developed its railway detection and systems to save lives, increase efficiency, and dramatically reduce expenses for the railway operators. Rail Vision believes that its technology will significantly increase railway safety around the world, while creating significant benefits and adding value to everyone who relies on the train ecosystem: from passengers using trains for transportation to companies that use railways to deliver goods and services. In addition, the company believes that its technology has the potential to advance the revolutionary concept of autonomous trains into a practical reality. For more information, please visit https://www.railvision.io/

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act and other securities laws. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses its efforts to expand its footprint in global markets and the potential of its MainLine product to address critical safety challenges in the rail industry. Forward-looking statements are not historical facts, and are based upon management's current expectations, beliefs and projections, many of which, by their nature, are inherently uncertain. Such expectations, beliefs and projections are expressed in good faith. However, there can be no assurance that management's expectations, beliefs and projections will be achieved, and actual results may differ materially from what is expressed in or indicated by the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. For a more detailed description of the risks and uncertainties affecting the Company, reference is made to the Company's reports filed from time to time with the Securities and Exchange Commission ("SEC"), including, but not limited to, the risks detailed in the Company's annual report on Form 20-F filed with the SEC on March 28, 2024. Forward-looking statements speak only as of the date the statements are made. The Company assumes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References and links to websites have been provided as a convenience, and the information contained on such websites is not incorporated by reference into this press release. Rail Vision is not responsible for the contents of third-party websites.

Investor Relations Michal Efraty investors@railvision.io