Filed Pursuant to Rule 424(b)(3) and Rule 424(c)
Registration Statement No. 333-296928

November 16, 2026

PROSPECTUS SUPPLEMENT NO. 4

MOBIX LABS, INC.
UP TO 3,744,161 SHARES OF CLASS A COMMON STOCK

This prospectus supplement amends the prospectus dated July 16, 2026 (as supplemented to date, the "Prospectus") of Mobix Labs, Inc. a Delaware corporation (the "Company"), which forms a part of the Company's Registration Statement on Form S-1, as amended (No. 333-296928). This prospectus supplement is being filed to update and supplement the information included or incorporated by reference in the Prospectus with the information contained in the Current Report on Form 8-K filed with the Securities and Exchange Commission (the "SEC") on November 13, 2026, as set forth below. This prospectus supplement should be read in conjunction with the Prospectus, which is to be delivered with this prospectus supplement.

Shares of our Class A Common Stock are listed on the Nasdaq Stock Market LLC ("Nasdaq") under the symbol "MOBX". On November 13, 2026, the closing price of our Class A Common Stock was $0.51.

Investing in the Company's Class A Common Stock involves risks. See "Risk Factors" beginning on page 4 of the Prospectus and under similar headings in any amendments or supplements to the Prospectus.

Neither the SEC nor any other regulatory body has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement No. 4 is November 16, 2026

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): **November 10, 2026**

MOBIX LABS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-40621**	**98-1591717**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

1 Venture, Suite 220 Irvine, California	**92618**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(949) 808-8888**

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing 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 240.13(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Class A Common Stock, par value $0.00001 per share	MOBX	Nasdaq Capital Market
Redeemable warrants, each warrant exercisable for one share of Class A Common Stock	MOBXW	Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 1.02. Termination of a Material Definitive Agreement

On November 12, 2026, Mobix Labs, Inc. (the "Company") and Special Project Delivery, Inc. ("SPD") mutually agreed to terminate their August 13, 2026 Agreement and Plan of Merger pursuant to Section 8.1(a), following their inability to obtain a fairness opinion supporting the transaction. The termination was amicable, with no termination fees payable, and the parties remain open to future collaboration.

Item 2.02 Results of Operations and Financial Condition.

On November 10, 2026, the Company issued a press release regarding preliminary results for the three months ended December 31, 2026. The press release is furnished as Exhibit 99.1 hereto.

Item 8.01 Other Events.

The Company hereby announces that its board of directors approved the Company's 1-for-7 reverse stock split (the "Reverse Split") of the Company's Class A common stock, par value $0.00001 per share (the "Common Stock"). The Reverse Split was approved by the stockholders of the Company at the special meeting held on October 2, 2026.

The Reverse Split is expected to legally take effect at 4:00 p.m. Eastern Time, on November 16, 2026. The Common Stock is expected to begin trading on a post-split adjusted basis on November 17, 2026. The Reverse Split is intended to increase the per share trading price of the Company's Class A common stock to enable the Company to maintain compliance with the minimum bid price requirement for continued listing on The Nasdaq Capital Market.

The 1-for-7 Reverse Split will automatically convert every 7 current shares of the Company's Common Stock into one share of Common Stock. No fractional shares will be issued in connection with the Reverse Split. Any fractional share will be rounded up to the nearest whole share.

The Reverse Split will reduce the number of shares of outstanding Common Stock from approximately (i) 23,646,570 shares of Class A common stock, to approximately 3,378,082 shares of Class A common stock. The total authorized number of shares will not be reduced. Proportional adjustments will also be made to the exercise and conversion prices of the Company's outstanding stock options, warrants, and convertible securities, and to the number of shares issued and issuable under the Company's stock incentive plans.

Stockholders holding their shares electronically in book-entry form are not required to take any action to receive post-split shares. Stockholders owning shares through a bank, broker, or other nominee will have their positions automatically adjusted to reflect the Reverse Split, subject to brokers' particular processes, and will not be required to take any action in connection with the Reverse Split.

Additional information regarding the Reverse Stock Split is available in the Company's definitive proxy statement originally filed with the U.S. Securities and Exchange Commission (SEC) on September 14, 2026.

Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are subject to the "safe harbor" created by those sections, concerning our annual meeting of stockholders, our plans, objectives, and expectations for business operations, funding, and financial performance and condition. Any statements contained herein that are not of historical facts may be deemed to be forward-looking statements. You can identify these statements by words such as "anticipate," "assume," "believe," "could," "estimate," "expect," "intend," "may," "plan," "should," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends. Forward-looking statements include, but are not limited to, statements concerning the Company's expectations regarding the timing and implementation of the Reverse Stock Split and the commencement of trading of the Company's post-split Common Stock, sustainability of the Company's ability to maintain compliance with the minimum bid price requirement for continued listing on The Nasdaq Capital Market, and the impact of the Reverse Stock Split on the Company's securityholders. These forward-looking statements are based on current expectations, estimates, forecasts, and projections about our business and the industry in which we operate and management's beliefs and assumptions and are not guarantees of future performance or development and involve known and unknown risks, uncertainties, and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this Current Report on Form 8-K may turn out to be inaccurate. Factors that could materially affect our business operations and financial performance and condition include, but are not limited to, those risks and uncertainties described under "Item 1A - Risk Factors" in our Annual Report on Form 10-K for the year ended September 30, 2025 and any risk factors disclosed in any subsequent Quarterly Reports on Form 10-Q. You are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on the forward-looking statements. The forward-looking statements are based on information available to us as of the date of this Current Report on Form 8-K. Unless required by law, we do not intend to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release dated November 10, 2026.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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 hereunto duly authorized.

Mobix Labs, Inc.

Dated: November 13, 2026

/s/ Keyvan Samini
Keyvan Samini
President and Chief Financial Officer

Exhibit 99.1

Mobix Labs Turnaround Accelerates: Revenue Surges 129% as Gross Margin More Than Triples

Preliminary, unaudited fourth-quarter results highlight 171% product revenue growth, narrowing operating losses and significant balance-sheet liability reductions

IRVINE, Calif.—(BUSINESS WIRE)—Nov. 10, 2026—Mobix Labs, Inc. (Nasdaq: MOBX), a U.S.-based provider of advanced connectivity and sensing solutions for aerospace, defense and mission-critical applications, today announced a mid-quarter business update highlighting preliminary, unaudited financial results for its fiscal fourth quarter and fiscal year ended September 30, 2026.

The preliminary results reflect significant progress in the Company's ongoing business turnaround, with sharply higher sequential revenue, substantial gross margin expansion, narrowing operating losses and meaningful improvements in key balance-sheet measures. Management anticipates continued revenue growth as the Company builds on its fourth-quarter operating recovery.

Preliminary, Unaudited Financial Highlights

Fourth-Quarter Operating Performance — Sequential Comparison

- **Revenue Surges 129%:** Preliminary fourth-quarter revenue increased to approximately $1.81 million from $789,000 in the preceding quarter, exceeding the upper end of the Company's previously announced revenue guidance range of $1.4 million to $1.8 million.
- **Product Revenue Jumps 171%:** Preliminary product revenue increased to approximately $1.43 million from $529,000 in the preceding quarter, reflecting a substantial recovery in the Company's product business.
- **Gross Margin More Than Triples:** Preliminary GAAP gross margin expanded to approximately 44.5% from 12.9% in the preceding quarter, an improvement of approximately 3,160 basis points.
- **Gross Profit Increases Nearly Eightfold:** Preliminary GAAP gross profit increased to approximately $804,000 from $102,000 in the preceding quarter, representing growth of approximately 688%.
- **GAAP Operating Loss Narrows 11%:** Preliminary GAAP operating loss decreased to approximately $6.56 million from $7.35 million in the preceding quarter, reflecting improved operating performance.

- **Significant Noncash Operating Expenses:** Approximately 36% of reported operating loss included noncash based expense of $2.36 million for was stock-based compensation, before considering depreciation and amortization.

- **GAAP Net Loss Declines 46%:** Preliminary GAAP net loss decreased to approximately $9.09 million from $16.80 million in the preceding quarter, reflecting improved operating results and changes in nonoperating items.

Full-Year Fiscal 2026 Financial Highlights

- **Significant Noncash and Financing-Related Charges:** Preliminary fiscal 2026 results included approximately $12.30 million in stock-based compensation, $1.21 million in depreciation and amortization, and $9.91 million in losses associated with the extinguishment of notes payable and issuance of preferred shares and liability-classified warrants. These charges totaled approximately $23.43 million, equivalent to approximately 56% of the Company's preliminary GAAP net loss of $41.86 million. The depreciation and amortization amount and the cash and noncash components of financing-related losses remain subject to final reconciliation.

Balance Sheet Improvements — Year-Over-Year Comparison

- **Accounts Payable Declines 46%:** Preliminary accounts payable decreased approximately $4.11 million to $4.88 million as of September 30, 2026, compared with $8.98 million one year earlier.

- **Total Liabilities Reduced 21%:** Preliminary total liabilities declined approximately $7.82 million to $29.63 million from $37.45 million one year earlier, while current liabilities decreased approximately 16%.

- **Stockholders' Equity Improves $5.2 Million:** Preliminary stockholders' equity increased to approximately $4.87 million as of September 30, 2026, compared with a stockholders' deficit of approximately $336,000 one year earlier.

Turnaround Gains Momentum as Operating Performance Recovers

The Company's preliminary fourth-quarter results represent substantial progress in its ongoing business turnaround, with revenue more than doubling sequentially, gross profit increasing nearly eightfold and gross margin expanding by more than 3,100 basis points.

During preceding quarters, working capital constraints limited the Company's ability to procure critical components, build inventory and fulfill customer orders, contributing to reduced revenue. Progress in addressing these constraints enabled increased production and shipments during the fourth quarter, contributing to the sharp sequential improvement in revenue and gross profit.

The operating recovery was accompanied by meaningful year-over-year balance-sheet improvements, including a nearly 46% reduction in accounts payable, a 21% decline in total liabilities and a $5.2 million improvement in stockholders' equity.

"Our preliminary fourth-quarter results represent an important milestone in Mobix Labs' ongoing turnaround," said Phil Sansone, Chief Executive Officer of Mobix Labs. "Revenue more than doubled sequentially, gross margin expanded from approximately 13% to nearly 45%, and operating losses narrowed. At the same time, we made meaningful progress in reducing liabilities and improving stockholders' equity. These results demonstrate the progress we are making in restoring operating momentum following earlier working capital constraints. We anticipate continued revenue growth as we build on this recovery and remain focused on improving financial and operating performance."

Outlook

Management expects continued revenue growth as Mobix Labs builds on its fourth-quarter operating improvements and pursues opportunities across its aerospace, defense and mission-critical markets.

The Company's ability to sustain its operating recovery and achieve future growth will depend in part on the availability of working capital, continued access to critical components, manufacturing capacity, customer demand and timely fulfillment of customer orders.

Preliminary Financial Information

The Company's preliminary fourth-quarter revenue exceeded the upper end of its previously announced guidance range, building on its earlier announcement anticipating more than 100% sequential revenue growth.

For year-over-year context, preliminary fourth-quarter revenue declined approximately 4%, while GAAP gross margin was approximately 44.5%, compared with 50.5% in the prior-year quarter. The Company continues to manage its working capital and liquidity requirements as it executes its ongoing turnaround strategy.

All fourth-quarter and fiscal year-end financial information presented in this release is preliminary and unaudited, based on information currently available to management, and subject to completion of the Company's year-end closing procedures, reconciliations and independent audit. Actual results may differ materially from the preliminary amounts reported. The Company expects to report its final fiscal 2026 financial results in its Annual Report on Form 10-K.

About Mobix Labs, Inc.

Mobix Labs, Inc. (Nasdaq: MOBX) is a U.S.-based provider of advanced electronic components and connectivity solutions serving aerospace, defense, communications and other mission-critical markets. Through its operating businesses, the Company provides electromagnetic interference (EMI) filtering technologies, high-reliability connectors and specialized radio-frequency solutions. For more information, visit Mobix Labs.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other applicable federal securities laws. These statements include, without limitation, statements regarding Mobix Labs, Inc.'s (the "Company") preliminary and unaudited financial results for the fourth quarter and fiscal year ended September 30, 2026; anticipated final financial results; the Company's ongoing business turnaround and operational recovery; expectations for continued revenue growth; improvements in gross margins, operating performance and financial condition; the Company's ability to sustain or improve production and shipment levels; anticipated customer demand and order activity; the availability of critical components and inventory; the Company's ability to address working capital limitations, obtain additional financing and satisfy its financial obligations; anticipated benefits of operational and financial initiatives; and the Company's business strategy, future operations, prospects and growth opportunities, including potential acquisitions and other strategic initiatives.

Forward-looking statements may be identified by words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "project," "should," "will," "would" and similar expressions, although not all forward-looking statements contain these identifying words. Such statements reflect management's current expectations, estimates, assumptions and beliefs as of the date of this release and are not guarantees of future performance or results.

The Company's preliminary financial results are unaudited and based on information currently available to management. These results remain subject to the completion of fiscal year-end closing procedures, accounting reconciliations, management review and the independent audit of the Company's financial statements. Accordingly, actual results may differ materially from the preliminary amounts disclosed, including as a result of adjustments to revenue recognition, inventory valuation, cost of revenue, stock-based compensation, depreciation and amortization, debt and equity-related transactions, liability classifications, impairment assessments and other accounting estimates and judgments.

Forward-looking statements are subject to substantial risks, uncertainties and other factors, many of which are beyond the Company's control, that could cause actual results, performance or achievements to differ materially from those expressed or implied. These risks include, among others: the Company's history of operating losses and negative operating cash flows; its existing working capital deficiencies, liquidity constraints and substantial financing requirements; substantial doubt regarding its ability to continue as a going concern; its ability to obtain sufficient additional debt or equity financing on acceptable terms, or at all; potential dilution to existing stockholders resulting from financing transactions; its ability to satisfy outstanding indebtedness, accounts payable and other obligations; restrictions imposed by financing arrangements; the availability and cost of critical components and other materials; the Company's ability to purchase inventory, maintain production capacity and fulfill customer orders in a timely manner; disruptions in manufacturing operations and supply chains; fluctuations in customer demand, order timing, product mix and shipment schedules; customer concentration and dependence on key customers and suppliers; the Company's ability to sustain or improve gross margins and reduce operating losses; competition and pricing pressures; technological developments and product qualification requirements; changes in defense, aerospace and government procurement activity; changes in government spending, regulations and policies; the Company's ability to execute its business strategy and operational turnaround; risks associated with acquisitions, proposed transactions and the integration of acquired businesses; potential delays, costs or failure to complete strategic transactions; uncertainties relating to accounting estimates and the valuation of financial instruments; compliance with Nasdaq continued listing requirements; stock price volatility; and general economic, financial market, geopolitical and industry conditions.

The Company's recent sequential improvements in revenue, gross margin and operating performance may not be indicative of future results. There can be no assurance that the Company will achieve continued revenue growth, sustain improved margins, further reduce operating losses, resolve its working capital constraints, obtain sufficient financing or successfully complete its business turnaround. Any failure to obtain sufficient capital or maintain adequate liquidity could materially adversely affect the Company's operations, financial condition and ability to execute its business plans.

Additional information concerning these and other risks and uncertainties is contained in the Company's filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and subsequent filings, particularly under the headings "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Investors are encouraged to review these filings carefully.

Forward-looking statements speak only as of the date of this press release. Except as required by applicable law, the Company undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.