

October 2, 2026

PROSPECTUS SUPPLEMENT NO. 2



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

This prospectus supplement amends the prospectus dated July 17, 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 Reports on Form 8-K filed with the Securities and Exchange Commission (the “SEC”) on August 28, 2026 and October 2, 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 October 1, 2026, the closing price of our Class A Common Stock was \$0.817.

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. 2 is October 2, 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): October 2, 2026

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

Delaware
(State or other jurisdiction
of incorporation)

001-40621
(Commission
File Number)

98-1591717
(I.R.S. Employer
Identification No.)

1 Venture, Suite 220, Irvine, CA
(Address of principal executive offices)

92618
(Zip Code)

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

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

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))

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 Global 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 5.07 Submission of Matters to a Vote of Security Holders

On October 2, 2026, Mobix Labs, Inc. (the “Company”) held a Special Meeting of Stockholders (the “Meeting”) to vote on four proposals, as described in the definitive proxy statement filed by the Company with the SEC on September 14, 2026 (the “Proxy Statement”). Present at the Meeting were holders of 9,416,734 shares of Class A Common Stock of the Company (the “Class A Common Stock”) represented in person or by proxy, representing approximately 52.45% of the voting power of the Class A Common Stock as of September 8, 2026, the record date for the Meeting (the “Record Date”), and constituting a quorum for the transaction of business.

At the Meeting, the Company’s stockholders voted on the following proposals, each of which is described in more detail in the Proxy Statement. Capitalized terms used but not defined herein have the meanings assigned to such terms in the Proxy Statement.

Set forth below are the final voting results for all the proposals presented at the Meeting:

Proposal No. 1: The Reverse Split Amendment Proposal

The Reverse Split Amendment Proposal was approved. The voting results were as follows:

For	Against	Abstentions
7,680,758	1,719,286	16,690

Proposal No. 2: The 2023 Equity Incentive Plan Amendment Proposal

The 2023 Equity Incentive Plan Amendment Proposal was approved. The voting results were as follows:

For	Against	Abstentions	Broker Non-Votes
2,747,842	1,475,554	70,445	5,122,893

Proposal No. 3: The Kips Issuance Proposal

The Kips Issuance Proposal was approved. The voting results were as follows:

For	Against	Abstentions	Broker Non-Votes
3,636,132	626,788	30,921	5,122,893

Proposal No. 4: The Leviston Issuance Proposal

The Leviston Issuance Proposal was approved. The voting results were as follows:

For	Against	Abstentions	Broker Non-Votes
3,587,818	676,498	29,525	5,122,893

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.

MOBIX LABS, INC.

By: /s/ Keyvan Samini

Name: Keyvan Samini

Title: President and Chief Financial Officer

Date: October 2, 2026
