Registration No. 333-

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

FORM S-8

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

BENTLEY SYSTEMS, INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

95-3936623 (I.R.S. Employer **Identification No.)**

685 Stockton Drive Exton, PA 19341 (Address of Principal Executive Offices) (Zip Code)

Bentley Systems, Incorporated 2015 Equity Incentive Plan Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan for Non-Employee Directors Bentley Systems, Incorporated 2020 Omnibus Incentive Plan Bentley Systems, Incorporated Global Employee Stock Purchase Plan (Full title of the Plans)

David R. Shaman **Chief Legal Officer and Corporate Secretary Bentley Systems, Incorporated 685 Stockton Drive** Exton, PA 19341 Telephone: (610) 458-5000 (Name and address and telephone number, including area code, of agent for service)

> With copies to: **Richard A. Fenves** Jonathan R. Ozner Simpson Thacher & Bartlett LLP 425 Lexington Avenue New York, New York 10017 (212) 455-2000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \Box Non-accelerated filer \mathbf{X}

Accelerated filer	
Smaller reporting company	
Emerging growth company	X

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 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of securities	Amount	Proposed	Proposed	Amount of

to be registered	to be registered	maximum offering price per share ⁽⁷⁾	maximum aggregate offering price ⁽⁷⁾	registration fee
Class B Common Stock, par value \$0.01 per share ^{(1) (6)}	13,604,723	\$4.85	\$65,982,907	\$8,564.58
Class B Common Stock, par value \$0.01 per share ^{(2) (6)}	10,000,000	\$22.00	\$220,000,000	\$28,556.00
Class B Common Stock, par value \$0.01 per share ^{(3) (6)}	50,000	\$22.00	\$1,100,000	\$142.78
Class B Common Stock, par value \$0.01 per share ^{(4) (6)}	25,000,000	\$22.00	\$550,000,000	\$71,390.00
Class B Common Stock, par value \$0.01 per share ^{(5) (6)}	25,000,000	\$22.00	\$550,000,000	\$71,390.00

(1) Covers 13,604,723 shares of Class B common stock, par value \$0.01 per share (the "Common Stock"), of Bentley Systems, Incorporated (the "Company" or the "Registrant") issuable upon exercise of stock options ("Options") outstanding under the Bentley Systems, Incorporated 2015 Equity Incentive Plan (the "2015 Equity Plan").

(2) Covers Common Stock issuable under the Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan.

(3) Covers Common Stock issuable under the Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan for Non-Employee Directors.

(4) Covers Common Stock issuable under the Bentley Systems, Incorporated 2020 Omnibus Incentive Plan (the "2020 Omnibus Plan").

(5) Covers Common Stock issuable under the Bentley Systems, Incorporated Global Employee Stock Purchase Plan (the "ESPP").

(6) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers an indeterminate number of additional shares of Common Stock which may be offered and issued to prevent dilution resulting from stock splits, stock distributions or similar transactions.

(7) Pursuant to Rule 457(c) and 457(h)(i) of the Securities Act, the proposed maximum offering price per share and the proposed maximum aggregate offering price are estimated solely for the purpose of calculating the amount of the registration fee and are based (1) with respect to the 13,604,723 shares underlying Options previously granted under the 2015 Equity Plan, on the weighted average per share exercise price of \$4.85, and (2) with respect to the remaining shares, on a price of \$22.00 per Common Stock, which is the initial public offering price per share of Common Stock as set forth on the cover page of the Registrant's prospectus dated September 22, 2020 relating to its initial public offering of Common Stock.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified in Item 1 and Item 2 of Part I of Form S-8 is omitted from this registration statement on Form S-8 (the "Registration Statement") in accordance with the provisions of Rule 428 under the Securities Act, and the introductory note to Part I of Form S-8. The documents containing the information specified in Part I of Form S-8 will be delivered to the participants in the 2015 Equity Plan, Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan for Non-Employee Directors, 2020 Omnibus Plan, and the ESPP covered by this Registration Statement as specified by Rule 428(b)(1) under the Securities Act. Such documents are not required to be, and are not, filed with the Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as a prospectus or prospectus supplement pursuant to Rule 424 under the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the Commission by the Registrant pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are hereby incorporated by reference in this Registration Statement:

(a) The Registrant's prospectus relating to the offering of Common Stock filed with the Commission pursuant to Rule 424(b) of the Securities Act, relating to the Form S-1 (File No. 333-248246); and

(b) The Registrant's registration statement on Form 8-A filed with the Commission pursuant to Section 12(b) of the Exchange Act, relating to the Registrant's Common Stock, including all other amendments and reports filed for the purpose of updating such description.

All documents that the Registrant subsequently files pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this Registration Statement (except for any portions of the Registrant's Current Reports on Form 8-K furnished pursuant to Item 2.02 or Item 7.01 thereof and any corresponding exhibits thereto not filed with the Commission) and prior to the filing of a post-effective amendment to this Registration Statement indicating that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law (the "DGCL") allows a corporation to eliminate the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except in cases where the director breached his or her duty of loyalty to the corporation or its stockholders, failed to act in good faith, engaged in intentional misconduct or a knowing violation of the law, willfully or negligently authorized the unlawful payment of a dividend or approved an unlawful stock redemption or repurchase or obtained an improper personal benefit. The Registrant's amended and restated certificate of incorporation contains a provision that eliminates directors' personal liability as set forth above.

In addition, the Registrant's amended and restated by-laws provide that the Registrant shall indemnify its directors and the officers designated by its board of directors to the extent permitted by the DGCL. Section 145 of the DGCL provides that a Delaware corporation has the power to indemnify its directors, officers, employees and agents in certain circumstances. Subsection (a) of Section 145 of the DGCL empowers a corporation to indemnify any director, officer, employee or agent, or former director, officer, employee or agent, who was or is a party, or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding provided that such director, officer, employee or agent acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, provided that such director, officer, employee or agent had no reasonable cause to believe that his or her conduct was unlawful.

Subsection (b) of Section 145 of the DGCL empowers a corporation to indemnify any director, officer, employee or agent, or former director, officer, employee or agent, who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery shall determine that despite the adjudication of liability such person is fairly and reasonably entitled to indemnify for such expenses which the court shall deem proper.

Section 145 further provides that to the extent that a director or officer or employee of a corporation has been successful in the defense of any action, suit or proceeding referred to in subsections (a) and (b) or in the defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith; that indemnification provided by Section 145 shall not be deemed exclusive of any other rights to which the party seeking indemnification may be entitled; and the corporation is empowered to purchase and maintain insurance on behalf of a director, officer, employee or agent of the corporation against any liability asserted against him or her or incurred by him or her in any such capacity or arising out of his or her status as such whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145; and that, unless indemnification is ordered by a court, the determination that indemnification under subsections (a) and (b) of Section 145 is proper because the director, officer, employee or agent has met the applicable standard of conduct under subsections shall be made by (1) a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, (2) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (3) by the stockholders.

We intend to have in effect insurance policies for general officers' and directors' liability insurance covering all of our officers and directors.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The following exhibits are filed as part of this Registration Statement:

Exhibit Number	Description of Document
<u>4.1</u>	Form of Amended and Restated Certificate of Incorporation of Bentley Systems, Incorporated (incorporated by reference to Exhibit 3.1 filed with the Registrant's registration statement on Form S-1/A filed with the Commission on September 15, 2020).
<u>4.2</u>	Form of Amended and Restated By-Laws of Bentley Systems, Incorporated (incorporated by reference to Exhibit 3.2 filed with the Registrant's registration statement on Form S-1/A filed with the Commission on September 15, 2020).
<u>4.3</u>	Bentley Systems, Incorporated 2015 Equity Incentive Plan, as amended and restated effective as of May 29, 2018 (incorporated by reference to Exhibit 10.6 filed with the Registrant's registration statement on Form S-1 filed with the Commission on August 21, 2020).
<u>4.4</u>	Form of Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan (incorporated by reference to Exhibit 10.6 filed with the Registrant's registration statement on Form S-1/A filed with the Commission on September 8, 2020).
<u>4.5</u>	Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan for Non-Employee Directors, as amended and restated as of January 1, 2015 (incorporated by reference to Exhibit 10.7 filed with the Registrant's registration statement on Form S-1/A filed with the Commission on September 8, 2020).
<u>4.6</u>	Form of Bentley Systems, Incorporated 2020 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.8 filed with the Registrant's registration statement on Form S-1/A filed with the Commission on September 8, 2020).
<u>4.7</u>	Form of Bentley Systems, Incorporated Global Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.9 filed with the Registrant's registration statement on Form S-1/A filed with the Commission on September 8, 2020).
<u>5.1*</u>	Opinion of Simpson Thacher & Bartlett LLP.
<u>23.1*</u>	Consent of KPMG LLP.
<u>23.2*</u>	Consent of Simpson Thacher & Bartlett LLP (included as part of Exhibit 5.1).
<u>24.1*</u>	Powers of Attorney (included in the signature pages to this Registration Statement).

* Filed herewith

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Exton, State of Pennsylvania, on the 24th day of September, 2020.

BENTLEY SYSTEMS, INCORPORATED

By: /s/ David J. Hollister

Name: David J. Hollister Title: Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that the undersigned directors and officers of the Registrant, which is filing a registration statement on Form S-8 with the Securities and Exchange Commission, Washington, D.C. 20549 under the provisions of the Securities Act of 1933 hereby constitute and appoint Gregory S. Bentley, David J. Hollister, and David R. Shaman, and each of them, any of whom may act without joinder of the other, the individual's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for the person and in his or her name, place and stead, in any and all capacities, to sign this Registration Statement and any or all amendments or supplements to this Registration Statement, including post-effective amendments, and to file the same, with all exhibits thereto, and other documents in connection therewith with the Securities and Exchange Commission, and does hereby grant unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement and powers of attorney have been signed by the following persons in the capacities indicated on the 24th day of September, 2020.

Signature	Title
/s/ Gregory S. Bentley Gregory S. Bentley	Chief Executive Officer and Director (principal executive officer)
/s/ Keith A. Bentley Keith A. Bentley	Director
/s/ Barry J. Bentley Barry J. Bentley	Director
/s/ Raymond B. Bentley Raymond B. Bentley	Director
/s/ Kirk B. Griswold Kirk B. Griswold	Director
/s/ Brian F. Hughes Brian F. Hughes	Director
/s/ Janet B. Haugen Janet B. Haugen	Director
/s/ David J. Hollister David J. Hollister	Chief Financial Officer (principal financial officer)
/s/ Werner Andre Werner Andre	Chief Accounting Officer (principal accounting officer)

Simpson Thacher & Bartlett LLP

425 LEXINGTON AVENUE NEW YORK, NY 10017-3954

TELEPHONE: +1-212-455-2000 FACSIMILE: +1-212-455-2502

September 24, 2020

Bentley Systems, Incorporated 685 Stockton Drive Exton, PA 19341

Ladies and Gentlemen:

We have acted as counsel to Bentley Systems, Incorporated, a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-8 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, relating to the issuance by the Company of an aggregate of up to 73,654,723 shares of Class B Common Stock, par value \$0.01 per share, of the Company (the "Shares"), consisting of: (i) up to 13,604,723 shares of Class B Common Stock that may be issued by the Company upon the exercise of stock options issued and outstanding under the Bentley Systems, Incorporated 2015 Equity Incentive Plan (the "2015 Plan" and, the Shares issued upon such exercise, the "Option Shares"), (ii) up to 10,000,000 shares of Class B Common Stock that may be issued by the Company pursuant to the Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan (the "DCP"), (iii) up to 50,000 shares of Class B Common Stock that may be issued by the Company pursuant to the Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan (the "DCP"), (iii) up to 50,000 shares of Class B Common Stock that may be issued by the Company pursuant to the Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan for Non-Employee Directors (the "NEDDCP"), (iv) up to 25,000,000 shares of Class B Common Stock that may be issued by the Company pursuant to the Bentley Systems, Incorporated 2020 Omnibus Incentive Plan (the "2020 Plan") and (v) up to 25,000,000 shares of Class B Common Stock that may be issued by the Company pursuant to the Bentley Systems, Incorporated Global Employee Stock Purchase Plan (together with the 2015 Plan, the DCP, the NEDDCP and the 2020 Plan, the "Plans").

BEIJING HONG KONG HOUSTON LONDON LOS ANGELES PALO ALTO SÃO PAULO SEOUL TOKYO WASHINGTON, D.C.

Bentley Systems, Incorporated

September 24, 2020

We have examined the Registration Statement, a form of the Amended and Restated Certificate of Incorporation of the Company (the "Amended Certificate"), the Plans, each of which has been filed with the Commission as an exhibit to the Registration Statement, and the form of option agreement under the 2015 Plan pursuant to which the options relating to the Option Shares were issued (each, an "Option Agreement"). In addition, we have examined, and have relied as to matters of fact upon, originals, or duplicates or certified or conformed copies, of such records, agreements, documents and other instruments and such certificates or comparable documents of public officials and of officers and representatives of the Company and have made such other investigations as we have deemed relevant and necessary in connection with the opinions hereinafter set forth.

In rendering the opinion set forth below, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as duplicates or certified or conformed copies and the authenticity of the originals of such latter documents. We have also assumed that the Amended Certificate is filed with the Secretary of State for the State of Delaware in the form filed with the Commission as an exhibit to the Registration Statement prior to the issuance of any of the Shares.

Based upon the foregoing, and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that (1) when the Amended Certificate has been duly filed with the Secretary of State of the State of Delaware and (2) upon issuance and delivery in accordance with the Plans and, in the case of the Option Shares, the applicable Option Agreement following the valid exercise by the applicable stockholder of the related option, the Shares will be validly issued, fully paid and nonassessable.

Bentley Systems, Incorporated

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September 24, 2020

We do not express any opinion herein concerning any law other than the Delaware General Corporation Law.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement.

Very truly yours,

/s/ Simpson Thacher & Bartlett LLP

SIMPSON THACHER & BARTLETT LLP

The Board of Directors Bentley Systems, Incorporated:

We consent to the use of our report dated March 6, 2020, with respect to the consolidated balance sheets of Bentley Systems, Incorporated as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes, incorporated herein by reference.

Our report refers to changes in accounting principle for revenue from contracts with customers and sales commissions due to the adoption of new accounting standards as of January 1, 2019.

/s/ KPMG LLP

Philadelphia, Pennsylvania September 24, 2020