

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock, \$0.001 par value	5,600,000 shares	\$ 1.51	\$ 8,456,000	\$ 602.91
			Total	\$ 602.91

(1) The Registration Statement also registers such indeterminate number of additional shares as may be issued or issuable as a result of stock splits, stock dividends or similar transactions covered by Rule 416 under the Securities Act of 1933, as amended.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and (h), based on the average of the high and low sale prices of the common stock, \$0.001 par value, of the Registrant as reported by NYSE Amex on May 18, 2010.

INTRODUCTION

This Registration Statement on Form S-8 is filed by Express-1 Expedited Solutions, Inc. (the Company or the Registrant) and relates to 5,600,000 shares of the Company's Common Stock, par value \$0.001 per share, issuable pursuant to the Company's Amended and Restated 2001 Stock Option Plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

Information required by Part I of Form S-8 to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act of 1933, and the Note to Part I of Form S-8.

Item 2. Registrant Information and Employee Plan Annual Information.

Information required by Part I of Form S-8 to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act of 1933, and the Note to Part I of Form S-8.

PART II

INFORMATION REQUIRED IN THIS REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference.

The following documents that the Company has filed with the Securities and Exchange Commission (the Commission) are incorporated in this registration statement by reference and made a part hereof:

1. Annual Report on Form 10-K for the fiscal year ended December 31, 2009, filed on March 26, 2010 (File No. 001-32172);
2. Quarterly Report on Form 10-Q, filed on May 12, 2010;
3. Current Reports on Form 8-K, filed on April 5, 2010, and April 20, 2010;
4. Definitive Proxy Statement on Schedule 14A, filed on April 20, 2010; and
5. The description of the Company's Common Stock contained in the company's Registration Statement on Form 10-SB, filed on January 30, 2002 (File No. 000-49606), including any amendments or reports filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934 subsequent to the effective date of this registration statement, but prior to the filing of a post-effective amendment to this registration statement indicating that all securities offered hereby have been sold or deregistering all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents.

Any statement contained herein or in any 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 to constitute a part of this registration statement, except as so modified or superseded.

Item 4. Description of Securities.

Not applicable.

Item 5. Interest of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Article VIII of the Company's Amended and Restated Certificate of Incorporation, as amended, provides as follows: The Company shall indemnify any person who was, is or is threatened to be made a party to a proceeding (as hereinafter defined) by reason of the fact that he or she (i) is or was a director or officer of the Company or (ii) while a director or officer of the Company, is or was serving at the request of the Company as a director, officer, partner, venturer, proprietor, trustee, employee, agent or similar functionary of another foreign or domestic corporation, partnership, joint venture, sole proprietorship, trust, employee benefit plan, or other enterprise, to the fullest extent permitted under the Delaware General Corporation Law (the "DGCL"), as the same exists or may hereafter be amended. Such right shall be a contract right and as such shall run to the benefit of any director or officer who is elected and accepts the position of director or officer of the Company or elects to continue to serve as a director or officer of the Company while this Article VIII is in effect. Any repeal or amendment of this Article VIII shall be prospective only and shall not limit the rights of any such director or officer of the obligations of the Company with respect to any claim arising from or related to the services of such director or officer in any of the foregoing capacities prior to any such repeal or amendment to this Article VIII. Such right shall include the right to be paid by the Company expenses incurred in defending any such proceeding in advance of its final disposition to the maximum extent permitted under the DGCL, as the same exists or may hereafter be amended. If a claim for indemnification or advancement of expenses hereunder is not paid in full by the Company within sixty (60) days after a written claim has been received by the Company, the claimant may at any time thereafter bring suit against the Company to recover the unpaid amount of the claim, and if successful in whole or in part, the claimant shall also be entitled to be paid the expenses of prosecuting such claim. It shall be a defense to any such action that such indemnification or advancement of costs of defense are not permitted under the DGCL, but the burden of proving such defense shall be on the Company. Neither the failure of the Company (including its board of directors or any committee thereof, independent legal counsel, or stockholders) to have made its determination prior to the commencement of such action that indemnification of, or advancement of costs of defense to, the claimant is permissible in the circumstances nor as actual determination by the Company (including its board of directors or any committee thereof, independent legal counsel, or stockholders) that such indemnification or advancement is not permissible shall be a defense to the action or create a presumption that such indemnification or advancement is not permissible. In the event of the death of any person having a right of indemnification under the foregoing provisions, such right shall inure to the benefit of his or her heirs, executors, administrators and personal representatives. The rights conferred above shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, bylaw, resolution of stockholders or directors, agreement, or otherwise.

Without limiting the generality of the foregoing, to the extent permitted by then applicable law, the grant of mandatory indemnification pursuant to this Article VIII shall extend to proceedings involving the negligence of such person.

The Company may additionally indemnify any employee or agent of the Company to the fullest extent permitted by law.

As used herein, the term proceeding means any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, arbitrative or investigative, any appeal in such action, suit or proceeding, and any inquiry or investigation that could lead to such action, suit or proceeding.

Article IX of the Company's Amended and Restated Certificate of Incorporation, as amended, provides as follows: A director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper benefit. Any repeal or amendment of this Article IX by the stockholders of the Company shall be prospective only, and shall not adversely affect any limitation on the personal liability of a director of the Company arising from an act or omission occurring prior to the time of such repeal or amendment. In addition to the circumstances in which a director of the Company is not personally liable as set forth in the foregoing provisions of this Article IX, a director shall not be liable to the Company or its stockholders to such further extent as permitted by any law hereafter enacted, including, without limitation, any subsequent amendment to the DGCL.

Article VII, Section 8 of the Company's Amended and Restated Bylaws provides that the Company will indemnify its directors and officers to the fullest extent permitted by the DGCL and may, if and to the extent authorized by the Board of Directors, so indemnify such other persons whom it has the power to indemnify against any liability, reasonable expense or other matter whatsoever.

Section 145 of the DGCL concerning indemnification of officers, directors, employees and agents is set forth below.

Section 145. Indemnification of officers, directors, employees and agents; insurance.

(a) A corporation shall have power to indemnify any person 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) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

(b) A corporation shall have power to indemnify any person 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 the person

is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall 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 or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

(c) To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

(d) Any indemnification under subsections (a) and (b) of this section (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because the person has met the applicable standard of conduct set forth in subsections (a) and (b) of this section. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (1) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (2) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (3) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (4) by the stockholders.

(e) Expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this section. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the corporation deems appropriate.

(f) The indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of this section shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. A right to indemnification or to advancement of expenses arising under a provision of the certificate of incorporation or a bylaw shall not be eliminated or impaired by an amendment to such provision after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought, unless the provision in effect at the time of such act or omission explicitly authorizes such elimination or impairment after such action or omission has occurred.

(g) A corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted

against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under this section.

(h) For purposes of this section, references to the corporation shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under this section with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued.

(i) For purposes of this section, references to other enterprises shall include employee benefit plans; references to fines shall include any excise taxes assessed on a person with respect to any employee benefit plan; and references to serving at the request of the corporation shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner not opposed to the best interests of the corporation as referred to in this section.

(j) The indemnification and advancement of expenses provided by, or granted pursuant to, this section shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(k) The Court of Chancery is hereby vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification brought under this section or under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise. The Court of Chancery may summarily determine a corporation's obligation to advance expenses (including attorneys' fees).

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit No.	Description
4.1	Amended and Restated 2001 Stock Option Plan
5.1	Opinion of Roetzel & Andress
23.1	Consent of Roetzel & Andress (included in Exhibit 5)
23.2	Consent of Pender Newkirk & Company LLP

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers and 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 of 1933;
- 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. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement;
- 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) of this section 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 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, 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 of 1933, as amended, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this 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 of 1933, as amended, 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 Act and will be governed by the final adjudication of such issue.
-

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Saint Joseph, State of Michigan, on this May 20, 2010.

Express-1 Expedited Solutions, Inc.

By: /s/ Michael R. Welch
 Michael R. Welch
 Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Michael R. Welch Michael R. Welch	Chief Executive Officer, President and Director (Principal Executive Officer)	May 20, 2010
/s/ John Welch John Welch	Interim Chief Financial Officer	May 20, 2010
/s/ Jim Martell Jim Martell	Chairman of the Board of Directors	May 20, 2010
/s/ Jennifer Dorris Jennifer Dorris	Director	May 20, 2010
/s/ Jay Taylor Jay Taylor	Director	May 20, 2010
/s/ John Affleck-Graves John Affleck-Graves	Director	May 20, 2010
/s/ Calvin Whitehead Calvin Whitehead	Director	May 20, 2010
/s/ Dan Para Dan Para	Director	May 20, 2010

EXHIBITS

- 4.1 Amended & Restated 2001 Stock Option Plan
- 5.1 Opinion of Roetzel & Andress
- 23.2 Consent of Pender Newkirk & Company LLP