Rocket Fuel Inc. Form 424B2 August 12, 2016

PROSPECTUS SUPPLEMENT As filed pursuant to Rule 424(b)(2) (to prospectus dated August 11, 2016) Registration No. 333-211261

Up to \$30,000,000

Common Stock

We have entered into a certain Controlled Equity OfferingSM Sales Agreement, or sales agreement, with Cantor Fitzgerald & Co., or Cantor, relating to shares of our common stock offered by this prospectus supplement. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$30.0 million from time to time through Cantor.

Our common stock is quoted on the NASDAQ Global Select Market, or the Exchange, under the symbol "FUEL." On June 30, 2016, the last reported sale price of our common stock was \$2.22 per share.

Sales of our common stock, if any, under this prospectus supplement may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act. Cantor is not required to sell any specific number or dollar amount of securities, but will act as a sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Cantor and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to Cantor for sales of common stock sold pursuant to the sales agreement will be equal to 3.0% of the gross proceeds of any shares of common stock sold under the sales agreement. In connection with the sale of the common stock on our behalf, Cantor will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Cantor will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Cantor with respect to certain liabilities, including liabilities under the Securities Act or the Exchange Act of 1934, as amended, or the Exchange Act.

Our common stock is listed on The NASDAQ Global Select Market under the symbol "FUEL." We will provide information in any applicable prospectus supplement regarding any listing of securities other than shares of our common stock on any securities exchange.

INVESTING IN OUR SECURITIES INVOLVES SIGNIFICANT RISKS. YOU SHOULD REVIEW CAREFULLY THE "RISK FACTORS" ON PAGE S-4 OF THIS PROSPECTUS SUPPLEMENT BEFORE INVESTING IN OUR SECURITIES.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is August 11, 2016.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and accompanying prospectus relates to the offering of our common stock. Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus supplement, the accompanying prospectus, any free writing prospectus that we have authorized for use in connection with this offering, and the information incorporated by reference as described under the headings "Where You Can Find More Information" and "Information Incorporated by Reference" in this prospectus supplement. This sales agreement prospectus is deemed a prospectus supplement to the base prospectus contained in the registration statement of which this prospectus forms a part.

These documents contain important information that you should consider when making your investment decision. This document is comprised of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to, and updates information contained in, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference into the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to the combined document consisting of this prospectus supplement and the accompanying prospectus. In this prospectus supplement, as permitted by law, we "incorporate by reference" information from other documents that we file with the Securities and Exchange Commission, or the SEC. This means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus and should be read with the same care. When we make future filings with the SEC to update the information contained in documents that have been incorporated by reference, the information included or incorporated by reference in this prospectus supplement is considered to be automatically updated and superseded. In other words, in case of a conflict or inconsistency between information contained in this prospectus supplement and information in the accompanying prospectus or incorporated by reference into this prospectus supplement, you should rely on the information contained in the document that was filed later.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement, the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized any other person to provide you with different information. We are not making an offer to sell or soliciting an offer to buy our common stock in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations, and prospects may have changed since those dates.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in this prospectus supplement, the accompanying prospectus, or incorporated in this prospectus supplement by reference. This summary does not contain all of the information you should consider before buying common stock in this offering. You should carefully read this entire prospectus supplement and the accompanying prospectus, including each of the documents incorporated herein or therein by reference, before making an investment decision. Unless the context otherwise requires, the terms "Rocket Fuel," "the Company," "we," "us" and "our" in this prospectus supplement and accompanying prospectus refer to Rocket Fuel Inc., and its subsidiaries.

Rocket Fuel Inc.

Overview

Rocket Fuel is a technology company that brings the power of machine learning to the world of digital marketing. We offer technology and services designed to help marketers and their agencies connect with consumers through digital media at moments when that connection is most likely to be influential and most likely to achieve the advertiser's objectives. Our core service offerings are organized around two platforms - a demand side platform, or "DSP", and a data management platform, or "DMP," - which can be used by themselves, integrated with a customer's other customer relationship management or marketing platforms or used together as our programmatic marketing platform. That integrated platform is designed to deliver advertising campaigns and optimize media spend to engage, upsell, and retarget consumers across addressable digital media channels, including display, mobile, video, social, and television, and across addressable devices, including tablets, personal computers, set top boxes, television, and mobile phones. We sell media services, in which we accept insertion orders for advertising campaigns from our customers and operate our programmatic marketing platform as a managed service on their behalf. We also offer platform solutions, through which we provide customers direct access to our platforms so that they can operate the platforms on their own, and we offer professional services to assist them.

Corporate Information

We were incorporated in Delaware in 2008. Our principal executive offices are located at 1900 Seaport Boulevard, Pacific Shores Center, Redwood City, CA 94063, and our telephone number is (650) 595-1300. Our website address is www.rocketfuel.com. The information on, or that may be accessed through, our website is not incorporated by reference into this prospectus supplement or accompanying prospectus and should not be considered a part of this prospectus supplement or accompanying prospectus.

"Rocket Fuel" is a trademark of our company. Our logo and our other trade names, trademarks and service marks appearing in this prospectus supplement and accompanying prospectus are our property. Other trade names, trademarks and service marks appearing in this prospectus and accompanying prospectus are the property of their respective owners. Solely for convenience, our trademarks and tradenames referred to in this prospectus and accompanying prospectus appear without the TM symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and tradenames.

Recent Developments

Tender Offer

On March 2, 2016, our chief executive officer held an employee town hall meeting in which he announced that we are planning the detailed steps necessary to conduct a tender offer to allow eligible employees to exchange certain of their outstanding stock options for a lesser number of stock options to be granted under our 2013 Equity Incentive Plan with a new vesting schedule.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. As an emerging growth company: we have availed ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002; we will provide less extensive disclosure about our executive compensation arrangements; and we will not require shareholder non-binding advisory votes on executive compensation or golden parachute arrangements.

We may use these provisions until the last day of our fiscal year following the fifth anniversary of our initial public offering. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.0 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period. We may choose to take advantage of some but not all of these reduced burdens. To the extent that we continue to take advantage of these reduced burdens, the information that we provide stockholders may be different than you might obtain from other public companies in which you hold equity interests.

THE OFFERING

Common stock offered by us

Shares of our common stock having an aggregate offering price of up to \$30.0 million.

Manner of offering

"At the market offering" that may be made from time to time through our sales agent, Cantor. See "Plan

of Distribution" on page S-13.

We intend to use the net proceeds, if any, from this offering for general corporate purposes, which may include working capital, capital expenditures, and other corporate expenses. In addition, we may

Use of Proceeds use a portion of the net proceeds for acquisitions of complementary products, technologies or businesses, although we do not have any plans, agreements or commitments related to any such

acquisitions at this time. See "Use of Proceeds" on page S-10.

Investing in our common stock involves significant risks. You should read the "Risk Factors" section of

this prospectus supplement and in the documents incorporated by reference in this prospectus

supplement and accompanying prospectus for a discussion of factors to consider before deciding to

purchase shares of our common stock.

NASDAO

Risk Factors

"FUEL." Global Select

Market symbol

RISK FACTORS

An investment in our common stock involves a high degree of risk. Prior to making a decision about investing in our common stock, you should carefully consider the specific factors discussed below and discussed under the section entitled "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 and our Quarterly Reports on Form 10-Q for the three months ended March 31, 2016 and June 30, 2016, as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended, or the Exchange Act, each of which is incorporated by reference in this prospectus supplement and accompanying prospectus in their entirety, together with all of the other information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein, and any related free writing prospectus. Additional Risks Related to This Offering and our Common Stock

Management will have broad discretion as to the use of the proceeds from this offering and may not use the proceeds effectively.

Because we have not designated the amount of net proceeds from this offering to be used for any particular purpose, our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of the offering. Our management may use the net proceeds for corporate purposes that may not improve our financial condition or market value.

You may experience future dilution as a result of future equity offerings.

To the extent that we raise additional funds other than pursuant to this offering through the sale of other equity or convertible debt securities, the issuance of such securities will result in dilution to our stockholders. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

The price of our common stock has been, is, and may continue to be highly volatile, which may make it difficult for stockholders to sell our common stock when desired or at attractive prices.

The market price of our common stock is highly volatile, and we expect it to continue to be volatile for the foreseeable future. Some of the factors that may cause the market price of our common stock to continue to fluctuate include: announcements of financial results, new offerings, products, services or technologies, initiatives, commercial relationships, acquisitions or other events by us, our competitors or others in our industry sector;

• price and volume fluctuations in the overall U.S. and foreign stock markets from time to time;

significant volatility in the market price and trading volume of technology companies in general and of companies in the digital advertising industry in particular;

fluctuations in the trading volume of our shares or the size of our public

actual or anticipated changes or fluctuations in our results of operations;

whether our results of operations meet the expectations of investors or securities analysts;

actual or anticipated changes in the expectations of investors or securities analysts, whether due to our issuance of new guidance or otherwise;

4itigation involving us, our industry, or both;

regulatory developments in the United States, foreign countries, or both;

sales of large blocks of our common stock;

overall conditions in our industry and market;

departures of key employees; or

an adverse impact on us from any of the risks cited in this Risk Factors section.

The stock market in general, and the NASDAQ Global Select Market and the market for companies in our industry in particular, have experienced extreme price and volume fluctuations that may have been unrelated or disproportionate to the operating performance of the listed companies. There have been dramatic fluctuations in the market prices of securities of medical technology companies. These price fluctuations may be rapid and severe and may leave investors little time to react. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. Sharp drops in the market price of our common stock may also expose us to securities class-action litigation.

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public markets could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock would have on the market price of our common stock. We do not anticipate paying dividends on our capital stock.

We do not intend to pay dividends on our capital stock in the foreseeable future. The declaration of dividends is subject to the discretion of our Board of Directors and will depend on various factors, including our operating results, financial condition, future prospects and any other factors deemed relevant by our board of directors. You should not rely on an investment in our company if you require dividend income from your investment in our company. The success of your investment will likely depend entirely upon any future appreciation of the market price of our capital stock, which is uncertain and unpredictable. There is no guarantee that our capital stock will appreciate in value or even maintain the price at which you purchased your shares.

The common stock offered hereby will be sold in "at the market" offerings, and investors who buy shares at different times will likely pay different prices.

Under the sales agreement, we have the right to sell common stock at different times and at different prices. Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

The actual number of shares we will issue under the sales agreement, at any one time or in total, is uncertain. Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a sales notice to Cantor at any time throughout the term of the sales agreement. The number of shares that are sold by Cantor after delivering a sales notice will fluctuate based on the market price of the common shares during the sales period and limits we set with Cantor. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering contain "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve risks and uncertainties, as well as assumptions, that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. All statements contained in this prospectus supplement and accompanying prospectus, other than statements of historical fact, including statements regarding our future results of operations and financial position, our business strategy and plans, and our objectives for future operations, are forward-looking statements. The words "believe," "may," "will," "potentially," "estimate," "continue," "anticip "intend," "could," "would," "project," "plan," "expect" and the negative and plural forms of these words and similar expression are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. These forward-looking statements may include, but are not limited to, statements concerning the following: expectations for financial performance in 2016, including revenue and the levels of operating expenses in the areas of research and development, sales and marketing and general and administrative, and restructuring costs; our goal of reducing the cost of customer service, operations, account management, IT, and general and administrative functions as a percentage of revenue in future periods;

the impact that our sales strategies and our product mix between our Media Services and Platform Solutions, will have on revenue, media and other costs of revenue and gross margins;

the expected impact of seasonality on our operating results;

the anticipated impact of the growth rates in the real-time advertising exchange market and digital advertising on our future performance;

our belief that our programmatic marketing platform can enhance digital media buying across any programmatic inventory;

our goal of gaining a larger share of current customers' budgets and attracting new high-value customers;

the expected impact on our growth and profitability of focusing on our top 50 and top 250 customers;

the impact of working capital requirements on our goal of growing our business;

the expected increase in demand for programmatic brand advertising;

our expectations regarding our headcount levels in 2016;

our ability to improve the productivity and efficiency of our resources and infrastructure;

the expected impact of our expense reduction and operating efficiency initiatives;

our expectation regarding capital expenditures in 2016;

the usefulness of non-GAAP financial measures for understanding and evaluating our operating results;

our plans to finance data center hardware requirements through capital leasing facilities;

the adequacy of our office facilities to meet or exceed our needs for the immediate future and our ability to sublease unused facilities;

our expectation that, subject to achieving our operating plan for 2016, existing cash and cash equivalents will be sufficient to meet our business requirements for at least the next 12 months;

anticipated growth of the digital advertising market and of brand advertising as part of that market;

the ability of our solutions to deliver intended results to customers, including but not limited to the ability of our programmatic marketing platform to successfully combine the functionality of our DSP with features of our DMP in a manner that is attractive to customers and prospects;

the ability to effectively market our programmatic marketing platform, through the integration of technologies and capabilities arising from our acquisition of [x+1];

our ability to adapt our relationships with agencies and agency holding companies in light of the evolving competitive environment, and the anticipated success of our sales strategy;

our expectation that we will improve our abilities to attract new customers, and to retain and gain a larger amount of our current customers' advertising budgets;

our ability to achieve revenue growth by better tailoring our sales model to differing sizes of customers and prospects, and by improving the focus of our sales representatives on our core offerings;

our ability to avoid serving ads on unsafe or inappropriate websites or to non-human targets;

our ability to continue to expand internationally;

our expectation that, as our foreign sales and expenses increase, our operating results may be more affected by fluctuations in the exchange rates of the currencies in which we do business; and

our intention to vigorously defend against pending securities lawsuits.

We discuss in greater detail, and incorporate by reference into this prospectus supplement and accompanying prospectus in their entirety, many of these risks and uncertainties under the heading "Risk Factors" beginning on page S-4 of this prospectus supplement. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements.

If any of these risks or uncertainties materializes or any of these assumptions proves incorrect, our results could differ materially from the expectations in these statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this report to conform these statements to actual results or to changes in our expectations.

You should read this prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

We currently intend to use the net proceeds from this offering, if any, for general corporate purposes, including working capital, capital expenditures, and other corporate expenses. In addition, we may use a portion of the net proceeds for acquisitions of complementary products, technologies or businesses, although we do not have any plans, agreements or commitments related to any such acquisitions at this time.

The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. As a result, our management will have broad discretion regarding the timing and application of the net proceeds from this offering. Pending their ultimate use, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments.

PRICE RANGE OF OUR COMMON STOCK

Our common stock is traded on the NASDAQ Global Select Market under the symbol "FUEL." The following table shows, for the periods indicated, the high and low sales price per share of our common stock as reported by the NASDAQ Global Select Market.

	High	Low
Fiscal Year Ending December 31, 2016		
2 nd Quarter	\$3.21	\$2.09
1st Quarter	\$4.10	\$2.61
Fiscal Year Ended December 31, 2015		
4 th Quarter	\$5.60	\$2.80
3 rd Quarter	\$8.28	\$4.41
2 nd Quarter	\$9.66	\$7.53
1st Quarter	\$16.82	2\$9.05
Fiscal Year Ended December 31, 2014		
4 th Quarter	\$21.10	\$13.75
3 rd Quarter	\$31.27	\$14.29
2 nd Quarter	\$43.84	\$19.31
1st Quarter	\$71.89	\$42.75

On June 30, 2016, the last reported sale price of our common stock, as reported by the NASDAQ Global Select Market, was \$2.22 per share.

As of June 30, 2016, there were approximately 160 stockholders of record of our common stock, although we believe that there are a significantly larger number of beneficial owners of our common stock.

The foregoing table shows only historical comparisons. These comparisons may not provide meaningful information to you in determining whether to purchase shares of our common stock. You are urged to obtain current market quotations for our common stock and to review carefully the other information contained in this prospectus or incorporated by reference herein. See the section of this prospectus entitled "Where You Can Find More Information."

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future, if at all. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant. In addition, our loan agreement contains restrictions on our ability to pay dividends.

PLAN OF DISTRIBUTION

On May 10, 2016, we entered into a Controlled Equity Offering SM Sales Agreement, or the sales agreement, with Cantor Fitzgerald & Co., or Cantor, under which we may issue and sell shares of our common stock through Cantor acting as agent. We may issue and sell shares through this prospectus supplement having an aggregate gross sales price of up to \$30,000,000. The following summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. The sales agreement has been filed as an exhibit to our registration statement on Form S-3 of which this prospectus forms a part.

Upon delivery of a placement notice and subject to the terms and conditions of the sales agreement, Cantor may sell our common stock by any method permitted by law that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act.

Each time we wish to issue and sell common stock under the sales agreement, we will notify Cantor of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares that may be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed Cantor, unless Cantor declines to accept the terms of such notice, Cantor has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of Cantor under the sales agreement to sell our common stock are subject to a number of conditions that we must meet. We or Cantor may suspend the offering of our common stock upon notice and, subject to other conditions, our prior approval.

The settlement between us and Cantor is generally anticipated to occur on the third trading day following the date on which any sales are made, or on some other date that is agreed upon by us and Cantor in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and Cantor may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay Cantor a commission equal to an aggregate of 3.0% of the gross proceeds we receive from the sales of our common stock. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In connection with the sale of the common stock on our behalf, Cantor will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of Cantor will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Cantor with respect to certain civil liabilities, including liabilities under the Securities Act. We have also agreed to reimburse Cantor for certain specified expenses, including the fees and disbursements of its legal counsel, in an amount not to exceed \$50,000. We estimate that the total expenses for the offering, but excluding any underwriter fees or expense reimbursement payable to Cantor under the terms of the sales agreement, will be approximately \$400,000.

The offering of our common stock pursuant to this prospectus will terminate upon the termination of the sales agreement as permitted therein. We and Cantor may each terminate the sales agreement at any time upon ten days prior notice.

Any portion of the \$30,000,000 included in this sales agreement prospectus supplement that is not previously sold or included in an active placement notice pursuant to the sales agreement is available for sale in other offerings pursuant to the base prospectus, and if no shares are sold under the sales agreement, the full

\$30,000,000 of securities may be sold in other offerings pursuant to the base prospectus and a corresponding prospectus supplement.

Cantor and its affiliates may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M under the Exchange Act, Cantor will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus supplement.

This prospectus supplement and the accompanying prospectus in electronic format may be made available on a website maintained by Cantor, and Cantor may distribute this prospectus supplement and the accompanying prospectus electronically.

LEGAL MATTERS

The validity of the common stock offered by this prospectus supplement and accompanying prospectus will be passed upon by Wilson Sonsini Goodrich & Rosati, P.C., Palo Alto, California. Cantor is being represented in connection with this offering by Cooley LLP, New York, New York.

The consolidated financial statements of Rocket Fuel Inc., incorporated in this prospectus by reference from its Annual Report on Form 10-K, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements of X Plus Two Solutions, Inc. as of December 31, 2013 and 2012 and for each of the years in the three year period ended December 31, 2013 incorporated in this prospectus by reference to Rocket Fuel Inc.'s Current Report on Form 8-K/A filed with the SEC on November 6, 2014 have been audited by RSM US LLP (formerly McGladrey LLP), independent auditor, as stated in their report thereon, incorporated herein by reference, and have been incorporated in this prospectus and registration statement in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a registration statement under the Securities Act of 1933, as amended, relating to the offering of the common stock. The registration statement, including the attached exhibits, contains additional relevant information about us and the common stock. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above. The registration statement and the documents referred to below under "Information Incorporated by Reference" are also available on our Internet website, www.rocketfuel.com. We have not incorporated by reference into this prospectus supplement or the accompanying prospectus the information on our website, and you should not consider it to be a part of this prospectus supplement or the accompanying prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement and the accompanying prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus supplement and the accompanying prospectus. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding, in each case, documents or information deemed to have been furnished and not "filed" with the SEC pursuant to Item 2.02 or Item 7.01 of Form 8-K or as otherwise permitted by SEC rules):

our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 14, 2016;

our Amendment No. 1 to Annual Report on Form 10-K/A for the fiscal year ended December 31, 2015, filed with the SEC on June 21, 2016;

• our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2016 and June 30, 2016, filed with the SEC on May 10, 2016 and August 8, 2016, respectively;

our Current Reports on Form 8-K filed with the SEC on January 21, 2016, February 24, 2016, June 15, 2016, June 22, 2016 and August 2, 2016;

the information specifically incorporated by reference into the Annual Report on Form 10-K from our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 29, 2016;

consolidated financial statements of X Plus Two Solutions, Inc., as of December 31, 2013 and 2012 and for each of the years in the three year period ended December 31, 2013, and the independent auditor's report thereon, filed as Exhibit 99.1 to our Current Report on Form 8-K/A filed with the SEC on November 6, 2014; and

the description of our common stock contained in our Registration Statement on Form 8-A as filed with the SEC on September 16, 2013 pursuant to Section 12(b) of the Exchange Act.

We also incorporate by reference into this prospectus supplement and accompanying prospectus additional documents and information that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, including all such documents we may file with the SEC after the date of Amendment No. 2 to the registration statement and prior to the effectiveness of the registration statement, but excluding, in each case, documents or information deemed furnished and not "filed" with the SEC pursuant to Item 2.02 or Item 7.01 of Form 8-K or as otherwise permitted by SEC rules. Any statements contained in a previously filed document incorporated by reference into this prospectus supplement and accompanying prospectus is deemed to be modified or superseded for purposes of this prospectus supplement and accompanying prospectus to the extent that a statement contained in this prospectus supplement or accompanying prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

This prospectus supplement and accompanying prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus supplement and accompanying prospectus. You should rely only on the information incorporated by reference or provided in this prospectus supplement and accompanying prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement or accompanying prospectus is accurate as of any date other than the date of this prospectus supplement or accompanying prospectus, or the date of the documents incorporated by reference in this prospectus supplement and accompanying prospectus. We will provide to each person, including any beneficial owner, to whom this prospectus supplement and accompanying prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus supplement and accompanying prospectus. Requests for such documents should be directed to:

Rocket Fuel Inc.

1900 Seaport Boulevard, Pacific Shores Center,

Redwood City, CA 94063

Attention: General Counsel and Corporate Secretary

(650) 595-1300

You may also access the documents incorporated by reference in this prospectus supplement and accompanying prospectus through our website at www.rocketfuel.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus supplement and accompanying prospectus or the registration statement of which they form a part.

PROSPECTUS

\$50,000,000 COMMON STOCK PREFERRED STOCK WARRANTS DEBT SECURITIES SUBSCRIPTION RIGHTS UNITS

Rocket Fuel Inc., a Delaware corporation ("Rocket Fuel"), may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, any combination of the securities described in this prospectus, up to an aggregate amount of \$50,000,000.

We will provide specific terms of any offering in a supplement to this prospectus. Any prospectus supplement may also add, update or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby.

These securities may be offered and sold in the same offering or in separate offerings; to or through underwriters, dealers and agents; or directly to purchasers. The names of any underwriters, dealers or agents involved in the sale of our securities, their compensation and any over-allotment options held by them will be described in the applicable prospectus supplement. See the section titled "Plan of Distribution."

Our common stock is listed on The NASDAQ Global Select Market under the symbol "FUEL." We will provide information in any applicable prospectus supplement regarding any listing of securities other than shares of our common stock on any securities exchange.

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements.

INVESTING IN OUR SECURITIES INVOLVES SIGNIFICANT RISKS. YOU SHOULD REVIEW CAREFULLY THE "RISK FACTORS" ON PAGE 4 OF THIS PROSPECTUS AND IN THE APPLICABLE PROSPECTUS SUPPLEMENT BEFORE INVESTING IN OUR SECURITIES.

Neither the Securities and Exchange Commission nor any state securities commission 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 is August 11, 2016

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the United States Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under this shelf process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings up to a total amount of \$50,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add to, update or change information contained in the prospectus and, accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement. The prospectus supplement to be attached to the front of this prospectus may describe, as applicable: the terms of the securities offered; the initial public offering price; the price paid for the securities; net proceeds; and the other specific terms related to the offering of the securities.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement or free writing prospectus relating to a particular offering. No person has been authorized to give any information or make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus, any accompanying prospectus supplement and any related free writing prospectus in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither this prospectus nor any prospectus supplement nor any related free writing prospectus shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits.

You should read the entire prospectus and any prospectus supplement and any related free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement or any related free writing prospectus, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement or any free writing prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement or free writing prospectus is correct as of any date subsequent to the date hereof or of such prospectus supplement or free writing prospectus, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

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PROSPECTUS SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in this prospectus or incorporated in this prospectus by reference. This summary does not contain all of the information you should consider before buying securities in this offering. You should carefully read this entire prospectus and any applicable prospectus supplement, including each of the documents incorporated herein or therein by reference, before making an investment decision. Unless the context otherwise requires, the terms "Rocket Fuel," "the Company," "we," "us" and "our" in this prospectus refer to Rocket Fuel Inc., and its subsidiaries.

ROCKET FUEL INC.

Overview

Rocket Fuel is a technology company that brings the power of machine learning to the world of digital marketing. We offer technology and services designed to help marketers and their agencies connect with consumers through digital media at moments when that connection is most likely to be influential and most likely to achieve the advertiser's objectives. Our core service offerings are organized around two platforms - a demand side platform, or "DSP", and a data management platform, or "DMP," - which can be used by themselves, integrated with a customer's other customer relationship management or marketing platforms or used together as our programmatic marketing platform. That integrated platform is designed to deliver advertising campaigns and optimize media spend to engage, upsell, and retarget consumers across addressable digital media channels, including display, mobile, video, social, and television, and across addressable devices, including tablets, personal computers, set top boxes, television, and mobile phones. We sell media services, in which we accept insertion orders for advertising campaigns from our customers and operate our programmatic marketing platform as a managed service on their behalf. We also offer platform solutions, through which we provide customers direct access to our platforms so that they can operate the platforms on their own, and we offer professional services to assist them.

Corporate Information

We were incorporated in Delaware in 2008. Our principal executive offices are located at 1900 Seaport Boulevard, Pacific Shores Center, Redwood City, CA 94063, and our telephone number is (650) 595-1300. Our website address is www.rocketfuel.com. The information on, or that may be accessed through, our website is not incorporated by reference into this prospectus and should not be considered a part of this prospectus.

"Rocket Fuel" is a trademark of our company. Our logo and our other trade names, trademarks and service marks appearing in this prospectus are our property. Other trade names, trademarks and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, our trademarks and tradenames referred to in this prospectus appear without the TM symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and tradenames.

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Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. As an emerging growth company: we have availed ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002; we will provide less extensive disclosure about our executive compensation arrangements; and we will not require shareholder non-binding advisory votes on executive compensation or golden parachute arrangements.

We may use these provisions until the last day of our fiscal year following the fifth anniversary of our initial public offering. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.0 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period. We may choose to take advantage of some but not all of these reduced burdens. To the extent that we continue to take advantage of these reduced burdens, the information that we provide stockholders may be different than you might obtain from other public companies in which you hold equity interests.

The Securities We May Offer

We may offer up to \$50,000,000 of common stock, preferred stock, warrants, debt securities, subscription rights and units in one or more offerings and in any combination. This prospectus provides you with a general description of the securities we may offer. A prospectus supplement, which we will provide each time we offer securities, will describe the specific amounts, prices and terms of these securities.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. Our amended and restated certificate of incorporation does not provide for cumulative voting rights. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our board of directors may determine. If we become subject to a liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

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Preferred Stock

Our board of directors has the authority, subject to limitations prescribed by Delaware law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further vote or action by our stockholders.

Each series of preferred stock, if issued, will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or winding-up, voting rights and rights to convert into common stock.

Warrants

We may issue warrants for the purchase of common stock, preferred stock or debt securities. We may issue warrants independently or together with other securities.

Debt Securities

We may offer secured or unsecured obligations in the form of one or more series of senior or subordinated debt. The senior debt securities and the subordinated debt securities are together referred to in this prospectus as the "debt securities." The subordinated debt securities generally will be entitled to payment only after payment of our senior debt. Senior debt generally includes all debt for money borrowed by us, except debt that is stated in the instrument governing the terms of that debt to be not senior to, or to have the same rank in right of payment as, or to be expressly junior to, the subordinated debt securities. We may issue debt securities that are convertible into shares of our common stock.

The senior and subordinated debt securities will be issued under separate indentures between us and a trustee. We have summarized the general features of the debt securities to be governed by the indentures. These indentures have been filed as exhibits to the registration statement of which this prospectus forms a part. We encourage you to read these indentures. Instructions on how you can get copies of these documents are provided in the section titled "Where You Can Find More Information."

Subscription Rights

We may issue subscription rights to purchase our common stock, preferred stock or debt securities. These subscription rights may be offered independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the subscription rights in such offering.

Units

We may issue units comprised of one or more of the other classes of securities issued by us as described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit.

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RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed in the section titled "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under "Part I—Item 1A—Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, and "Part II—Item 1A—Risk Factors" in our Quarterly Reports on Form 10-Q for the three months ended March 31, 2016 and June 30, 2016, all of which are incorporated herein by reference, and as may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and any prospectus supplement related to a particular offering.

FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The words "anticipate," "could," "expect," "believe," "goal," "plan," "intend," "estimate," "may," "seek," "potential "project," "should," "would," "will," and similar expressions and variations thereof are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," and include statements regarding the intent, belief or current expectations of the company and management that are subject to known and unknown risks, uncertainties and assumptions and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to those discussed in the section titled "Risk Factors" set forth above. This prospectus, any prospectus supplement and the information incorporated by reference in this prospectus and any prospectus supplement also contain statements that are based on management's current expectations and beliefs, including estimates and projections about our company, industry, financial condition, results of operations and other matters. These statements are not guarantees of future performance and are subject to numerous risks, uncertainties, and assumptions that are difficult to predict.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

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RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for each of the periods indicated. You should read these ratios in connection with our financial statements and accompanying notes, and our annual report on Form 10-K for the year ended December 31, 2015, incorporated by reference in this prospectus.

					Six
Voorl	Months				
Year l	Ended				
					June 30,
2011	2012	2013	2014	2015	2016

Ratio of earnings to fixed charges

Deficiency of earnings available to cover fixed charges (3,785)(7,728)(14,886)(65,450)(204,738)(34,300)
For purposes of calculating the ratio of earnings to fixed charges, earnings represents the difference between (i) the sum of (a) pre-tax income from continuing operations before adjustment for income or loss from equity investees; (b) fixed charges; (c) amortization of capitalized interest; (d) distributed income of equity investees; and (e) pre-tax losses of equity investees for which charges arising from guarantees are included in fixed charges and (ii) the sum of (a) interest capitalized; (b) preference security divided requirements of consolidated subsidiaries; and (c) the non-controlling interest in pre-tax income of subsidiaries that have not incurred fixed charges. Fixed charges represents the sum of (a) interest expensed and capitalized, (b) amortized premiums, discounts and capitalized expenses related to indebtedness, (c) an estimate of the interest within rental expense and (d) preference security dividend requirements of consolidated subsidiaries. The portion of total rental expense that represents the interest factor is estimated to be approximately 25%.

Currently, we have no shares of preferred stock outstanding and we have not paid any dividends on preferred stock in the periods presented. Therefore, the ratios of earnings to combined fixed charges and preferred stock dividends are not different from the ratios of earnings to fixed charges.

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USE OF PROCEEDS

Unless otherwise indicated in the prospectus supplement, we will use the net proceeds from the sale of securities offered by this prospectus for general corporate purposes, which may include working capital, capital expenditures, and other corporate expenses. In addition, we may use a portion of the net proceeds for acquisitions of complementary products, technologies or businesses, although we do not have any plans, agreements or commitments related to any such acquisitions at this time. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. As a result, unless otherwise indicated in the prospectus supplement, our management will have broad discretion to allocate the net proceeds of the offerings. Pending their ultimate use, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments.

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DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future, if at all. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant. In addition, our loan agreement contains restrictions on our ability to pay dividends.

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DESCRIPTION OF CAPITAL STOCK

The following description summarizes the most important terms of our capital stock and does not purport to be complete and is qualified in its entirety by the provisions of our amended and restated certificate of incorporation and second amended and restated bylaws, which documents are incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and the applicable provisions of the Delaware General Corporation Law (the "DGCL").

General

Our authorized capital stock consists of one billion (1,000,000,000) shares of common stock, \$0.001 par value per share, and one hundred million (100,000,000) shares of undesignated preferred stock, \$0.001 par value per share. Common Stock

Outstanding Shares

On June 30, 2016, there were 44,438,214 shares of common stock outstanding, held of record by 160 stockholders. Our board of directors is authorized, without stockholder approval, to issue additional shares of our capital stock. Dividend Rights

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. We have never declared or paid cash dividends on any of our capital stock and currently do not anticipate paying any cash dividends after this offering or in the foreseeable future.

Voting Rights

There are 1,000,000,000 shares of common stock authorized for issuance. Pursuant to our amended and restated certificate of incorporation, each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of stockholders; provided, however, that, except as otherwise required by law, holders of our common stock, as such, shall not be entitled to vote on any amendment to our amended and restated certificate of incorporation that relates solely to the terms of one or more outstanding series of preferred stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to our amended and restated certificate of incorporation. Pursuant to our amended and restated certificate of incorporation can generally be taken by a majority of our board and/or stockholders holding a majority of our outstanding shares, except as otherwise indicated in the section entitled "Anti-takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws," where certain amendments to our amended and restated certificate of incorporation and second amended and restated bylaws require the vote of at least 66 % of our then outstanding voting securities. Additionally, our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a plurality of the votes cast at a meeting of stockholders will be able to elect all of the directors then standing for election.

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Right to Receive Liquidation Distributions

In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued pursuant to this offering, when paid for, will be fully paid and nonassessable.

Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 100,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock by us could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control of our company or other corporate action. No shares of preferred stock are outstanding, and we have no present plan to issue any shares of preferred stock.

Stock Options

As of June 30, 2016, there were 7,577,847 shares of our common stock issuable upon exercise of outstanding stock options, at a weighted-average exercise price of \$3.68 per share.

Restricted Stock Units

As of June 30, 2016, there were 3,026,658 shares of our common stock issuable upon vesting of restricted stock units. Warrants

As of June 30, 2016, we had no outstanding warrants to purchase shares of our common stock or our preferred stock.

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Exclusive Forum for Adjudication of Disputes

In our Definitive Proxy Statement for our 2016 Annual Meeting of Stockholders, or the 2016 Proxy Statement, filed with the SEC on April 29, 2016, we submitted a proposal to the stockholders to amend our amended and restated bylaws to provide for the following provision:

"Unless the corporation consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any current or former director, officer or other employee of the corporation to the corporation or the corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the General Corporation Law of the State of Delaware, or (iv) any action asserting a claim governed by the internal affairs doctrine shall be a state or federal court located within the State of Delaware (a "Chosen Court"), in all cases subject to the Chosen Court having personal jurisdiction over the indispensable parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the corporation shall be deemed to have notice of and consented to the provisions of this bylaw."

This amendment to our amended and restated bylaws took effect immediately upon the approval at our 2016 Annual Meeting by the holders of a majority of the shares present at such meeting in person or by proxy and entitled to vote thereon.

Registration Rights

Certain holders of shares of our common stock that converted from shares of our convertible preferred stock, or their permitted transferees, and our founders, or their permitted transferees, are entitled to certain rights with respect to the registration of such shares under the Securities Act of 1933, as amended, or the Securities Act. We refer to these shares as "registrable securities." These rights are provided under the terms of an investor rights agreement between us and the holders of registrable securities and, subject to certain exceptions, include demand registration rights, piggyback registration rights and Form S-3 registration rights. In any registration made pursuant to such investor rights agreement, all fees, costs and expenses of underwritten registrations will be borne by us, and all selling expenses, including estimated underwriting discounts and selling commissions, will be borne by the holders of the registrable securities being registered.

These registration rights will terminate as to a given holder of registrable securities upon the earliest of (a) three (3) years following the closing date of our initial public offering, or September 25, 2016, or (b) such time after our initial public offering that all registrable securities held by such holder can be sold in any three (3) month period without registration in compliance with Rule 144 under the Securities Act.

Demand Registration Rights

Under the terms of our investor rights agreement, we will be required, upon the written request of holders of at least 50% of the then outstanding registrable securities, to register, as soon as practicable, all or a portion of the registrable securities for public resale. We are required to effect only two registrations pursuant to this provision of our investor rights agreement. Such request for registration must cover a number of shares with an anticipated aggregate offering price of \$10,000,000 (exclusive of underwriters' discounts and commissions). We will not be required to effect a demand registration during the period beginning 90 days prior to the filing and 180 days following the effectiveness of a registration statement relating to a public offering of our securities.

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Piggyback Registration Rights

The holders of registrable securities are entitled to certain piggyback registration rights. If we register any of our securities for our own account, after the completion of this offering, the holders of these shares are entitled to include their shares in the registration. Both we and the underwriters of any underwritten offering have the right to limit the number of shares registered by these holders for marketing reasons, subject to limitations set forth in our investor rights agreement.

Form S-3 Registration Rights

The holders of registrable securities are entitled to certain Form S-3 registration rights. If we are eligible to file a registration statement on Form S-3, these holders have the right, upon their written request, to have such shares registered by us if the proposed aggregate offering price of such shares is at least \$1,000,000, subject to exceptions set forth in our investor rights agreement.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

The provisions of Delaware law, our amended and restated certificate of incorporation and our second amended and restated bylaws contain provisions that could have the effect of delaying, deferring, or discouraging another person from acquiring control of us. These provisions and certain provisions of Delaware law, which are summarized below, could discourage takeovers, coercive or otherwise. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Undesignated Preferred Stock

Our board of directors has the ability to designate and issue preferred stock with voting or other rights or preferences that could deter hostile takeovers or delay changes in our control or management.

Limits on Ability of Stockholders to Act by Written Consent or Call a Special Meeting

Our amended and restated certificate of incorporation provides that our stockholders may not act by written consent. This limit on the ability of stockholders to act by written consent may lengthen the amount of time required to take stockholder actions. As a result, the holders of a majority of our capital stock would not be able to amend the second amended and restated bylaws or remove directors without holding a meeting of stockholders called in accordance with our second amended and restated bylaws.

In addition, our second amended and restated bylaws further provide that special meetings of our stockholders may be called only by the chairman of our board of directors, our chief executive officer, our president (in the absence of a chief executive officer), or our board of directors. A stockholder may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our second amended and restated bylaws contain advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made

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by or at the direction of our board of directors or a committee of the board of directors. These advance notice procedures may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed and may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of our company.

Board Classification

Our board of directors is divided into three classes. The directors in each class serve for a three-year term, one class being elected each year by our stockholders. This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

• prior to the date of the transaction, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interest of the transaction that resulted in the stockholder becoming an interested stockholder.

upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (i) shares owned by persons who are directors and also officers and (ii) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or at or subsequent to the date of the transaction, the business combination is approved by our board of directors and

at or subsequent to the date of the transaction, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 % of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

The provisions of Delaware law and the provisions of our amended and restated certificate of incorporation and second amended and restated bylaws could have the effect of discouraging others from

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attempting hostile takeovers and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions might also have the effect of preventing changes in our management. It is also possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare, N.A. The transfer agent and registrar's address is 250 Royall Street, Canton, MA 02021. Our shares of common stock are issued in uncertificated form only, subject to limited circumstances.

Market Listing

Our common stock is listed on The NASDAQ Global Select Market under the symbol "FUEL."

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DESCRIPTION OF THE WARRANTS

General

We may issue warrants for the purchase of our debt securities, preferred stock or common stock, or any combination thereof. Warrants may be issued independently or together with our debt securities, preferred stock or common stock and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the warrants. The warrant agent will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of certain provisions of the warrants is not complete. For the terms of a particular series of warrants, you should refer to the prospectus supplement for that series of warrants and the warrant agreement for that particular series.

Debt Warrants

The prospectus supplement relating to a particular issue of warrants to purchase debt securities will describe the terms of the debt warrants, including the following:

the title of the debt warrants;

the offering price for the debt warrants, if any;

the aggregate number of the debt warrants;

the designation and terms of the debt securities, including any conversion rights, purchasable upon exercise of the debt warrants;

if applicable, the date from and after which the debt warrants and any debt securities issued with them will be separately transferable;

the principal amount of debt securities that may be purchased upon exercise of a debt warrant and the exercise price for the warrants, which may be payable in cash, securities or other property;

the dates on which the right to exercise the debt warrants will commence and expire;

•f applicable, the minimum or maximum amount of the debt warrants that may be exercised at any one time; whether the debt warrants represented by the debt warrant certificates or debt securities that may be issued upon exercise of the debt warrants will be issued in registered or bearer form;

information with respect to book-entry procedures, if any;

the currency or currency units in which the offering price, if any, and the exercise price are payable;

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•f applicable, a discussion of material U.S. federal income tax considerations;

the anti-dilution provisions of the debt warrants, if any;

the redemption or call provisions, if any, applicable to the debt warrants;

any provisions with respect to the holder's right to require us to repurchase the warrants upon a change in control or similar event; and

any additional terms of the debt warrants, including procedures, and limitations relating to the exchange, exercise and settlement of the debt warrants.

Debt warrant certificates will be exchangeable for new debt warrant certificates of different denominations. Debt warrants may be exercised at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement. Prior to the exercise of their debt warrants, holders of debt warrants will not have any of the rights of holders of the debt securities purchasable upon exercise and will not be entitled to payment of principal or any premium, if any, or interest on the debt securities purchasable upon exercise.

Equity Warrants

The prospectus supplement relating to a particular series of warrants to purchase our common stock or preferred stock will describe the terms of the warrants, including the following:

the title of the warrants;

the offering price for the warrants, if any;

the aggregate number of warrants;

the designation and terms of the common stock or preferred stock that may be purchased upon exercise of the warrants;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each security;

if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;

the number of shares of common stock or preferred stock that may be purchased upon exercise of a warrant and the exercise price for the warrants;

the dates on which the right to exercise the warrants shall commence and expire;

if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

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the currency or currency units in which the offering price, if any, and the exercise price are payable;

•f applicable, a discussion of material U.S. federal income tax considerations;

the anti-dilution provisions of the warrants, if any;

the redemption or call provisions, if any, applicable to the warrants;

any provisions with respect to the holder's right to require us to repurchase the warrants upon a change in control or similar event; and

any additional terms of the warrants, including procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of equity warrants will not be entitled:

to vote, consent or receive dividends;

receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or

exercise any rights as stockholders of us.

The descriptions of the warrants in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable warrants. These descriptions do not restate those warrants in their entirety and may not contain all the information that you may find useful. We urge you to read the applicable warrants because they, and not the summaries, define your rights as holders of the warrants. For more information, please review the forms of the relevant warrants, which will be filed with the SEC promptly after the offering of warrants and will be available as described in the section titled "Where You Can Find More Information."

DESCRIPTION OF THE DEBT SECURITIES

The debt securities may be either secured or unsecured and will either be our senior debt securities or our subordinated debt securities. The debt securities will be issued under one or more separate indentures between us and a trustee to be specified in an accompanying prospectus supplement. Senior debt securities will be issued under a senior indenture and subordinated debt securities will be issued under a subordinated indenture. Together, the senior indenture and the subordinated indenture are called indentures in this description. This prospectus, together with the applicable prospectus supplement, will describe the terms of a particular series of debt securities.

The following is a summary of selected provisions and definitions of the indentures and debt securities to which any prospectus supplement may relate. The summary of selected provisions of the indentures and the debt securities appearing below is not complete and is subject to, and qualified entirely by reference to, all of the provisions of the applicable indenture and certificates evidencing the applicable debt securities. For additional information, you should look at the applicable indenture and the certificate evidencing the applicable debt security that is filed as an exhibit to the registration statement that includes the prospectus. In this description of the debt

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securities, the words "we," "us," or "our" refer only to Rocket Fuel Inc. and not to any of our subsidiaries, unless we expressly state or the context otherwise requires.

The following description sets forth selected general terms and provisions of the applicable indenture and debt securities to which any prospectus supplement may relate. Other specific terms of the applicable indenture and debt securities will be described in the applicable prospectus supplement. If any particular terms of the indenture or debt securities described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement.

General

Debt securities may be issued in separate series without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series.

We are not limited as to the amount of debt securities we may issue under the indentures. Unless otherwise provided in a prospectus supplement, a series of debt securities may be reopened to issue additional debt securities of such series.

The prospectus supplement relating to a particular series of debt securities will set forth:

whether the debt securities are senior or subordinated;

the offering price;

the title;

any limit on the aggregate principal amount;

the person who shall be entitled to receive interest, if other than the record holder on the record date;

the date or dates the principal will be payable;

the interest rate or rates, which may be fixed or variable, if any, the date from which interest will accrue, the interest payment dates and the regular record dates, or the method for calculating the dates and rates;

the place where payments may be made;

the terms and conditions upon which the debt securities may be redeemed by us at our option;

any mandatory redemption or purchase provisions at the option of the holder or any sinking fund or similar provisions and any applicable redemption or purchase prices associated with these provisions;

if issued other than in denominations of U.S. \$1,000 or any multiple of U.S. \$1,000, the denominations in which the debt securities shall be issuable;

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if applicable, the method for determining how the principal, premium, if any, or interest will be calculated by reference to an index or formula;

if other than U.S. currency, the currency or currency units in which principal, premium, if any, or interest will be payable and whether we or a holder may elect payment to be made in a different currency;

the portion of the principal amount that will be payable upon acceleration of maturity, if other than the entire principal amount;

if the principal amount payable at stated maturity will not be determinable as of any date prior to stated maturity, the amount or method for determining the amount which will be deemed to be the principal amount;

if applicable, whether the debt securities shall be subject to the defeasance provisions described below under

• Satisfaction and discharge; defeasance" or such other defeasance provisions specified in the applicable prospectus supplement for the debt securities;

any conversion or exchange provisions;

whether the debt securities will be issuable in the form of a global security;

the deletion, addition or change in any event of default;

any change or modification to the subordination provisions applicable to the subordinated debt securities if different from those described below under "Subordinated debt securities;"

any deletion, addition or change in the covenants set forth in Article 10 of the indenture;

any paying agents, authenticating agents, security registrars or other agents for the debt securities, if other than the trustee;

any provisions relating to any security provided for the debt securities, including any provisions regarding the circumstances under which collateral may be released or substituted;

any provisions relating to guaranties for the securities and any circumstances under which there may be additional obligors;

any provisions granting special rights to holders when a specified event occurs;

any provisions with respect to any special interest premium or other premium;

any special tax provisions that apply to the debt securities;

with respect to the debt securities that do not bear interest, the dates for certain required reports to the applicable trustee;

any and all additional, eliminated or changed terms that will apply to the debt securities; and

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any other terms of such debt securities.

Unless otherwise specified in the prospectus supplement, the debt securities will be registered debt securities. Debt securities may be sold at a substantial discount below their stated principal amount, bearing no interest or interest at a rate which at time of issuance is below market rates. The U.S. federal income tax considerations applicable to debt securities sold at a discount will be described in the applicable prospectus supplement.

Exchange and Transfer

Debt securities may be transferred or exchanged at the office of the security registrar or at the office of any transfer agent designated by us.

We will not impose a service charge for any transfer or exchange, but we may require holders to pay any tax or other governmental charges associated with any transfer or exchange.

In the event of any partial redemption of debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange, any debt security of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt security of that series selected for redemption, in whole or in part, except the unredeemed portion being redeemed in part.

We will appoint the trustee as the initial security registrar. Any transfer agent, in addition to the security registrar initially designated by us, will be named in the prospectus supplement. We may designate additional transfer agents or change transfer agents or change the office of the transfer agent. However, we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

Global Securities

The debt securities of any series may be represented, in whole or in part, by one or more global securities. Each global security will:

be registered in the name of a depositary, or its nominee, that we will identify in a prospectus supplement;

be deposited with the depositary or nominee or custodian; and

bear any required legends.

No global security may be exchanged in whole or in part for debt securities registered in the name of any person other than the depositary or any nominee unless:

the depositary has notified us that it is unwilling or unable to continue as depositary or has ceased to be qualified to act as depositary;

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an event of default is continuing with respect to the debt securities of the applicable series; or any other circumstance described in a prospectus supplement has occurred permitting or requiring the issuance of any such security.

As long as the depositary, or its nominee, is the registered owner of a global security, the depositary or nominee will be considered the sole owner and holder of the debt securities represented by the global security for all purposes under the indentures. Except in the above limited circumstances, owners of beneficial interests in a global security will not be:

entitled to have the debt securities registered in their names;

entitled to physical delivery of certificated debt securities; or

considered to be holders of those debt securities under the indenture.

Payments on a global security will be made to the depositary or its nominee as the holder of the global security. Some jurisdictions have laws that require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to transfer beneficial interests in a global security.

Institutions that have accounts with the depositary or its nominee are referred to as "participants." Ownership of beneficial interests in a global security will be limited to participants and to persons that may hold beneficial interests through participants. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants.

Ownership of beneficial interests in a global security will be shown on and effected through records maintained by the depositary, with respect to participants' interests, or any participant, with respect to interests of persons held by participants on their behalf.

Payments, transfers and exchanges relating to beneficial interests in a global security will be subject to policies and procedures of the depositary. The depositary policies and procedures may change from time to time. Neither any trustee nor we will have any responsibility or liability for the depositary's or any participant's records with respect to beneficial interests in a global security.

Payment and Paying Agents

Unless otherwise indicated in a prospectus supplement, the provisions described in this paragraph will apply to the debt securities. Payment of interest on a debt security on any interest payment date will be made to the person in whose name the debt security is registered at the close of business on the regular record date. Payment on debt securities of a particular series will be payable at the office of a paying agent or paying agents designated by us. However, at our option, we may pay interest by mailing a check to the record holder. The trustee will be designated as our initial paying agent.

We may also name any other paying agents in a prospectus supplement. We may designate additional paying agents, change paying agents or change the office of any paying agent. However, we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

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All moneys paid by us to a paying agent for payment on any debt security that remain unclaimed for a period ending the earlier of:

40 business days prior to the date the money would be turned over to the applicable state; or at the end of two years after such payment was due,

will be repaid to us thereafter. The holder may look only to us for such payment.

No Protection in the Event of a Change of Control

Unless otherwise indicated in a prospectus supplement with respect to a particular series of debt securities, the debt securities will not contain any provisions that may afford holders of the debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction, whether or not such transaction results in a change in control.

Covenants

Unless otherwise indicated in a prospectus supplement with respect to a particular series of debt securities, the debt securities will not contain any financial or restrictive covenants.

Consolidation, Merger and Sale of Assets

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of debt securities, we may not consolidate with or merge into any other person (other than one of our subsidiaries), in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to, any person (other than a subsidiary of Rocket Fuel Inc.), unless:

the successor entity, if any, is a U.S. corporation, limited liability company, partnership, trust or other business entity; the successor entity assumes our obligations on the debt securities and under the indentures;

immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and

certain other conditions specified in the indenture are met.

Events of Default

Unless we indicate otherwise in a prospectus supplement, the following will be events of default for any series of debt securities under the indentures:

- (1) we fail to pay principal of or any premium on any debt security of that series when due;
- (2) we fail to pay any interest on any debt security of that series for 30 days after it becomes due;
- (3) we fail to deposit any sinking fund payment when due;

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- we fail to perform any other covenant in the indenture and such failure continues for 90 days after we are given the notice required in the indentures; and
- (5) certain events involving our bankruptcy, insolvency or reorganization.

Additional or different events of default applicable to a series of debt securities may be described in a prospectus supplement. An event of default of one series of debt securities is not necessarily an event of default for any other series of debt securities.

The trustee may withhold notice to the holders of any default, except defaults in the payment of principal, premium, if any, interest, any sinking fund installment on, or with respect to any conversion right of, the debt securities of such series. However, the trustee must consider it to be in the interest of the holders of the debt securities of such series to withhold this notice.

Unless we indicate otherwise in a prospectus supplement, if an event of default, other than an event of default described in clause (5) above, shall occur and be continuing with respect to any series of debt securities, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding securities of that series may declare the principal amount and premium, if any, of the debt securities of that series, or if any debt securities of that series are original issue discount securities, such other amount as may be specified in the applicable prospectus supplement, in each case together with accrued and unpaid interest, if any, thereon, to be due and payable immediately.

Unless we indicate otherwise in a prospectus supplement, if an event of default described in clause (5) above shall occur, the principal amount and premium, if any, of all the debt securities of that series, or if any debt securities of that series are original issue discount securities, such other amount as may be specified in the applicable prospectus supplement, in each case together with accrued and unpaid interest, if any, thereon, will automatically become immediately due and payable. Any payment by us on the subordinated debt securities following any such acceleration will be subject to the subordination provisions described below under "Subordinated debt securities." Notwithstanding the foregoing, each indenture will provide that we may, at our option, elect that the sole remedy for an event of default relating to our failure to comply with our obligations described under the section entitled "Reports" below or our failure to comply with the requirements of Section 314(a)(1) of the Trust Indenture Act will for the first 360 days after the occurrence of such an event of default consist exclusively of the right to receive additional interest on the relevant series of debt securities at an annual rate equal to (i) 0.25% of the principal amount of such series of debt securities for the first 180 days after the occurrence of such event of default and (ii) 0.50% of the principal amount of such series of debt securities from the 181st day to, and including, the 360th day after the occurrence of such event of default, which we call "additional interest." If we so elect, the additional interest will accrue on all outstanding debt securities from and including the date on which such event of default first occurs until such violation is cured or waived and shall be payable on each relevant interest payment date to holders of record on the regular record date immediately preceding the interest payment date. On the 361st day after such event of default (if such violation is not cured or waived prior to such 361st day), the debt securities will be subject to acceleration as provided above. In the event we do not elect to pay additional interest upon any such event of default in accordance with this paragraph, the debt securities will be subject to acceleration as provided above.

In order to elect to pay the additional interest as the sole remedy during the first 360 days after the occurrence of any event of default relating to the failure to comply with the reporting obligations in accordance

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with the preceding paragraph, we must notify all holders of debt securities and the trustee and paying agent of such election prior to the close of business on the first business day following the date on which such event of default occurs. Upon our failure to timely give such notice or pay the additional interest, the debt securities will be immediately subject to acceleration as provided above.

After acceleration, the holders of a majority in aggregate principal amount of the outstanding securities of that series may, under certain circumstances, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, or other specified amounts or interest, have been cured or waived. Other than the duty to act with the required care during an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request of the holders unless the holders shall have offered to the trustee reasonable indemnity. Generally, the holders of a majority in aggregate principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee.

A holder of debt securities of any series will not have any right to institute any proceeding under the indentures, or for the appointment of a receiver or a trustee, or for any other remedy under the indentures, unless:

- (1) the holder has previously given to the trustee written notice of a continuing event of default with respect to the debt securities of that series;
- (2) the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made a written request and have offered reasonable indemnity to the trustee to institute the proceeding; and the trustee has failed to institute the proceeding and has not received direction inconsistent with the original request
- (3) from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series within 60 days after the original request.

Holders may, however, sue to enforce the payment of principal, premium or interest on any debt security on or after the due date or to enforce the right, if any, to convert any debt security (if the debt security is convertible) without following the procedures listed in (1) through (3) above.

We will furnish the trustee an annual statement from our officers as to whether or not we are in default in the performance of the conditions and covenants under the indenture and, if so, specifying all known defaults. Modification and Waiver

Unless we indicate otherwise in a prospectus supplement, the applicable trustee and we may make modifications and amendments to an indenture with the consent of the holders of a majority in aggregate principal amount of the outstanding securities of each series affected by the modification or amendment.

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We may also make modifications and amendments to the indentures for the benefit of holders without their consent, for certain purposes including, but not limited to:

to evidence the succession of another person to Rocket Fuel, or successive successions, and the assumption by any such successor of the covenants of Rocket Fuel in the indentures in compliance with Article 8 of the indentures; adding covenants;

adding events of default;

making certain changes to facilitate the issuance of the debt securities;

to add to, change or eliminate any of the provisions of the indentures or more series of securities, provided that any such addition, change or elimination (A) shall not apply to any security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision or (B) shall become effective only when there is no such security outstanding;

securing the debt securities;

providing for guaranties of, or additional obligors on, the debt securities;

to establish the form or term of debt securities as permitted by Sections 2.1 and 3.1 of the indenture; providing for a successor trustee or additional trustees;

conforming the indenture to the description of the securities set forth in this prospectus or the accompanying prospectus supplement;

curing any ambiguity, defect or inconsistency; provided that such action shall not adversely affect the interest of the holders in any material respect;

permitting or facilitating the defeasance and discharge of the debt securities;

make such other provisions in regard to matters or questions arising under the indentures or under any supplemental indentures as our board of directors may deem necessary or desirable, and which does not in each case adversely affect the interests of the holders of the debt securities of a series; and

comply with requirements of the SEC in order to effect or maintain the qualifications of the indentures under the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act").

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However, neither the trustee nor we may make any modification or amendment without the consent of the holder of each outstanding security of that series affected by the modification or amendment if such modification or amendment would:

change the stated maturity of the principal of, or any installment of principal or interest on, any debt security; reduce the principal, premium, if any, or interest on any debt security or any amount payable upon redemption or repurchase, whether at our option or the option of any holder, or reduce the amount of any sinking fund payments; reduce the principal of an original issue discount security or any other debt security payable on acceleration of maturity;

change the place of payment or the currency in which any debt security is payable;

impair the right to enforce any payment after the stated maturity or redemption date;

•f subordinated debt securities, modify the subordination provisions in a materially adverse manner to the holders; adversely affect the right to convert any debt security if the debt security is a convertible debt security; or change the provisions in the indenture that relate to modifying or amending the indenture.

Satisfaction and Discharge; Defeasance

We may be discharged from our obligations on the debt securities, subject to limited exceptions, of any series that have matured or will mature or be redeemed within one year if we deposit enough money with the trustee to pay all the principal, interest and any premium due to the stated maturity date or redemption date of the debt securities. Each indenture contains a provision that permits us to elect either or both of the following: we may elect to be discharged from all of our obligations, subject to limited exceptions, with respect to any series of debt securities then outstanding. If we make this election, the holders of the debt securities of the series will not be entitled to the benefits of the indenture, except for the rights of holders to receive payments on debt securities or the registration of transfer and exchange of debt securities and replacement of lost, stolen or mutilated debt securities. we may elect to be released from our obligations under some or all of any financial or restrictive covenants applicable to the series of debt securities to which the election relates and from the consequences of an event of default resulting from a breach of those covenants.

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To make either of the above elections, we must irrevocably deposit in trust with the trustee enough money to pay in full the principal, interest and premium on the debt securities. This amount may be made in cash and/or U.S. government obligations or, in the case of debt securities denominated in a currency other than U.S. dollars, cash in the currency in which such series of securities is denominated and/or foreign government obligations. As a condition to either of the above elections, for debt securities denominated in U.S. dollars we must deliver to the trustee an opinion of counsel that the holders of the debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the action.

With respect to debt securities of any series that are denominated in a currency other than United States dollars, "foreign government obligations" means:

direct obligations of the government that issued or caused to be issued the currency in which such securities are denominated and for the payment of which obligations its full faith and credit is pledged, or, with respect to debt securities of any series which are denominated in Euros, direct obligations of certain members of the European Union for the payment of which obligations the full faith and credit of such members is pledged, which in each case are not callable or redeemable at the option of the issuer thereof; or

obligations of a person controlled or supervised by or acting as an agency or instrumentality of a government described in the bullet above the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by such government, which are not callable or redeemable at the option of the issuer thereof. Notices

Notices to holders will be given by mail to the addresses of the holders in the security register.

Governing Law

The indentures and the debt securities will be governed by, and construed under, the laws of the State of New York. No Personal Liability of Directors, Officers, Employees and Stockholders

No incorporator, stockholder, employee, agent, officer, director or subsidiary of ours will have any liability for any obligations of ours, or because of the creation of any indebtedness under the debt securities, the indentures or supplemental indentures. The indentures provide that all such liability is expressly waived and released as a condition of, and as a consideration for, the execution of such indentures and the issuance of the debt securities.

Regarding the Trustee

The indentures limit the right of the trustee, should it become our creditor, to obtain payment of claims or secure its claims.

The trustee will be permitted to engage in certain other transactions with us. However, if the trustee acquires any conflicting interest, and there is a default under the debt securities of any series for which it is trustee, the trustee must eliminate the conflict or resign.

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Subordinated Debt Securities

The following provisions will be applicable with respect to each series of subordinated debt securities, unless otherwise stated in the prospectus supplement relating to that series of subordinated debt securities.

The indebtedness evidenced by the subordinated debt securities of any series is subordinated, to the extent provided in the subordinated indenture and the applicable prospectus supplement, to the prior payment in full, in cash or other payment satisfactory to the holders of senior debt, of all senior debt, including any senior debt securities.

Upon any distribution of our assets upon any dissolution, winding up, liquidation or reorganization, whether voluntary or involuntary, marshalling of assets, assignment for the benefit of creditors, or in bankruptcy, insolvency, receivership or other similar proceedings, payments on the subordinated debt securities will be subordinated in right of payment to the prior payment in full in cash or other payment satisfactory to holders of senior debt of all senior debt. In the event of any acceleration of the subordinated debt securities of any series because of an event of default with respect to the subordinated debt securities of that series, holders of any senior debt would be entitled to payment in full in cash or other payment satisfactory to holders of senior debt of all senior debt before the holders of subordinated debt securities are entitled to receive any payment or distribution.

In addition, the subordinated debt securities will be structurally subordinated to all indebtedness and other liabilities of our subsidiaries, including trade payables and lease obligations. This occurs because our right to receive any assets of our subsidiaries upon their liquidation or reorganization, and your right to participate in those assets, will be effectively subordinated to the claims of that subsidiary's creditors, including trade creditors, except to the extent that we are recognized as a creditor of such subsidiary. If we are recognized as a creditor of that subsidiary, our claims would still be subordinate to any security interest in the assets of the subsidiary and any indebtedness of the subsidiary senior to us.

We are required to promptly notify holders of senior debt or their representatives under the subordinated indenture if payment of the subordinated debt securities is accelerated because of an event of default.

Under the subordinated indenture, we may also not make payment on the subordinated debt securities if:
a default in our obligations to pay principal, premium, if any, interest or other amounts on our senior debt occurs and the default continues beyond any applicable grace period, which we refer to as a payment default; or any other default occurs and is continuing with respect to designated senior debt that permits holders of designated senior debt to accelerate its maturity, which we refer to as a non-payment default, and the trustee receives a payment blockage notice from us or some other person permitted to give the notice under the subordinated indenture.

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We will resume payments on the subordinated debt securities:

in case of a payment default, when the default is cured or waived or ceases to exist, and

in case of a nonpayment default, the earlier of when the default is cured or waived or ceases to exist or 179 days after the receipt of the payment blockage notice.

No new payment blockage period may commence on the basis of a nonpayment default unless 365 days have elapsed from the effectiveness of the immediately prior payment blockage notice. No nonpayment default that existed or was continuing on the date of delivery of any payment blockage notice to the trustee shall be the basis for a subsequent payment blockage notice.

As a result of these subordination provisions, in the event of our bankruptcy, dissolution or reorganization, holders of senior debt may receive more, ratably, and holders of the subordinated debt securities may receive less, ratably, than our other creditors. The subordination provisions will not prevent the occurrence of any event of default under the subordinated indenture.

The subordination provisions will not apply to payments from money or government obligations held in trust by the trustee for the payment of principal, interest and premium, if any, on subordinated debt securities pursuant to the provisions described under the section entitled "Satisfaction and discharge; defeasance," if the subordination provisions were not violated at the time the money or government obligations were deposited into trust.

If the trustee or any holder receives any payment that should not have been made to them in contravention of subordination provisions before all senior debt is paid in full in cash or other payment satisfactory to holders of senior debt, then such payment will be held in trust for the holders of senior debt.

Senior debt securities will constitute senior debt under the subordinated indenture.

Additional or different subordination provisions may be described in a prospectus supplement relating to a particular series of debt securities.

Definitions

"Designated senior debt" means our obligations under any particular senior debt in which the instrument creating or evidencing the same or the assumption or guarantee thereof, or related agreements or documents to which we are a party, expressly provides that such indebtedness shall be designated senior debt for purposes of the subordinated indenture. The instrument, agreement or other document evidencing any designated senior debt may place limitations and conditions on the right of such senior debt to exercise the rights of designated senior debt.

"Indebtedness" means the following, whether absolute or contingent, secured or unsecured, due or to become due, outstanding on the date of the indenture for such series of securities or thereafter created, incurred or assumed: our indebtedness evidenced by a credit or loan agreement, note, bond, debenture or other written obligation;

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all of our obligations for money borrowed;

all of our obligations evidenced by a note or similar instrument given in connection with the acquisition of any businesses, properties or assets of any kind,

our obligations:

as lessee under leases required to be capitalized on the balance sheet of the lessee under generally accepted accounting principles, or

as lessee under leases for facilities, capital equipment or related assets, whether or not capitalized, entered into or leased for financing purposes;

all of our obligations under interest rate and currency swaps, caps, floors, collars, hedge agreements, forward contracts or similar agreements or arrangements;

all of our obligations with respect to letters of credit, bankers' acceptances and similar facilities, including reimbursement obligations with respect to the foregoing;

all of our obligations issued or assumed as the deferred purchase price of property or services, but excluding trade accounts payable and accrued liabilities arising in the ordinary course of business;

all obligations of the type referred to in the above clauses of another person, the payment of which, in either case, we have assumed or guaranteed, for which we are responsible or liable, directly or indirectly, jointly or severally, as obligor, guarantor or otherwise, or which are secured by a lien on our property; and

renewals, extensions, modifications, replacements, restatements and refundings of, or any indebtedness or obligation issued in exchange for, any such indebtedness or obligation described in the above clauses of this definition.

"Senior debt" means the principal of, premium, if any, and interest, including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any such proceeding, and rent payable on or in connection with, and all fees and other amounts payable in connection with, our indebtedness. However, senior debt shall not include:

any debt or obligation if its terms or the terms of the instrument under which or pursuant to which it is issued expressly provide that it shall not be senior in right of payment to the subordinated debt securities or expressly provide that such indebtedness is on the same basis or "junior" to the subordinated debt securities; or debt to any of our subsidiaries, a majority of the voting stock of which is owned, directly or indirectly, by us.

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"Subsidiary" means a corporation more than 50% of the outstanding voting stock of which is owned, directly or indirectly, by us or by one or more of our other subsidiaries or by a combination of us and our other subsidiaries. For purposes of this definition, "voting stock" means stock or other similar interests which ordinarily has or have voting power for the election of directors, or persons performing similar functions, whether at all times or only so long as no senior class of stock or other interests has or have such voting power by reason of any contingency.

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DESCRIPTION OF SUBSCRIPTION RIGHTS

We may issue subscription rights to purchase our common stock, preferred stock or debt securities. These subscription rights may be offered independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the subscription rights in such offering. In connection with any offering of subscription rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

The prospectus supplement relating to any subscription rights we offer, if any, will, to the extent applicable, include specific terms relating to the offering, including some or all of the following:

the price, if any, for the subscription rights;

the exercise price payable for our common stock, preferred stock or debt securities upon the exercise of the subscription rights;

the number of subscription rights to be issued to each stockholder;

the number and terms of our common stock, preferred stock or debt securities which may be purchased per each subscription right;

the extent to which the subscription rights are transferable;

any other terms of the subscription rights, including the terms, procedures and limitations relating to the exchange and exercise of the subscription rights;

the date on which the right to exercise the subscription rights shall commence, and the date on which the subscription rights shall expire;

the extent to which the subscription rights may include an over-subscription privilege with respect to unsubscribed securities or an over-allotment privilege to the extent the securities are fully subscribed; and

if applicable, the material terms of any standby underwriting or purchase arrangement which may be entered into by Rocket Fuel in connection with the offering of subscription rights.

The descriptions of the subscription rights in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable subscription right agreements. These descriptions do not restate those subscription right agreements in their entirety and may not contain all the information that you may find useful. We urge you to read the applicable subscription right agreements because they, and not the summaries, define your rights as holders of the subscription rights. For more information, please review the forms of the relevant subscription right agreements, which will be filed with the SEC promptly after the offering of subscription rights and will be available as described in the section titled "Where You Can Find More Information."

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DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other classes of securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The units may be issued under unit agreements to be entered into between us and a unit agent, as detailed in the prospectus supplement relating to the units being offered. The prospectus supplement will describe:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances the securities comprising the units may be held or transferred separately;

- a description of the terms of any unit agreement governing the units;
- a description of the provisions for the payment, settlement, transfer or exchange of the units;
- a discussion of material federal income tax considerations, if applicable; and
- whether the units if issued as a separate security will be issued in fully registered or global form.

The descriptions of the units in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable unit agreements. These descriptions do not restate those unit agreements in their entirety and may not contain all the information that you may find useful. We urge you to read the applicable unit agreements because they, and not the summaries, define your rights as holders of the units. For more information, please review the forms of the relevant unit agreements, which will be filed with the SEC promptly after the offering of units and will be available as described in the section titled "Where You Can Find More Information."

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PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (1) to or through underwriters or dealers, (2) directly to purchasers, including our affiliates, (3) through agents, including ordinary brokerage transactions, block trades, placements, "at the market" transactions, put or call transactions or in any other way not involving market makers or established trading markets or (4) through a combination of any these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. Any prospectus supplement will include, to the extent applicable, the following information:

the terms of the offering;

the names of any underwriters or agents;

the name or names of any managing underwriter or underwriters;

the purchase price of the securities;

the net proceeds from the sale of the securities;

any delayed delivery arrangements;

any underwriting discounts, commissions and other items constituting underwriters' compensation;

any initial public offering price;

any discounts or concessions allowed or reallowed or paid to dealers; and

any commissions paid to agents.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4). Any at the market offering will be through an underwriter or underwriters acting as principal or agent for us.

We may issue to the holders of our common stock, on a pro rata basis for no consideration, subscription rights to purchase shares of our common stock or preferred stock. These subscription rights may or may not be transferable by stockholders. The applicable prospectus supplement will describe the specific terms of any offering of our common or preferred stock through the issuance of subscription rights, including the terms of the subscription rights offering, the terms, procedures and limitations relating to the exchange and exercise of the subscription rights and, if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of common or preferred stock through the issuance of subscription rights.

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Sale through Underwriters or Dealers

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers. The prospectus supplement will include the names of the principal underwriters, the respective amount of securities underwritten, the nature of the obligation of the underwriters to take the securities and the nature of any material relationship between an underwriter and us.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities offered pursuant to this prospectus.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

Direct Sales and Sales through Agents

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved.

Securities may also be sold through agents designated from time to time. Any required prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent by us. Unless otherwise indicated in such prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in any required prospectus supplement.

Delayed Delivery Contracts

If the prospectus supplement indicates, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts

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would be subject only to those conditions described in the prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Market Making, Stabilization and Other Transactions

Unless the applicable prospectus supplement states otherwise, each series of offered securities by us will be a new issue and will have no established trading market. We may elect to list any series of offered securities on an exchange. Any underwriters that we use in the sale of such offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Accordingly, we cannot assure you that the securities will have a liquid trading market.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Rule 104 under the Exchange Act. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Derivative Transactions and Hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sale transactions and other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may effect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others. The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities.

Electronic Auctions

We may also make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you should pay particular attention to the description of that system we will provide in a prospectus supplement. Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may

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present to each bidder, on a so-called "real-time" basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected. For example, in the case of a debt security, the clearing spread could be indicated as a number of "basis points" above an index treasury note. Of course, many pricing methods can and may also be used.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction. General Information

Agents, underwriters and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act. Agents, underwriters and dealers may engage in transactions with or perform services for us in the ordinary course of their businesses.

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LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon by Wilson Sonsini Goodrich & Rosati, P.C., Palo Alto, California. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement. EXPERTS

The consolidated financial statements of Rocket Fuel Inc., incorporated in this prospectus by reference from its Annual Report on Form 10-K, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements of X Plus Two Solutions, Inc. as of December 31, 2013 and 2012 and for each of the years in the three year period ended December 31, 2013 incorporated in this prospectus by reference to Rocket Fuel Inc.'s Current Report on Form 8-K/A filed with the SEC on November 6, 2014 have been audited by RSM US LLP (formerly McGladrey LLP), independent auditor, as stated in their report thereon, incorporated herein by reference, and have been incorporated in this prospectus and registration statement in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a registration statement under the Securities Act of 1933, as amended, relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above. The registration statement and the documents referred to below under "Information Incorporated by Reference" are also available on our Internet website, www.rocketfuel.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

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INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding, in each case, documents or information deemed to have been furnished and not "filed" with the SEC pursuant to Item 2.02 or Item 7.01 of Form 8-K or as otherwise permitted by SEC rules):

our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 14, 2016;

our Amendment No. 1 to Annual Report on Form 10-K/A for the fiscal year ended December 31, 2015, filed with the SEC on June 21, 2016;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2016 and June 30, 2016, filed with the SEC on May 10, 2016 and August 8, 2016, respectively;

our Current Reports on Form 8-K filed with the SEC on January 21, 2016, February 24, 2016, June 15, 2016, June 22, 2016 and August 2, 2016;

the information specifically incorporated by reference into the Annual Report on Form 10-K from our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 29, 2016;

consolidated financial statements of X Plus Two Solutions, Inc., as of December 31, 2013 and 2012 and for each of the years in the three year period ended December 31, 2013, and the independent auditor's report thereon, filed as Exhibit 99.1 to our Current Report on Form 8-K/A filed with the SEC on November 6, 2014; and the description of our common stock contained in our Registration Statement on Form 8-A as filed with the SEC on

September 16, 2013 pursuant to Section 12(b) of the Exchange Act.

We also incorporate by reference into this prospectus additional documents and information that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, including all such documents we may file with the SEC after the date of Amendment No. 2 to the registration statement and prior to the effectiveness of the registration statement, but excluding, in each case, documents or information deemed furnished and not "filed" with the SEC pursuant to Item 2.02 or Item 7.01 of Form 8-K or as otherwise permitted by SEC rules. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

This prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus. You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you

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with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus. We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus.

Requests for such documents should be directed to:

Rocket Fuel Inc.

1900 Seaport Boulevard, Pacific Shores Center

Redwood City, CA 94063

Attention: General Counsel and Corporate Secretary

(650) 595-1300

You may also access the documents incorporated by reference in this prospectus through our website at www.rocketfuel.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

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Up to \$30,000,000 Common Stock

PROSPECTUS SUPPLEMENT

August 11, 2016