

TRAVELCENTERS OF AMERICA LLC
Form 424B5
January 08, 2013

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)
[TABLE OF CONTENTS](#)

[Table of Contents](#)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-181182

The information contained in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell and they are not soliciting an offer to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

Subject to completion, dated January 8, 2013

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus dated July 11, 2012)

\$

TravelCenters of America LLC

% Senior Notes due 2028

This is an offering of \$ aggregate principal amount of % Senior Notes due 2028, or the Notes. We will pay interest on the Notes quarterly in arrears on January 15, April 15, July 15 and October 15 of each year, beginning on April 15, 2013. The Notes will mature on , 2028.

The Notes will constitute our senior unsecured obligations and will rank *pari passu* in right of payment with all of our existing and future unsecured and unsubordinated indebtedness and will be effectively subordinated to all existing and future secured indebtedness (including all borrowings under our credit facility) to the extent of the value of the assets securing such indebtedness and to all existing and future debt, other liabilities (including deferred rent obligations) and any preferred equity of our subsidiaries. The Notes will be issued in denominations and integral multiples of \$25.00.

We may, at our option, at any time on or after , 2016, redeem some or all of the Notes by paying 100% of the principal amount of the Notes to be redeemed plus accrued but unpaid interest, if any, to, but not including, the redemption date, as described under "Description of Notes - Optional Redemption."

The Notes will constitute a new issue of securities with no established trading market. We intend to apply to list the Notes on the NYSE MKT LLC, or NYSE MKT, under the symbol " " and, if approved, expect trading in the Notes to begin within 30 days after the original issue date of the Notes. The Notes are expected to trade "flat," meaning that purchasers will not pay, and sellers will not receive, any accrued and unpaid interest on the Notes that is not reflected in the trading price.

Investment in the Notes involves a high degree of risk. You should read carefully the sections entitled "Risk Factors" and "Warning Concerning Forward Looking Statements" beginning on pages S-5 and S-28, respectively, of this prospectus supplement and in our Annual Report on Form 10-K for the year ended December 31, 2011 and Quarterly Report on Form 10-Q for the quarter ended

September 30, 2012, which are incorporated herein by reference.

Neither the Securities and Exchange Commission, or SEC, nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful and complete. Any representation to the contrary is a criminal offense.

	Per Note	Total⁽²⁾
Public offering price ⁽¹⁾	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds, before expenses, to us	\$	\$

- (1) Plus accrued interest, if any, from January , 2013 if the initial settlement occurs after that date.
- (2) Assumes no exercise of the underwriters' over-allotment option.

We have granted the underwriters an option to purchase up to an additional \$ aggregate principal amount of Notes at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus supplement solely to cover over-allotments, if any.

The underwriters expect to deliver the Notes to purchasers in book-entry form only through The Depository Trust Company, or DTC, on or about January , 2013.

Joint Book-Running Managers

Citigroup

RBC Capital Markets

UBS Investment Bank

Lead Manager

MLV & Co.

Co-Managers

Janney Montgomery Scott

Oppenheimer & Co.

BB&T Capital Markets

The date of this prospectus supplement is January , 2013.

Table of Contents

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT

<u>About This Prospectus Supplement</u>	<u>S-ii</u>
<u>Prospectus Supplement Summary</u>	<u>S-1</u>
<u>Risk Factors</u>	<u>S-5</u>
<u>Use of Proceeds</u>	<u>S-9</u>
<u>Ratio of Earnings to Fixed Charges</u>	<u>S-9</u>
<u>Capitalization</u>	<u>S-10</u>
<u>Description of Notes</u>	<u>S-11</u>
<u>Description of Other Indebtedness</u>	<u>S-17</u>
<u>Material Federal Income Tax Considerations</u>	<u>S-18</u>
<u>Underwriting</u>	<u>S-23</u>
<u>Legal Matters</u>	<u>S-26</u>
<u>Experts</u>	<u>S-26</u>
<u>Where You Can Find More Information</u>	<u>S-26</u>
<u>Warning Concerning Forward Looking Statements</u>	<u>S-28</u>

PROSPECTUS

<u>About This Prospectus</u>	<u>1</u>
<u>Prospectus Summary</u>	<u>1</u>
<u>Risk Factors</u>	<u>2</u>
<u>Forward Looking Statements</u>	<u>2</u>
<u>Ratio of Earnings to Fixed Charges and Ratio of Earnings to Combined Fixed Charges and Preferred Share Dividends</u>	<u>6</u>
<u>Use of Proceeds</u>	<u>6</u>
<u>Dilution</u>	<u>6</u>
<u>Description of the Common Shares and Preferred Shares We May Offer</u>	<u>7</u>
<u>Description of the Debt Securities We May Offer</u>	<u>18</u>
<u>Description of the Warrants We May Offer</u>	<u>23</u>
<u>Plan of Distribution</u>	<u>24</u>
<u>Validity of Securities</u>	<u>26</u>
<u>Experts</u>	<u>26</u>
<u>Where You Can Find More Information</u>	<u>26</u>
<u>Incorporation of Certain Information by Reference</u>	<u>27</u>

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

References in this prospectus to "we," "us," "our," the "Company" or "TravelCenters of America" mean TravelCenters of America LLC and its consolidated subsidiaries, unless otherwise expressly stated or the context indicates otherwise.

Unless otherwise stated, we have assumed throughout this prospectus supplement that the underwriters' overallotment option is not exercised.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and risks related to an investment in the Notes. The second part, the accompanying prospectus, gives more general information about us and the securities we may offer from time to time referenced in that prospectus. If the information contained or incorporated by reference in this prospectus supplement varies from that in the accompanying prospectus, you should rely only on the information contained or incorporated by reference in this prospectus supplement.

Any statements made in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document which is incorporated or deemed to be incorporated into this prospectus supplement modifies or supersedes the prior statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement. The information relating to us contained in this prospectus supplement and the accompanying prospectus should be read together with the information in the documents incorporated by reference.

You should assume that the information appearing in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of the respective dates of those documents or such other dates as may be specified therein. Our business, financial condition, results of operations, liquidity and prospects may have changed since any of those respective dates. You should read this entire prospectus supplement, as well as the accompanying prospectus and the documents incorporated by reference that are described under "Where You Can Find More Information" in this prospectus supplement and the accompanying prospectus, before making your investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus prepared by or on behalf of us. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

The information below is only a summary of more detailed information included elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference. This summary does not contain all of the information that is important to you or that you should consider before investing in the Notes. As a result, you should read this entire prospectus supplement and the accompanying prospectus, as well as the information incorporated herein and therein by reference, carefully. See "Where You Can Find More Information."

The Company

We are a leading operator and franchisor of travel centers primarily along the U.S. interstate highway system. Our customers include trucking fleets, independent truck drivers and motorists. As of December 31, 2012, our business included 243 travel centers in 41 U.S. states and in Canada, operated under the "Travel Centers of America," "TA" and "Petro" brand names. Of these travel centers, we operated 208 and franchisees operated 35, including six that they sublease from us. We own 25 of these travel centers in fee, lease or manage 189 from or for others, including 185 that we lease from Hospitality Properties Trust, or HPT, which is our former parent company, and 29 are owned by franchisees. As of December 31, 2012, we had agreed to acquire an additional four travel center properties, including one currently owned and operated by a franchisee. Our typical travel center includes:

about 24 acres of land with parking for 189 tractor trailers and 100 cars;

a full service restaurant operated under one of our proprietary brands and one or more quick service restaurants operated under nationally franchised brand names;

a large truck repair and service facility and parts store;

multiple diesel and gasoline fueling points; and

a large convenience store, game room, laundry and other amenities.

Our Competitive Strengths

We believe we possess a number of competitive strengths that enable us to be a leader in our industry and may enable us to enhance this leadership position in the future. We believe these competitive strengths include our broad geographic footprint, our large average travel center size, the wide array of customer services and amenities we offer, our truck repair service business, which offers a wide variety of repair and maintenance services at substantially all of our travel centers, and our large variety of restaurant choices.

Our Approach to Managing Growth and Capital

We are making this offering of the Notes principally to fund our expansion activities and for general business purposes. See "Use of Proceeds." We believe that the U.S. economy is in a period of slow and uneven recovery and expansion. We also believe that many smaller travel center owners are finding it difficult to access capital for acquisition, refinancing and improvements and further that these conditions have afforded, and may continue to afford, us with opportunities to acquire and renovate existing travel centers for less than their replacement cost. We have acquired or agreed to acquire 22 travel center properties for an aggregate purchase price of \$99.9 million during 2011 and 2012, and we have renovated or expect to complete during 2013 renovations of these travel centers for an additional approximately \$88.4 million in the aggregate. The average investment in these acquired travel centers after renovations is approximately \$8.6 million per travel center, which we believe is less than the cost

Table of Contents

to construct a full service travel center such as those we operate. We also invested \$4.2 million during 2012 to acquire the operations at four travel centers we had previously subleased to franchisees.

We have funded our recent acquisitions and internal capital investments through a combination of cash from operations, the issuance of common equity for net proceeds of \$53.1 million in 2011 and the sale to HPT of improvements to the properties we lease from HPT for proceeds of \$69.1 million and \$48.3 million in 2011 and for the nine months ended September 30, 2012, respectively. At September 30, 2012, pursuant to the borrowing base calculation under our credit facility, \$186.8 million was available for borrowing and letters of credit; no borrowings were outstanding but \$58.2 million was used for the issuance of letters of credit. As of September 30, 2012, we owned 24 travel centers in fee with an undepreciated book value of \$192.0 million that are unencumbered by mortgage debt.

In addition to our acquisition activities, we plan to seek to grow our business through expanding our product offerings. For example, we currently are negotiating a possible agreement with Shell Oil Products US, or Shell, for the construction by Shell of a network of natural gas refueling lanes at certain of our travel centers located along the U.S. interstate highway system. We do not have a binding agreement with Shell for the construction of natural gas fueling lanes at our travel centers. Material terms continue to be negotiated and have not yet been agreed to between us and Shell. We and Shell may not achieve agreement on all terms and a binding definitive agreement may never be entered.

Risk Factors

An investment in the Notes is subject to a high degree of risk and significant uncertainty. For a discussion of these risks, please see "Risk Factors" beginning on page S-5 of this prospectus supplement and in our Annual Report on Form 10-K for the year ended December 31, 2011 and "Warning Concerning Forward Looking Statements" beginning on Page S-28 of this prospectus supplement, in our Annual Report on Form 10-K for the year ended December 31, 2011 and in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2012. Our Annual Report on Form 10-K for the year ended December 31, 2011 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2012 are incorporated by reference into this prospectus supplement and the accompanying prospectus. See "Where You Can Find More Information."

Corporate Information

We are a Delaware limited liability company. Our principal place of business is 24601 Center Ridge Road, Suite 200, Westlake, OH 44145-5639, and our telephone number is (440) 808-9100.

Table of Contents**The Offering**

The following summary information about this offering and the terms and provisions of the Notes is not intended to be complete. It does not contain all of the information that may be important to you. For more information, please refer to the "Description of Notes" in this prospectus supplement, "Description of the Debt Securities We May Offer" in the accompanying prospectus and the indenture under which the Notes will be issued, the form of which is filed with the SEC as an exhibit to the registration statement of which this prospectus supplement and the accompanying prospectus form a part. See "Where You Can Find More Information."

Issuer	TravelCenters of America LLC
Securities Offered	\$ aggregate principal amount of % Senior Notes due 2028 (\$ aggregate principal amount if the underwriters' overallotment option is exercised in full).
Overallotment Option	We have granted the underwriters an option to purchase up to an additional \$ aggregate principal amount of Notes at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus supplement solely to cover overallotments.
Maturity Date	, 2028, unless, otherwise previously redeemed.
Interest Rate	% per year, payable quarterly in arrears.
Interest Payment Dates	January 15, April 15, July 15 and October 15 of each year, beginning on April 15, 2013.
Ranking	The Notes will constitute senior unsecured obligations of TravelCenters of America LLC. They will not be secured by any of our property or assets and, as a result, you will be one of our unsecured creditors. The Notes will not be obligations of our subsidiaries. The Notes will be effectively subordinated to all of our existing and future secured indebtedness (including all borrowings under our credit facility) to the extent of the value of the assets securing such indebtedness and to all existing and future debt, other liabilities (including deferred rent obligations) and any preferred equity of our subsidiaries.
Optional Redemption	We may, at our option, at any time and from time to time on or after , 2016, redeem some or all of the Notes by paying 100% of the principal amount of the Notes to be redeemed plus accrued but unpaid interest, if any, to, but not including, the redemption date, as described under "Description of Notes Optional Redemption."
No Financial Covenants	The indenture relating to the Notes does not contain financial covenants. See "Risk Factors The indenture does not contain financial covenants and does not limit the amount of indebtedness that we may incur" and "Description of Notes Certain Covenants."

Table of Contents

Listing and Trading	We intend to apply to list the Notes on the NYSE MKT under the symbol " ." If approved, we expect trading in the Notes to begin within 30 days after the original issue date of the Notes.
Use of Proceeds	We estimate that the net proceeds from this offering will be \$ million after deducting the underwriting discount and other estimated offering expenses (approximately \$ million if the underwriters' overallotment option is exercised in full). We currently intend to use the net proceeds of this offering for general business purposes, including acquisitions of additional travel centers, funding capital improvements to our existing travel centers, and other expansion activities.

Table of Contents

RISK FACTORS

Investing in the Notes involves a high degree of risk and uncertainty that may result in a loss of all or part of your investment. You should carefully review the risk factors set forth below and those contained under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2011, which risk factors are incorporated by reference in this prospectus supplement. You should also carefully review the information contained under the heading "Warning Concerning Forward Looking Statements" in this prospectus supplement, in our Annual Report on Form 10-K for the year ended December 31, 2011, and in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, and under the heading "Forward Looking Statements" in the accompanying prospectus. If any such risks occur, our business, financial condition, results of operations, liquidity or prospects could be materially harmed and you could lose all or part of your investment.

We will have a substantial amount of indebtedness and deferred rent obligations, which could adversely affect our financial condition and ability to meet our obligations under the Notes.

As of September 30, 2012, we had total consolidated indebtedness of \$58.2 million, consisting solely of letters of credit outstanding under our credit facility, deferred rent obligations of \$150 million and no preferred equity outstanding. These obligations are substantial and could limit our ability to make payments of interest and principal on the Notes, and to obtain financing for working capital, capital expenditures, acquisitions, refinancing, lease liabilities or other purposes. They may also increase our vulnerability to adverse economic, market and industry conditions, limit our flexibility in planning for, or reacting to, changes in our business operations or to our industry overall, and place us at a disadvantage in relation to competitors that have lower debt levels. Any or all of the above events and factors could have an adverse effect on our results of operations, financial condition and ability to meet our obligations under the Notes.

We depend upon our subsidiaries for cash flow to service our debt, and the Notes will be structurally subordinated to the payment of the indebtedness, lease and other liabilities and any preferred equity of our subsidiaries.

We are the sole obligor on the Notes. We derive all of our revenue and cash flow from our subsidiaries and our ability to service our debt, including the Notes, is substantially dependent upon the earnings of our subsidiaries and their ability to make cash available to us. In addition, most of our contractual and other obligations are obligations of our subsidiaries and thus structurally senior to our obligations on the Notes. None of our subsidiaries will guarantee the Notes. Our subsidiaries are separate and distinct legal entities and have no obligation, contingent or otherwise, to pay any amounts due on the Notes, or to make any funds available therefore, whether by dividend, distribution, loan or other payments, and the rights of holders of Notes to benefits from any of the assets of our subsidiaries will be structurally subordinated to the claims of our subsidiaries' creditors and any preferred equity holders. As a result, the Notes are structurally subordinated to the prior payment and satisfaction of all of the existing and future debts, liabilities and obligations, including payment obligations under the HPT lease agreements, trade payables and any preferred equity, of our subsidiaries. Any future subsidiary debt or obligation, whether or not secured, or any preferred equity will have priority over the Notes. As of September 30, 2012, our subsidiaries had total indebtedness of \$58.2 million, consisting solely of letters of credit outstanding under our credit facility under which our subsidiaries are either co-borrowers or guarantors, and deferred rent obligations of \$150 million, which are structurally senior to the Notes. Our deferred rent is due in two installments, \$107 million due on December 31, 2022 and \$43 million due on June 30, 2024.

Table of Contents

The Notes are unsecured and effectively subordinated to all of our existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness.

Upon any distribution to our creditors in a bankruptcy, liquidation, reorganization or similar proceeding relating to us or our property, the holders of our secured debt, including the lenders under our credit facility, will be entitled to exercise the remedies available to a secured lender under applicable law and pursuant to the instruments governing such debt and to be paid in full from the assets securing that secured debt before any payment may be made with respect to the Notes. In that event, because the Notes will not be secured by any of our assets, it is possible that there will be no assets from which claims of holders of the Notes can be satisfied or, if any assets remain, that the remaining assets will be insufficient to satisfy those claims in full. If the value of such remaining assets is less than the aggregate outstanding principal amount of the Notes and accrued interest and all future debt ranking *pari passu* with the Notes, we will be unable to fully satisfy our obligations under the Notes. In addition, if we fail to meet our payment or other obligations under our secured debt, the holders of that secured debt would be entitled to foreclose on our assets securing that secured debt and liquidate those assets. Accordingly, we may not have sufficient funds to pay amounts due on the Notes. As a result, you may lose a portion of or the entire value of your investment in the Notes.

Our credit facility is secured by substantially all of the personal property of the borrowers and the guarantors, including a first-priority security interest in 100% of the equity interests of the borrowers and each of their domestic majority owned subsidiaries, 65% of the equity interests of each of the borrowers' foreign majority owned subsidiaries, and all intercompany debt. The amount available to us under our credit facility is determined by reference to a borrowing base calculated based on eligible collateral. At September 30, 2012, this borrowing base calculation provided a total of \$186.8 million available for loans and letters of credit under the credit facility. At September 30, 2012, there were no loans outstanding under the credit facility but we had outstanding \$58.2 million of letters of credit issued under that facility securing certain purchases, insurance, fuel taxes and other trade obligations. Further, the terms of the Notes permit us to incur additional secured indebtedness. Your Notes will be effectively subordinated to any such additional secured indebtedness. See "Description of Other Indebtedness."

Our credit facility imposes restrictive covenants on us, and a default under the agreements relating to our credit facility could have a material adverse effect on our business and financial condition and ability to make payments on the Notes.

Our credit facility requires us and our subsidiaries, among other obligations, to maintain a specified financial ratio under certain circumstances and to satisfy certain financial tests. These tests include maintenance of certain financial ratios any time that excess availability under the credit facility falls below 15% of the maximum credit limit of \$200 million, until such time that the excess availability has been greater than 15% of the maximum credit limit for thirty consecutive days. In addition, our credit facility restricts, among other things, our ability to incur debt and liens, make certain investments and pay dividends and other distributions including, under certain circumstances, payments on the Notes. Under certain circumstances, we are required to seek permission from the lenders under our credit facility to engage in specified corporate actions. The lenders' interests may be different from our interests and those of the holders of the Notes, and no assurance can be given that we will be able to obtain the lenders' permission if it is needed.

Various risks, uncertainties and events beyond our control could affect our ability to comply with these covenants. Failure to comply with these covenants (or similar covenants contained in future financing agreements) could result in a default under our credit facility and other agreements containing cross-default provisions, which, if not cured or waived, could have a material adverse effect on our business, financial condition and results of operations. A default would permit lenders or holders, excluding holders of the Notes, to accelerate the maturity of the debt under these agreements

Table of Contents

and to foreclose upon any collateral securing the debt and to terminate any commitments to lend. Under these circumstances, we might not have sufficient funds or other resources to satisfy all of our obligations, including our obligations under the Notes. In addition, the limitations imposed by financing agreements on our ability to incur additional debt and to take other actions might significantly impair our ability to obtain other financing. If our indebtedness were to be accelerated, our assets may not be sufficient to repay such indebtedness in full. In such circumstances, we could be forced into bankruptcy or liquidation and, as a result, you could lose your investment in the Notes. See "Description of Other Indebtedness."

The indenture does not contain financial covenants and does not limit the amount of indebtedness that we may incur.

The indenture under which the Notes will be issued contains no financial covenants or other provisions that would afford the holders of the Notes any substantial protection in the event we participate in a material transaction. In addition, the indenture does not limit the amount of indebtedness we may incur or our ability to pay dividends, make distributions or repurchase shares of our common stock. As a result, you are not protected under the indenture in the event of a highly leveraged transaction, reorganization, change of control, restructuring, sale of significant amount of assets, merger or similar transaction that may adversely affect you.

We may issue additional Notes.

Under the terms of the indenture that governs the Notes, we may from time to time without notice to, or the consent of, the holders of the Notes, create and issue additional notes which will be equal in rank to the Notes.

An active trading market for the Notes may not develop, be maintained or be liquid.

The Notes are new securities for which there currently is no established trading market. We intend to apply for listing of the Notes on the NYSE MKT. However, such application may not be approved. We can give no assurances concerning the liquidity of any market that may develop for the Notes offered hereby, the ability of any investor to sell the Notes, or the price at which investors would be able to sell them. If a market for the Notes does not develop, investors may be unable to resell the Notes for an extended period of time, if at all. If a market for the Notes does develop, it may not continue or it may not be sufficiently liquid to allow holders to resell any of the Notes. Consequently, investors may not be able to liquidate their investment readily, and lenders may not readily accept the Notes as collateral for loans.

The Notes may trade at a discount from their initial issue price or principal amount, depending upon many factors, including prevailing interest rates, the market for similar securities and other factors, including general economic conditions and our financial condition, performance and prospects. Any decline in trading prices, regardless of cause, may adversely affect the liquidity and trading markets for the Notes.

The Notes will not be rated and we do not intend to seek a rating for the Notes.

We do not intend to have the Notes rated by any rating agency. Unrated securities usually trade at a discount to similar rated securities. As a result, there is a risk that the Notes may trade at a price that is lower than they might otherwise trade if rated by a rating agency. It is possible, however, that one or more rating agencies might independently determine to assign a rating to the Notes. In addition, we may elect to issue other securities for which we may seek to obtain a rating. If any ratings are assigned to the Notes in the future or if we issue other securities with a rating, such ratings, if they are

Table of Contents

lower than market expectations or are subsequently lowered or withdrawn, could adversely affect the market for or the market value of the Notes.

Our management has broad discretion over the use of proceeds from this offering.

Our management has broad discretion to use the net proceeds from this offering. Because the proceeds are not required to be allocated to any specific investment or transaction, you cannot evaluate the manner in which the proceeds will be used prior to making your investment decision. The proceeds of this offering may be used in a manner which does not generate a favorable return for us. See "Use of Proceeds."

Federal and state statutes could allow courts, under specific circumstances, to avoid the Notes and require noteholders to return payments received from us to a fund for the benefit of our creditors, or subordinate the Notes to other claims of our creditors.

Under Federal bankruptcy law and comparable provisions of state fraudulent transfer laws, the Notes could be avoided, or claims in respect of the Notes could be subordinated to all of our other debts if, among other things, we:

issued the Notes with the intent of hindering, delaying or defrauding any existing or future creditor;

received less than reasonably equivalent value or fair consideration for the issuance of the Notes;

were insolvent or rendered insolvent by reason of such issuance;

were engaged in a business or transaction for which our remaining assets constituted unreasonably small capital;

intended to incur, or believed that we would incur, debts beyond our ability to pay as they mature; or

were a defendant in an action for money damages against such person if, after final judgment, the judgment was unsatisfied.

As a general matter, value is given for a transfer or an obligation if, in exchange for the transfer or obligation, property is transferred or an antecedent debt is secured or satisfied. A court would likely find that we did not receive reasonably equivalent value or fair consideration for the Notes if we did not substantially benefit directly or indirectly from the issuance of the Notes.

We cannot be certain as to the standards a court would use to determine whether we were solvent at the relevant time or, regardless of the standard that a court uses, whether the Notes would be subordinated to any of our other debt. In general, however, a court would deem an entity insolvent if:

the sum of its debts, including contingent and unliquidated liabilities, exceeds its assets, at a fair valuation; or

the present fair saleable value of its assets is less than the amount that would be required to pay its probable liability on its existing debts, including contingent liabilities, as they become absolute and matured.

If a court were to avoid the issuance of the Notes as the result of a fraudulent transfer or conveyance, the court could direct that holders of the Notes return any amounts paid under the Note to us or to a fund for the benefit of our creditors, or subordinate the Notes to our other claims.

Table of Contents

An increase in market interest rates could result in a decrease in the value of the Notes.

In general, as market interest rates rise, notes bearing interest at a fixed rate decline in value. Consequently, if you purchase the Notes, and the market interest rates subsequently increase, the market value of your Notes may decline. We cannot predict the future level of market interest rates.

Redemption may adversely affect your return on the Notes.

We have the right to redeem some or all of the Notes prior to maturity, as described under "Description of Notes Optional Redemption." We may redeem the Notes at times when prevailing interest rates may be relatively low compared to prevailing rates at the time of issuance of the Notes. Accordingly, you may not be able to reinvest the redemption proceeds in a comparable security at an effective interest rate as high as that of the Notes.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be \$ million (or \$ million if the underwriters' overallotment option is exercised in full) after deducting the underwriting discount and other estimated offering expenses. We currently intend to use the net proceeds of this offering for general business purposes, including acquisitions of additional travel centers, funding capital improvements to our existing travel centers, and other expansion activities. We expect to invest the net proceeds of this offering in short term, interest bearing securities pending other uses.

RATIO OF EARNINGS TO FIXED CHARGES

Our ratio of earnings to fixed charges for each of the periods indicated is as follows:

	Nine Months Ended September 30, 2012	Company Years ended December 31,				Eleven Months Ended December 31, 2007 ⁽²⁾⁽³⁾	Predecessor One Month Ended January 31, 2007 ⁽²⁾
		2011	2010 ⁽²⁾	2009 ⁽²⁾	2008 ⁽²⁾		
Ratio of earnings to fixed charges ⁽¹⁾	1.67	1.32					

- (1) For purposes of calculating the ratio of earnings to fixed charges, fixed charges are calculated by adding (a) interest expensed and capitalized, (b) amortized premiums, discounts and capitalized expenses related to indebtedness and (c) an estimate of the interest within rental expense. Earnings are calculated by adding (i) pretax income or loss from continuing operations, (ii) distributed income from equity investees, (iii) fixed charges, and (iv) amortization of capitalized interest, and subtracting (x) interest capitalized and (y) income from equity investments.
- (2) For these periods, earnings were inadequate to cover fixed charges. The amount of the coverage deficiencies were \$66,560,000, \$94,363,000, \$43,261,000, \$105,609,000 and \$62,511,000 for the years ended December 31, 2010, 2009 and 2008, the eleven months ended December 31, 2007 and the one month ended January 31, 2007, respectively.
- (3) Includes the operating results of Petro Stopping Centers, L.P., which has since been merged with our subsidiary, TA Operating LLC, since we completed our acquisition of Petro Stopping Centers, L.P. on May 30, 2007.

Table of Contents**CAPITALIZATION**

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2012, on a historical basis and as adjusted to give effect to the sale of the Notes offered hereby. You should read the following table in conjunction with our financial statements, the notes to our financial statements and the other financial data included in or incorporated by reference into this prospectus supplement and the accompanying prospectus.

	As of September 30, 2012	
	Actual	As adjusted ⁽¹⁾
	(dollars in thousands)	
Cash and cash equivalents ⁽²⁾	\$ 101,610	\$
Revolving credit facility ⁽³⁾	\$	\$
% Senior Notes due 2028		
Deferred rent obligation ⁽⁴⁾	150,000	150,000
Shareholders' equity:		
Common shares, no par value, 31,683,666 shares authorized; 28,809,010 shares issued and outstanding	604,198	604,198
Accumulated other comprehensive income	1,383	1,383
Accumulated deficit	(250,512)	(250,512)
Total shareholders' equity	\$ 355,069	\$ 355,069
Total capitalization	\$ 505,069	\$

(1) Excludes up to an additional \$ million aggregate principal amount of Notes issuable upon the exercise of the underwriters' overallotment option.

(2) We expect that our cash and cash equivalents balance at December 31, 2012, will be significantly less than it was at September 30, 2012, due to seasonality in our business and our capital expenditures and business acquisitions during the fourth quarter.

(3) At September 30, 2012, we had \$58.2 million of letters of credit outstanding under our credit facility.

(4) This obligation is interest free, \$107.1 million is due on December 31, 2022 and \$42.9 million is due on June 30, 2024.

Table of Contents

DESCRIPTION OF NOTES

The following description of the particular terms of the Notes supplements and, to the extent inconsistent with, replaces the description of the general terms and provisions of debt securities set forth under "Description of the Debt Securities We May Offer" in the accompanying prospectus. References in this section to "we," "us" and "our" mean TravelCenters of America LLC and not its subsidiaries.

General

We will issue the Notes under an indenture to be dated as of January , 2013 and a Supplemental Indenture thereto dated as of the same date, together, the Indenture, between us and U.S. Bank National Association, as trustee. The Indenture is subject to, and governed by, the Trust Indenture Act of 1939, as amended. This prospectus supplement briefly summarizes some of the provisions of the Indenture. These summaries are not complete. If you would like more information on these provisions, review the copy of the form of Indenture that we have filed with the SEC. See "Where You Can Find More Information" in this prospectus supplement and the accompanying prospectus. You may also review the Indenture at the Trustee's corporate trust office at One Federal Street, 3rd Floor, Boston, Massachusetts 02110.

The Notes will be a separate series under the Indenture, initially in an aggregate principal amount of \$. This series may be reopened and we may, from time to time, issue additional Notes of the same series. The Notes will mature (unless previously redeemed) on , 2028. The Notes will be issued only in fully registered form without coupons, in denominations and integral multiples of \$25.00. The Notes will be evidenced by a global note in book-entry form, except under the limited circumstances described below under " Form of Notes."

The Notes will constitute our senior unsecured obligations and will rank *pari passu* in right of payment with all of our existing and future unsecured and unsubordinated indebtedness and will be effectively subordinated to all existing and future secured indebtedness (including all borrowings under our credit facility) to the extent of the value of the assets securing such indebtedness and to all existing and future debt, other liabilities (including deferred rent obligations) and any preferred equity of our subsidiaries. The Notes will not be guaranteed by our subsidiaries. Accordingly, our secured debt and the debt, other liabilities and any preferred equity of our subsidiaries will have to be satisfied in full before you will be able to realize any value from our encumbered or indirectly held assets. As of September 30, 2012, we had no secured indebtedness outstanding (although we have a secured credit facility under which, as of such date, we had availability to borrow up to approximately \$186.8 million and against which we had issued \$58.2 million of letters of credit), our total consolidated indebtedness consisted solely of those letters of credit, and our subsidiaries had deferred rent obligations of \$150 million and no preferred equity outstanding. In addition, substantially all of our majority-owned U.S. subsidiaries have guaranteed borrowings under our credit facility. Our outstanding other indebtedness is described below under "Description of Other Indebtedness." We and our subsidiaries may also incur additional indebtedness, including secured indebtedness.

The Indenture does not contain any provisions that would limit our ability to incur indebtedness or that would afford you protection in the event of (1) a highly leveraged or similar transaction involving us or any of our affiliates, (2) a change in control or (3) a reorganization, restructuring, merger or similar transaction involving us that may adversely affect you. In addition, we may, in the future, enter into transactions such as the sale of all or substantially all of our assets or a merger or consolidation that would increase the amount of our indebtedness or substantially reduce or eliminate our assets, which might have an adverse effect on our ability to service our indebtedness, including the Notes. See "Risk Factors The indenture does not contain financial covenants and does not limit the amount of indebtedness that we may incur."

Table of Contents

Interest and Maturity

The Notes will bear interest at the rate per annum set forth on the cover page of this prospectus supplement from, and including, January , 2013, or from, and including, the immediately preceding interest payment date to which interest has been paid. Interest is payable quarterly in arrears on January 15, April 15, July 15 and October 15 of each year, beginning on April 15, 2013, to the persons in whose names the Notes are registered at the close of business on January 1, April 1, July 1 or October 1, as the case may be, immediately before the relevant interest payment date; provided that a special record date or other arrangements will apply in respect of interest not punctually paid or provided for. Accrued and unpaid interest is also payable on the date of maturity or earlier redemption of the Notes. Interest on the Notes will be computed on the basis of a 360-day year of twelve 30-day months. The Notes will mature (unless previously redeemed) on , 2028.

Optional Redemption

We may, at our option, at any time on or after , 2016, redeem some or all of the Notes by paying 100% of the principal amount of the Notes to be redeemed plus accrued but unpaid interest, if any, to, but not including, the redemption date.

We are required to give notice of such a redemption not less than 30 days nor more than 60 days prior to the redemption date to each holder's address appearing in the securities register maintained by the Trustee. In the event we elect to redeem less than all of the Notes, the particular Notes to be redeemed will be selected by the Trustee by such method as the Trustee shall deem fair and appropriate.

Certain Covenants

Existence. We will do or cause to be done all things necessary to preserve and keep in full force and effect our existence, rights and franchises; provided, however that we will not be required to preserve any such right or franchise if our Board of Directors determines that the preservation thereof is no longer desirable in the conduct of our business and that the loss thereof is not disadvantageous in any material respect to our ability to make payments under the Indenture. In addition, the Indenture does not restrict our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets, provided that any successor or acquirer of such assets must assume all of our obligations under the Indenture and the Notes.

Maintenance of Properties. We will cause all properties used or useful in the conduct of our or our subsidiaries' business to be maintained and kept in good condition, repair and working order; provided, however, that we shall not be prevented from discontinuing the operation or maintenance of any of such properties if such discontinuance is, in our judgment, desirable in the conduct of our or our subsidiaries' business and not disadvantageous in any material respect to our ability to make payments under the Indenture.

Provision of Financial Information. If, at any time, we are no longer subject to the periodic reporting requirements of the Exchange Act for any reason, we agree that we will continue to prepare the financial statements and a "Management's Discussion and Analysis of Financial Condition and Results of Operations" substantially similar to that which would have been required to be included in an annual report on Form 10-K and a quarterly report on Form 10-Q if we had been subject to such Exchange Act reporting requirements (with all such financial statements prepared in accordance with Regulation S-X (or any successor regulation) promulgated by the SEC and all such annual financial statements including a report thereon from our certified independent accountants) and post copies thereof to our website for public availability within 15 days after the time periods that would have been applicable to filing such reports with the SEC in the rules and regulations applicable to such reports if we had been required to file those reports with the SEC; provided, however, that if we are no longer

Table of Contents

subject to the periodic reporting requirements of the Exchange Act, we will not be required to comply with Section 302 or Section 404 of the Sarbanes-Oxley Act of 2002, or related Items 307 and 308 of Regulation S-K (or any successor regulation) promulgated by the SEC, or Item 10(e) of Regulation S-K with respect to any non-GAAP financial measures contained therein (or any successor regulation) or any similar requirement under any other regulation.

No Financial Covenants. The Indenture does not contain any limit on the amount of indebtedness that may be authenticated and delivered under it. Similarly, the Indenture does not limit the amount of secured indebtedness that we may incur or require us to maintain a particular amount of unencumbered assets or any specified coverage ratios. See "Risk Factors The indenture does not contain financial covenants and does not limit the amount of indebtedness that we may incur."

Merger, Consolidation or Sale

Under the Indenture, we are generally permitted to consolidate or merge with or into another company. We are also permitted to convey, transfer or lease substantially all of our properties and assets as an entirety to another company. However, we may not take any of these actions unless the following conditions are met:

if we consolidate or merge out of existence or convey, transfer or lease substantially all of our properties and assets as an entirety, the surviving company must be a corporation, partnership, limited liability company or trust, organized and validly existing under the laws of the United States, any state thereof or the District of Columbia and must expressly agree to be legally responsible for the Notes and all of our obligations under the Indenture;

immediately after the consolidation or merger or such conveyance, transfer or lease, we must not be in default that is continuing under the Indenture. A default for this purpose would include any event that would be an event of default if the requirements for giving us default notice or our default having to exist for a specific period of time were disregarded; and

we must deliver the Trustee an Officers' Certificate and an opinion of counsel regarding compliance with the Indenture.

Events of Default, Notice and Waiver

The accompanying prospectus contains a description of events of default under the Indenture under the heading "Description of the Debt Securities We May Offer Events of default under the indentures."

Modification of the Indenture

The accompanying prospectus contains a description of our ability to modify the Indenture or the Notes under the heading "Description of the Debt Securities We May Offer Modification of indentures; waiver." Some types of changes require the consent of each holder of the Notes, other types require the consent of the holders of a majority of the principal amount of outstanding Notes, and other types do not require the consent of any holders of the Notes. In addition, we and the Trustee may modify and amend the Indenture and the Notes without the consent of the holders if the modification or amendment only conforms the terms of the Indenture or the Notes to the description thereof contained in this prospectus supplement and the accompanying prospectus.

Sinking Fund

The Notes are not entitled to any sinking fund payments.

Table of Contents

The Registrar and Paying Agent

We have initially designated U.S. Bank National Association as the registrar and paying agent for the Notes. Payments of interest and principal will be made, and the Notes will be transferable, at the office of the paying agent, or at such other place or places as may be designated pursuant to the Indenture. For so long as the Notes are in book-entry form evidenced by a global security, payments will be made to a nominee of the depository.

Discharge, Full Defeasance and Covenant Defeasance

Discharge. We may discharge some of our obligations to holders of the Notes that have become due and payable or will become due and payable within one year, or are scheduled for redemption within one year, by irrevocably depositing with the Trustee, in trust, money in an amount sufficient to pay the Notes, including any premium and interest.

Full Defeasance. We can, under particular circumstances, effect a full defeasance of the Notes. By this we mean we can legally release ourselves from any payment or other obligations on the Notes if, among other things, we put in place the arrangements described below to repay the Notes and deliver certain certificates and opinions to the Trustee, including, among other things:

we must deposit in trust for your benefit and the benefit of all other direct holders of the Notes a combination of money or U.S. government agency notes or bonds (or, in some circumstances, depository receipts representing these notes or bonds) that will generate enough cash to satisfy all interest, principal and any other payment obligations on the Notes on their various due dates;

the current U.S. federal income tax law must be changed or an Internal Revenue Service, or IRS, ruling must be issued permitting us to make the deposit described above, without causing you to be taxed on the Notes any differently than if we did not make the deposit and instead repaid the debt securities ourselves. Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back your debt securities and gave you your share of the cash and notes or bonds deposited in trust. Under such circumstances, you could recognize gain or loss on the debt securities you were deemed to have returned to us; and

we must deliver to the Trustee a legal opinion confirming the U.S. federal income tax law change or IRS ruling described above.

If we did accomplish full defeasance, you would have to rely solely on the trust deposit for repayment on the Notes. You could not look to us for repayment in the unlikely event of any shortfall. Conversely, the trust deposit would most likely be protected from any claims of our lenders and other creditors if we ever became bankrupt or insolvent. You would also be released from any subordination provisions.

Notwithstanding the foregoing, the following rights and obligations will survive full defeasance:

your right to receive payments from the trust when payments are due;

our obligations relating to registration and transfer of Notes and lost or mutilated certificates; and

our obligations to maintain a payment office and to hold moneys for payment in trust.

Covenant Defeasance. Under current U.S. federal income tax law, we can make the same type of deposit described above and be released from some of the restrictive covenants in the Notes. This is called "covenant defeasance." In that event, you would lose the protection of such restrictive covenants but would gain the protection of having money and securities set aside in trust to repay the Notes.

Table of Contents

If we accomplish covenant defeasance, the following provisions of the indenture and the Notes would no longer apply:

the covenants set forth above under " Merger, Consolidation or Sale" and " Certain Covenants"; and

the event of default listed in the third bullet point under the heading "Description of the Debt Securities We May Offer Events of default under the indentures" in the accompanying prospectus.

If we accomplish covenant defeasance, you may still look to us for repayment of the Notes if a shortfall in the trust deposit occurred. A shortfall may occur if one of the remaining events of default occurs, such as our bankruptcy, causing the Notes to become immediately due and payable. Depending on the event causing the default, you may not be able to obtain payment of the shortfall.

Listing

We intend to apply to list the Notes on the NYSE MKT under the symbol " . " If approved, we expect trading in the Notes to begin within 30 days after the original issue date of the Notes.

Trading Characteristics

We expect the Notes to trade "flat," meaning that purchasers will not pay, and sellers will not receive, any accrued and unpaid interest on the Notes that is not included in the trading price. Any portion of the trading price of a Note that is attributable to accrued and unpaid interest will be treated as ordinary interest income for U.S. federal income tax purposes and will not be treated as part of the amount realized for purposes of determining gain or loss on the disposition of the Note.

Form of Notes

The Notes will initially be issued in the form of a single, fully registered global note without coupons that will be deposited with or on behalf of DTC and registered in the name of its nominee, Cede & Co. This means that we will not issue certificates to each owner of Notes. One global note will be issued to DTC, which will keep a computerized record of its participants (for example, your broker) whose clients have purchased the Notes. The participant will then keep a record of its clients who purchased the Notes. Beneficial interests in the global note will be shown on, and transfers of the global note will be made only through, records maintained by DTC and its participants.

Accordingly, we will issue one registered global security denominated in an amount equal to the aggregate principal amount of all of the Notes to be issued and represented by such registered global security.

Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, the registered global security may not be transferred except as a whole:

by DTC to its nominee;

by Cede & Co. to DTC or another nominee of DTC; or

by DTC or Cede & Co. to a successor of DTC or a nominee of the successor.

The following provisions will apply to the depositary arrangements for the Notes:

ownership of beneficial interests in the registered global security will be limited to persons that have accounts with DTC, those persons being referred to as "participants," or persons that may hold interests through participants;

Table of Contents

upon the issuance of the registered global security, DTC will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal amounts of the Notes represented by the registered global security beneficially owned by the participants;

the dealers and underwriters participating in the distribution of the Notes will designate the accounts to be credited; and

the transfer of any ownership interest will be effected only through, records maintained by DTC for the registered global security (with respect to interests of participants) and on the records of participants (with respect to interests of persons holding through participants).

The laws of some states may require that certain purchasers of securities take physical delivery of the securities in definitive form. These laws may limit the ability of those persons to own, transfer or pledge beneficial interests in registered global security.

So long as DTC, or its nominee, is the registered owner of the registered global security, DTC or its nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by the registered global security for all purposes under the Indenture. Except as set forth below, owners of beneficial interests in the registered global security:

will not be entitled to have the Notes represented by the registered global security registered in their names;

will not receive or be entitled to receive physical delivery of the Notes in definitive form; and

will not be considered the owners or holders of the Notes under the Indenture.

Accordingly, each person owning a beneficial interest in the registered global security must rely on the procedures of DTC and, if the person is not a participant, on the procedures of a participant through which the person owns its interest, to exercise any rights of a holder under the Indenture.

We understand that under currently existing industry practices, if we request any action of holders or if an owner of a beneficial interest in the registered global security desires to give or take any action that a holder is entitled to give or take under the Indenture, DTC would authorize the participants holding the relevant beneficial interests to give or take the action, and those participants would authorize beneficial owners owning through those participants to give or take the action or would otherwise act upon the instructions of beneficial owners holding through them.

We will make payments of principal of and interest on the Notes represented by the registered global security to DTC or its nominee, as the case may be, as the registered owner of the registered global security. Neither we nor the Trustee or any other agent of us or the Trustee will be responsible or liable for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

We expect that DTC, upon receipt of any payments of principal and interest in respect of the registered global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the registered global security as shown on the records of DTC. We also expect that standing customer instructions and customary practices will govern payments by participants to owners of beneficial interests in the registered global security held through the participants, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name." We also expect that any of these payments will be the responsibility of the participants.

If DTC is at any time unwilling or unable to continue as depository or ceases to be a clearing agency registered under the Exchange Act, we will appoint an eligible successor depository. If we fail to appoint an eligible successor depository within 90 days, we will issue the Notes in definitive form in

Table of Contents

exchange for the registered global security. In addition, we may at any time and in our sole discretion decide not to have the Notes represented by a registered global security. In such event, we will issue Notes in definitive form in exchange for the registered global security representing the Notes. The Trustee will register any Notes issued in definitive form in exchange for a registered global security in such name or names as the depository, based upon instructions from its participants, shall instruct the Trustee.

DTC has advised us that DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC holds securities that its participants, or direct participants, deposit with DTC. DTC also facilitates the post-trade settlement among direct participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between direct participants' accounts. This eliminates the need for physical movement of securities certificates. Direct participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation, or DTCC. DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly. The rules applicable to DTC and its direct participants are on file with the SEC. The information in this paragraph concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we take no responsibility for the accuracy thereof.

DESCRIPTION OF OTHER INDEBTEDNESS

Revolving Credit Facility. Our senior secured revolving credit facility, or Revolving Credit Facility, under which we and our subsidiaries TA Leasing LLC and TA Operating LLC are the borrowers, provides a revolving line of credit under which up to \$200 million may be borrowed, subject to limits based on qualified collateral. Subject to available collateral and lender participation, the maximum amount may be increased to \$300 million. The Revolving Credit Facility also provides for the issuance of letters of credit. Loans bear interest at either the London Interbank Offered Rate (LIBOR) or a calculated base rate, in each case plus an applicable margin based on facility availability, utilization and other matters. The calculated base rate means, for any day, a rate per annum equal to the Prime Rate in effect on such day. Amounts outstanding under our Revolving Credit Facility are senior to our obligations under the Notes.

In addition to paying interest, we pay a commitment fee to the lenders under the Revolving Credit Facility at a rate of 0.50% per annum (which is reduced to 0.375% when usage of the Revolving Credit Facility is greater than 50% of the maximum credit limit), which fee is payable monthly in arrears. Letters of credit are also subject to fronting fees and letter of credit fees. The fronting fee equals 0.125% per annum on the daily outstanding balance of letters of credit issued by any issuing bank during the immediately preceding month (or part thereof), payable monthly in arrears. Letter of credit fees are payable on the daily outstanding amount of letters of credit and range from 1.125% to 1.375% for commercial letters of credit and 2.25% to 2.75% for standby letters of credit, depending on the usage of the Revolving Credit Facility for the immediately preceding calendar month, and are payable monthly in arrears. At September 30, 2012, there were no loans outstanding under our Revolving Credit Facility but we had outstanding \$58.2 million of letters of credit issued under the facility, securing certain purchases, insurance, fuel taxes and other trade obligations.

Table of Contents

The loan documentation for the Revolving Credit Facility contains, among other terms, representations and warranties, covenants, events of default and indemnification customary for asset-based loan agreements for similarly situated companies, and other representations and warranties, covenants and events of default deemed by the administrative agent to be appropriate for the specific transaction.

Covenants. Our Revolving Credit Facility subjects the borrowers and their majority owned subsidiaries, among other obligations, to periodic reporting requirements with respect to equipment, inventory, accounts payable and other collateral securing the Revolving Credit Facility.

If at any time excess availability under the Revolving Credit Facility falls below 15% of the maximum credit limit, we and our subsidiaries (other than certain excluded subsidiaries) on a consolidated basis are required to maintain a fixed charge coverage ratio of not less than 1.00 to 1.00, until such time that the excess availability has been greater than 15% of the maximum credit limit for 30 consecutive days. The fixed charge coverage ratio is defined as the ratio of (i) the amount equal to (1) EBITDAR (as defined in the Revolving Credit Facility) for such period, minus (2) certain capital expenditures, as defined, minus (3) the difference (if positive) between (A) cash income taxes and (B) cash refunds of income taxes, to (ii) the fixed charges for such period, which includes cash interest expense, scheduled principal payments on debt, cash rent expense and certain dividends paid.

Guarantees. The borrowers' obligations under the Revolving Credit Facility are guaranteed by the other borrowers and by each of their existing and subsequently acquired domestic majority owned subsidiaries, subject to certain exceptions.

Security. The Revolving Credit Facility is secured by a first-priority security interest in substantially all of the personal property of the borrowers and the guarantors, including a first-priority security interest in 100% of the equity interests of the borrowers and each of their domestic majority owned subsidiaries, 65% of the equity interests of each of the borrowers' foreign majority owned subsidiaries, and all intercompany debt.

MATERIAL FEDERAL INCOME TAX CONSIDERATIONS

The following summary of federal income tax considerations is based upon the Internal Revenue Code of 1986, as amended, or the Tax Code, Treasury regulations, and rulings and decisions now in effect, all of which are subject to change, possibly with retroactive effect, or possible differing interpretations. We have not sought a ruling from the Internal Revenue Service, or the IRS, with respect to any matter described in this summary, and we cannot provide any assurance that the IRS or a court will agree with the statements made in this summary. The summary applies to you only if you hold the Notes as a capital asset, which is generally an asset held for investment rather than as inventory or as property used in a trade or business. The summary does not discuss all the particular tax considerations that might be relevant to you if you are subject to special rules under the federal income tax law, for example, if you are:

a bank, insurance company, regulated investment company, real estate investment trust or other financial institution;

a broker, dealer or trader in securities or foreign currency;

a person that has a functional currency other than the U.S. dollar;

a person who acquires the Notes in connection with employment or other performance of services;

a person subject to alternative minimum tax;

Table of Contents

a person who owns the Notes as part of a straddle, hedging transaction, conversion transaction or constructive sale transaction;

a tax-exempt entity; or

an expatriate.

In addition, the following summary does not address all possible tax considerations relating to the acquisition, ownership and disposition of the Notes, and in particular does not discuss any estate, gift, generation-skipping transfer, state, local or foreign tax considerations. For all these reasons, we encourage you to consult with your tax advisor about the federal income tax and other tax considerations of your acquisition, ownership and disposition of the Notes.

For purposes of this summary, you are a "U.S. holder" if you are a beneficial owner of the Notes and for federal income tax purposes are:

a citizen or resident of the United States, including an alien individual who is a lawful permanent resident of the United States or meets the substantial presence residency test under the federal income tax laws;

a corporation or other entity treated as a corporation for federal income tax purposes, that is created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to federal income taxation regardless of its source; or

a trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust, or an electing trust in existence on August 20, 1996 to the extent provided in Treasury regulations;

and if your status as a U.S. holder is not overridden pursuant to the provisions of an applicable tax treaty. Conversely, you are a "non-U.S. holder" if you are a beneficial owner of the Notes and are not a U.S. holder. If an entity treated as a partnership for federal income tax purposes holds the Notes, the tax treatment of each partner will depend on the status of the partner and the activities and status of the partnership. We encourage you to consult your tax advisor if you are a partner in a partnership that holds the Notes.

Tax Considerations for U.S. Holders

If you are a U.S. holder:

Payments of interest. You must generally include interest on a Note in your gross income as ordinary interest income:

when you receive it, if you use the cash method of accounting for federal income tax purposes; or

when it accrues, if you use the accrual method of accounting for federal income tax purposes.

Purchase price for a Note that is allocable to prior accrued interest generally may be treated as offsetting a portion of the interest income from the next scheduled interest payment on the Note. Any interest income so offset is not taxable.

Market discount. If you acquire a Note and your adjusted tax basis in it upon acquisition is less than its principal amount, you will be treated as having acquired the Note at a "market discount" unless the amount of this market discount is less than the *de minimis* amount (generally 0.25% of the principal amount of the Note multiplied by the number of remaining whole years to maturity of the

Table of Contents

Note). Under the market discount rules, you will be required to treat any gain on the sale, exchange, redemption, retirement, or other taxable disposition of a Note, or any appreciation in a Note in the case of certain nontaxable dispositions, such as a gift, as ordinary income to the extent of the market discount which has not previously been included in your income and which is treated as having accrued on the Note at the time of the disposition. In addition, you may be required to defer, until the maturity of the Note or earlier taxable disposition, the deduction of all or a portion of the interest expense on any indebtedness incurred or continued to purchase or carry the Note. Any market discount will be considered to accrue ratably during the period from the date of your acquisition to the maturity date of the Note, unless you elect to accrue the market discount on a constant yield method. In addition, you may elect to include market discount in income currently as it accrues, on either a ratable or constant yield method, in which case the rule described above regarding deferral of interest deductions will not apply. This election to include market discount in income currently, once made, applies to all market discount obligations acquired by you during or after the first taxable year to which the election applies and may not be revoked without the consent of the IRS. We encourage you to consult with your tax advisor regarding these elections.

Amortizable bond premium. If you acquire a Note and your adjusted tax basis in it upon acquisition is greater than its principal amount, you will be treated as having acquired the Note with "bond premium." You generally may elect to amortize this bond premium over the remaining term of the Note on a constant yield method, and the amount amortized in any year will be treated as a reduction of your interest income from the Note for that year. If the amount of your bond premium amortization would be lower if calculated based on an earlier optional redemption date and the redemption price on that date than the amount of amortization calculated through that date based on the Note's maturity date and its stated principal amount, then you must calculate the amount and timing of your bond premium amortization deductions assuming that the Note will be redeemed on the optional redemption date at the optional redemption price. You may generally recalculate your bond premium amortization amount and schedule of deductions to the extent your Note is not actually redeemed at that earlier optional redemption date. If you do not make an election to amortize bond premium, your bond premium on a Note will decrease the gain or increase the loss that you otherwise recognize on a disposition of that Note. Any election to amortize bond premium applies to all taxable debt obligations that you hold at the beginning of the first taxable year to which the election applies and that you thereafter acquire. You may not revoke an election to amortize bond premium without the consent of the IRS. We encourage you to consult with your tax advisor regarding this election.

Disposition of a Note. Upon the sale, exchange, redemption, retirement or other disposition of a Note, you generally will recognize taxable gain or loss in an amount equal to the difference, if any, between (1) the amount you receive in cash or in property, valued at its fair market value, upon this sale, exchange, redemption, retirement or other disposition, other than amounts representing accrued and unpaid interest which will be taxable as interest income, and (2) your adjusted tax basis in the Note. Your adjusted tax basis in the Note will, in general, equal your acquisition cost for the Note, exclusive of any amount paid allocable to prior accrued interest, as increased by any market discount you have included in income in respect of the Note, and as decreased by any amortized bond premium on the Note. Except to the extent of any accrued market discount not previously included in income, as discussed above, your gain or loss will be capital gain or loss, and will be long-term capital gain or loss if you have held the Note for more than one year at the time of disposition. For noncorporate U.S. holders, preferential rates of tax may apply to long-term capital gains. The deductibility of capital losses is subject to limitation.

Medicare contribution tax. For taxable years beginning after December 31, 2012, U.S. holders who are individuals, estates or certain trusts are generally required to pay a new 3.8% Medicare tax on their net investment income (including interest on the Notes and gains from the disposition of the Notes), or in the case of estates and trusts on their net investment income that is not distributed, in the case of

Table of Contents

each individual, estate or trust holder, to the extent that the holder's total adjusted income exceeds an applicable threshold.

Tax Considerations for Non-U.S. Holders

If you are a non-U.S. holder:

Generally. You will not be subject to federal income taxes on payments of principal or premium, if any, or interest on a Note, or upon the sale, exchange, redemption, retirement or other disposition of a Note, if:

you do not own directly or indirectly 10% or more of the total voting power of all classes of our voting shares;

your income and gain in respect of the Note is not effectively connected with the conduct of a United States trade or business;

you are not a controlled foreign corporation that is related to or under common control with us;

we or the applicable paying agent, or the Withholding Agent, have timely received from you a properly executed, applicable IRS Form W-8 or substantially similar form in the year in which a payment of interest, principal or premium occurs, or in a previous calendar year to the extent provided for in the instructions to the applicable IRS Form W-8; and

in the case of gain upon the sale, exchange, redemption, retirement or other disposition of a Note recognized by an individual non-U.S. holder, you were present in the United States for less than 183 days during the taxable year in which the gain was recognized.

The IRS Form W-8 or a substantially similar form must be signed by you under penalties of perjury certifying that you are a non-U.S. holder and providing your name and address, and you must inform the Withholding Agent of any change in the information on the statement within 30 days of the change. If you hold a Note through a securities clearing organization or other qualified financial institution, the organization or institution may provide a signed statement to the Withholding Agent. However, in that case, the signed statement must generally be accompanied by a statement containing the relevant information from the executed IRS Form W-8 or substantially similar form that you provided to the organization or institution. If you are a partner in a partnership holding the Notes, both you and the partnership must comply with applicable certification requirements.

Except in the case of income or gain in respect of a Note that is effectively connected with the conduct of a United States trade or business, discussed below, interest received or gain recognized by you which does not qualify for exemption from taxation will be subject to federal income tax at a rate of 30%, which will be withheld in the case of payments of interest, unless reduced or eliminated by an applicable tax treaty. You must generally use an applicable IRS Form W-8, or a substantially similar form, to claim tax treaty benefits. If you are a non-U.S. holder claiming benefits under an income tax treaty, you should be aware that you may be required to obtain a taxpayer identification number and to certify your eligibility under the applicable treaty's limitations on benefits article in order to comply with the applicable certification requirements of the Treasury regulations.

Effectively connected income and gain. If you are a non-U.S. holder whose income and gain in respect of a Note are effectively connected with the conduct of a United States trade or business (and, if provided by an applicable income tax treaty, are attributable to a permanent establishment or fixed base you maintain in the United States), you will be subject to regular federal income tax on this income and gain in generally the same manner as U.S. holders, and general federal income tax return filing requirements will apply. In addition, if you are a corporation, you may be subject to a branch profits tax equal to 30% of your effectively connected adjusted earnings and profits for the taxable year, unless you qualify for a lower rate under an applicable tax treaty. To obtain an exemption from

Table of Contents

withholding on interest on the Notes that is effectively connected with the conduct of a United States trade or business, you must generally supply to the Withholding Agent an applicable IRS Form W-8, or a substantially similar form.

Information Reporting and Backup Withholding

Information reporting and backup withholding may apply to interest and other payments to you under the circumstances discussed below. Amounts withheld under backup withholding are generally not an additional tax and may be refunded or credited against your federal income tax liability, provided that you furnish the required information to the IRS.

The reporting obligations of non-U.S. financial institutions and other non-U.S. entities for purposes of identifying accounts and investments held directly or indirectly by U.S. persons are increasing. The failure to comply with these additional information reporting, certification and other specified requirements could result in a 30% withholding tax on applicable payments to non-U.S. persons. Pursuant to IRS guidance, future regulations will provide that such withholding applies only to payments of interest made on or after January 1, 2014, and to other "withholdable payments" (including payments of gross proceeds from a sale or other disposition of certain debt instruments) made on or after January 1, 2017.

If you are a U.S. holder. You may be subject to backup withholding when you receive interest payments on a Note or proceeds upon the sale, exchange, redemption, retirement or other disposition of a Note. In general, you can avoid this backup withholding if you properly execute under penalties of perjury an IRS Form W-9 or a substantially similar form on which you:

provide your correct taxpayer identification number;

certify that you are exempt from backup withholding because (a) you are a corporation or come within another enumerated exempt category, (b) you have not been notified by the IRS that you are subject to backup withholding, or (c) you have been notified by the IRS that you are no longer subject to backup withholding; and

certify that you are a U.S. citizen or other U.S. person.

If you do not provide your correct taxpayer identification number on the IRS Form W-9 or a substantially similar form, you may be subject to penalties imposed by the IRS.

Unless you have established on a properly executed IRS Form W-9 or a substantially similar form that you come within an enumerated exempt category, interest and other payments on the Notes paid to you during the calendar year, and the amount of tax withheld, if any, will be reported to you and to the IRS.

If you are a non-U.S. holder. The amount of interest paid to you on a Note during each calendar year, and the amount of tax withheld, if any, will generally be reported to you and to the IRS. This information reporting requirement applies regardless of whether you were subject to withholding or whether withholding was reduced or eliminated by an applicable tax treaty. Also, interest paid to you on a Note may be subject to backup withholding unless you properly certify your non-U.S. holder status on an IRS Form W-8 or a substantially similar form in the manner described above, under "Tax Considerations for Non-U.S. Holders." Similarly, information reporting and backup withholding will not apply to proceeds you receive upon the sale, exchange, redemption, retirement or other disposition of a Note, if you properly certify that you are a non-U.S. holder on an IRS Form W-8 or a substantially similar form. Even without having executed an IRS Form W-8 or a substantially similar form, however, in some cases information reporting and backup withholding may not apply to proceeds you receive upon the sale, exchange, redemption, retirement or other disposition of a Note, if you receive those proceeds through a broker's foreign office.

Table of Contents**UNDERWRITING**

We intend to offer the Notes through the underwriters named below. Citigroup Global Markets Inc., RBC Capital Markets, LLC and UBS Securities LLC are acting as joint book-running managers of the offering and as representatives of the underwriters. Subject to the terms and conditions contained in an underwriting agreement between us and the underwriters, we have agreed to sell to the underwriters, and the underwriters severally have agreed to purchase from us, the aggregate principal amount of the Notes listed opposite their names below.

Underwriter	Principal Amount
Citigroup Global Markets Inc.	\$
RBC Capital Markets, LLC	
UBS Securities LLC	
MLV & Co. LLC	
Janney Montgomery Scott LLC	
Oppenheimer & Co. Inc.	
BB&T Capital Markets, a division of BB&T Securities, LLC	
Total	\$

The underwriters have agreed to purchase all of the Notes sold pursuant to the underwriting agreement, other than Notes that may be sold pursuant to the overallotment option described below, if any of the Notes are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the Notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters, including the validity of the Notes, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

We have agreed that, for a period of 30 days from the date of this prospectus supplement, we will not, without the prior written consent of Citigroup Global Markets Inc., RBC Capital Markets, LLC and UBS Securities LLC, offer, sell, or contract to sell, or otherwise dispose of, directly or indirectly, or announce the offering of, any debt securities with a maturity of more than one year issued or guaranteed by us. This agreement does not prevent us from borrowing under our existing credit facility or any replacement credit facility. Citigroup Global Markets Inc., RBC Capital Markets, LLC and UBS Securities LLC, in their sole discretion, may release us from this agreement at any time without notice.

Overallotment Option

We have granted the underwriters an option to purchase up to an additional \$ aggregate principal amount of Notes at the public offering price, less an underwriting discount of per Note. The underwriters may exercise this option within 30 days from the date of this prospectus supplement solely to cover overallotments.

Table of Contents

Discounts, Commissions and Expenses

The representatives of the underwriters have advised us that the underwriters propose initially to offer the Notes to the public at the public offering price listed on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of \$ _____ per Note. The underwriters may allow, and the dealers may reallow, a discount not in excess of \$ _____ per Note to other dealers. After the initial public offering, the public offering price, concessions and discount may be changed.

The following table summarizes the discounts and commissions that we will pay to the underwriters in connection with the offering. The underwriting discount will be \$ _____ per Note. The total underwriting discount shown in the following table reflects the actual total underwriting discount that we are required to pay to the underwriters.

	Underwriting Discount Paid by Us
Per Note	\$ _____
Total ⁽¹⁾	\$ _____

(1) Assumes no exercise of the underwriters' option to purchase additional Notes.

The expenses of the offering, not including the underwriting discount, are estimated to be \$ _____ and are payable by us.

Delayed Settlement

We expect to deliver the Notes against payment for the Notes on or about the date specified in the last paragraph of the cover page of this prospectus supplement, which will be the _____ business day following the date of the pricing of the Notes. Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to a trade expressly agree otherwise. Accordingly, purchasers who wish to trade Notes on the date of pricing or the next succeeding business day will be required, by virtue of the fact that the Notes initially will settle in _____ days, to specify alternative settlement arrangements to prevent a failed settlement.

New Issue of Securities

The Notes will constitute a new issue of securities with no established trading market. We intend to apply to list the Notes on the NYSE MKT under the symbol "_____." If approved, we expect trading of the Notes on the NYSE MKT to commence within 30 days after the original issue date of the Notes. We have been advised by the underwriters that they intend to make a market in the Notes, but they are not obligated to do so and may discontinue market making at any time without notice. We cannot assure you of the liquidity of the trading market for the Notes or that an active public market for the Notes will develop. If an active public trading market for the Notes does not develop, the market price and liquidity of the Notes may be adversely affected.

Price Stabilization and Short Positions

In connection with the offering, the underwriters may purchase and sell Notes in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions and stabilizing purchases.

Short sales involve secondary market sales by the underwriters of a greater number of Notes than they are required to purchase in the offering.

Table of Contents

Covering transactions involve purchases of Notes in the open market after the distribution has been completed in order to cover short positions.

Stabilizing transactions involve bids to purchase Notes so long as the stabilizing bids do not exceed a specified maximum.

The underwriters also may impose a penalty bid. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the underwriters, in covering short positions or making stabilizing purchases, repurchases Notes originally sold by that syndicate member in order to cover short positions or make stabilizing purchases.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the Notes. They may also cause the price of the Notes to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

Electronic Distribution

A prospectus supplement and accompanying prospectus in electronic format may be made available on the websites maintained by one or more underwriters. Other than the prospectus supplement and accompanying prospectus in electronic format, the information on the underwriters' websites is not part of this prospectus supplement.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us. They have received customary fees and commissions for these transactions. Affiliates of some of the underwriters are lenders under our revolving credit facility.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. Certain of the underwriters or their affiliates that have a lending relationship with us routinely hedge their credit exposure to us consistent with their customary risk management policies. Typically, such underwriters and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities, including potentially the Notes offered hereby. Any such credit default swaps or short positions could adversely affect future trading prices of the Notes offered hereby. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Table of Contents

LEGAL MATTERS

The validity of the Notes offered by this prospectus supplement and the accompanying prospectus will be passed upon for us by Skadden, Arps, Slate, Meagher & Flom LLP. Selected legal matters in connection with this offering will be passed upon for us by Sullivan & Worcester LLP. Skadden, Arps, Slate, Meagher & Flom LLP and Sullivan & Worcester LLP also represent HPT, Reit Management & Research LLC, or RMR, which provides management services to us and to HPT, and certain of their respective affiliates on various matters. Sidley Austin LLP has acted as counsel to the underwriters.

EXPERTS

The consolidated financial statements of TravelCenters of America LLC appearing in TravelCenters of America LLC's Annual Report (Form 10-K) for the year ended December 31, 2011, and the effectiveness of TravelCenters of America LLC's internal control over financial reporting as of December 31, 2011, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in its reports thereon, which conclude, among other things, that TravelCenters of America LLC did not maintain effective internal control over financial reporting as of December 31, 2011, based on Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, because of the effects of the material weaknesses described therein, included therein, and incorporated herein by reference. Such financial statements have been incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

Available Information

We file annual, quarterly, and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement of which this prospectus supplement and the accompanying prospectus are a part, and its exhibits and schedules or other information on file at the SEC's Public Reference room at 100 F Street, NE, Washington, D.C. 20549. You can request copies of those documents upon payment of a duplicating fee to the SEC. Information filed by us with the SEC can be copied at the SEC's Public Reference Room. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room. You can review our SEC filings and the registration statement by accessing the SEC's Internet site at <http://www.sec.gov>. The information contained on the SEC's website is expressly not incorporated by reference into this prospectus supplement.

Our SEC filings are also available on our website at www.tatravelcenters.com, although the information on our website is expressly not incorporated by reference into, and does not constitute a part of, this prospectus supplement.

This prospectus supplement contains summaries of provisions contained in some of the documents discussed in this prospectus supplement, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to in this prospectus supplement have been filed with the SEC and incorporated by reference as exhibits to the registration statement of which this prospectus supplement is a part. If any contract, agreement or other document is filed or incorporated by reference as an exhibit to the registration statement, you should read the exhibit for a more complete understanding of the document or matter involved.

Table of Contents

Incorporation of Documents by Reference

The SEC allows us to incorporate by reference information into this prospectus supplement. This means we can disclose information to you by referring you to another document we filed with the SEC. We will make those documents available to you without charge upon your request. Requests for those documents should be directed to TravelCenters of America LLC, Two Newton Place, 255 Washington Street, Suite 300, Newton, MA 02458, Attention: Secretary. In addition, you may obtain copies of this information by calling (440) 808-9100. This prospectus supplement incorporates by reference the following documents:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2011, filed with the SEC on March 16, 2012;

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, filed with the SEC on May 7, 2012, our Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, filed with the SEC on August 7, 2012 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, filed with the SEC on November 6, 2012;

our Current Reports on Form 8-K filed with the SEC on May 11, 2012, December 6, 2012 and January 7, 2013;

the information identified as incorporated by reference under Items 10, 11, 12, 13 and 14 of Part III of our Annual Report on Form 10-K for the fiscal year ended December 31, 2011 from our definitive Proxy Statement for our 2012 Annual Meeting of Shareholders filed with the SEC on March 16, 2012; and

the description of our common shares contained in our Registration Statement on Form 8-A filed with the SEC on January 25, 2007, including any amendments or reports filed for the purpose of updating that description (File No. 001-33274).

We are also incorporating by reference additional documents we may file pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement until the offering of the Notes has been completed or terminated, other than any portion of the respective filings furnished, rather than filed, under the applicable SEC rules. This additional information is a part of this prospectus supplement from the date of filing of those documents.

Any statements made in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document which is also incorporated or deemed to be incorporated into this prospectus supplement modifies or supersedes the prior statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement. The information specifically incorporated by reference in this prospectus supplement supersedes the information incorporated by reference in the prospectus.

The information relating to us contained in this prospectus supplement and the accompanying prospectus should be read together with the information in the documents incorporated by reference.

Table of Contents

WARNING CONCERNING FORWARD LOOKING STATEMENTS

THIS PROSPECTUS SUPPLEMENT, THE ACCOMPANYING PROSPECTUS, AND THE INFORMATION INCORPORATED BY REFERENCE HEREIN AND THEREIN CONTAIN STATEMENTS THAT CONSTITUTE FORWARD LOOKING STATEMENTS WITHIN THE MEANING OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995 AND OTHER FEDERAL SECURITIES LAWS. ALSO, WHENEVER WE USE WORDS SUCH AS "BELIEVE," "EXPECT," "ANTICIPATE," "INTEND," "PLAN," "ESTIMATE" OR SIMILAR EXPRESSIONS, WE ARE MAKING FORWARD LOOKING STATEMENTS. THESE FORWARD LOOKING STATEMENTS ARE BASED UPON OUR PRESENT INTENT, BELIEFS OR EXPECTATIONS, BUT FORWARD LOOKING STATEMENTS ARE NOT GUARANTEED TO OCCUR AND MAY NOT OCCUR. ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THOSE CONTAINED IN OR IMPLIED BY OUR FORWARD LOOKING STATEMENTS AS A RESULT OF VARIOUS FACTORS. AMONG OTHERS, THE FORWARD LOOKING STATEMENTS WHICH APPEAR IN THIS PROSPECTUS SUPPLEMENT, THE ACCOMPANYING PROSPECTUS, AND THE INFORMATION INCORPORATED BY REFERENCE HEREIN AND THEREIN THAT MAY NOT OCCUR INCLUDE:

WE STATE IN THIS PROSPECTUS SUPPLEMENT OUR BELIEF THAT THE U.S. ECONOMY IS IN A PERIOD OF SLOW AND UNEVEN ECONOMIC RECOVERY AND EXPANSION. RECENT ECONOMIC DATA HAS BEEN MIXED AND IMPROVEMENTS, IF ANY, IN THE U.S. ECONOMY OR IN THE TRUCKING OR TRAVEL CENTER INDUSTRIES MAY NOT CONTINUE, AND OUR FUEL AND NONFUEL SALES VOLUME MAY DECLINE;

WE STATE IN THIS PROSPECTUS SUPPLEMENT OUR BELIEF THAT SMALLER TRAVEL CENTER OWNERS FIND IT DIFFICULT TO ACCESS CAPITAL FOR ACQUISITION, REFINANCING AND IMPROVEMENT OF THEIR FACILITIES AND THAT WE MAY BE ABLE TO ACQUIRE AND RENOVATE ADDITIONAL TRAVEL CENTERS AT PRICES THAT ARE LESS THAN THEIR REPLACEMENT COST. ALSO, IN THIS PROSPECTUS SUPPLEMENT AND IN OUR QUARTERLY REPORT ON FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2012, WHICH IS INCORPORATED BY REFERENCE INTO THIS PROSPECTUS SUPPLEMENT, WE STATE THAT WE HAVE ACQUIRED TRAVEL CENTER LOCATIONS IN 2011 AND 2012, WE REFERENCE SEVERAL TRAVEL CENTER AND BUSINESS PURCHASES THAT WE HAVE COMPLETED OR AGREED TO COMPLETE IN 2011 AND 2012 AND WE STATE THAT WE CURRENTLY INTEND TO CONTINUE OUR EFFORTS TO SELECTIVELY ACQUIRE ADDITIONAL PROPERTIES. WE ALSO STATE IN THIS PROSPECTUS SUPPLEMENT THAT WE HAVE RENOVATED OR EXPECT TO COMPLETE DURING 2013 RENOVATIONS OF THESE TRAVEL CENTERS FOR AN ADDITIONAL APPROXIMATELY \$88.4 MILLION IN THE AGGREGATE, WHICH WE BELIEVE WHEN COMBINED WITH THE ACQUISITION COST IS LESS THAN THE COST TO CONSTRUCT A FULL SERVICE TRAVEL CENTER SUCH AS THOSE WE OPERATE. THERE ARE MANY FACTORS THAT MAY RESULT IN OUR NOT BEING ABLE TO ACQUIRE AND RENOVATE ADDITIONAL TRAVEL CENTERS AT PRICES THAT ARE LESS THAN THEIR REPLACEMENT COST, INCLUDING COMPETITION FOR SUCH ACQUISITIONS FROM OTHER BUYERS, THE INABILITY TO NEGOTIATE ACCEPTABLE PURCHASE TERMS AND THE POSSIBILITY THAT WE NEED TO USE OUR AVAILABLE FUNDS FOR OTHER PURPOSES, SUCH AS ADDITIONAL INVESTMENTS IN OR MAINTENANCE AND REPAIR OF OUR EXISTING TRAVEL CENTERS. ALSO, THE ACTUAL COST OF RENOVATIONS MAY EXCEED OUR ESTIMATES AND THE RENOVATIONS MAY TAKE LONGER THAN ANTICIPATED.

Table of Contents

ALSO, WE MAY NOT SUCCEED IN COMPLETING THE PURCHASES TO WHICH WE HAVE AGREED AND WE MAY NOT SUCCEED IN IDENTIFYING AND/OR ACQUIRING OTHER TRAVEL CENTERS. THE IMPLICATIONS OF OUR STATEMENTS MAY ALSO BE THAT WE WILL BE ABLE TO OPERATE OUR ACQUIRED LOCATIONS PROFITABLY. MANY OF THE TRAVEL CENTERS WE HAVE ACQUIRED, OR MAY ACQUIRE, PRODUCED OPERATING RESULTS WHICH MAY HAVE CAUSED THE PRIOR OWNERS TO EXIT THESE BUSINESSES AND OUR ABILITY TO OPERATE THESE LOCATIONS PROFITABLY DEPENDS UPON MANY FACTORS, INCLUDING OUR ABILITY TO INTEGRATE NEW OPERATIONS INTO OUR EXISTING OPERATIONS AND SOME FACTORS WHICH ARE BEYOND OUR CONTROL SUCH AS THE LEVEL OF DEMAND FOR OUR GOODS AND SERVICES ARISING FROM THE U.S. ECONOMY GENERALLY. WE MAY NOT BE ABLE TO SUCCESSFULLY INTEGRATE TRAVEL CENTER OPERATIONS OR OPERATE THESE LOCATIONS, OR ANY OF THEM, PROFITABLY IN THE FUTURE;

WE STATE IN THIS PROSPECTUS SUPPLEMENT THAT WE ARE NEGOTIATING AN AGREEMENT WITH SHELL OIL PRODUCTS US, OR SHELL, TO CONSTRUCT A NETWORK OF NATURAL GAS FUELING LANES AT CERTAIN OF OUR TRAVEL CENTERS ALONG THE U.S. INTERSTATE HIGHWAY SYSTEM. WE DO NOT HAVE A BINDING AGREEMENT WITH SHELL FOR THE CONSTRUCTION OF NATURAL GAS FUELING LANES AT OUR TRAVEL CENTERS. MATERIAL TERMS CONTINUE TO BE NEGOTIATED AND HAVE NOT YET BEEN AGREED BETWEEN US AND SHELL. WE AND SHELL MAY NOT ACHIEVE AGREEMENT ON ALL TERMS AND A BINDING DEFINITIVE AGREEMENT MAY NEVER BE ENTERED. FOR THESE REASONS, WE CAN PROVIDE NO ASSURANCE REGARDING THE FINAL TERMS OF ANY DEFINITIVE AGREEMENT WITH SHELL OR THAT ANY SUCH DEFINITIVE AGREEMENT WILL BE ENTERED. NATURAL GAS FUELING FOR THE TRUCKING INDUSTRY IS NEW AND WE CANNOT ASSURE YOU THAT A TRUCKER MARKET FOR NATURAL GAS WILL DEVELOP, AND WE OR SHELL MAY ABANDON THIS PROJECT. LAND USE REGULATIONS AT OUR TRAVEL CENTERS MAY PREVENT INSTALLATION OF NATURAL GAS FUELING LANES OR THE INSTALLATION OR OPERATION OF NATURAL GAS FUELING LANES MAY REQUIRE REGULATORY APPROVALS AND SPECIALIZED EQUIPMENT AND TRAINED PERSONNEL WHICH MAY NOT BE TIMELY AVAILABLE OR MAY BE MORE COSTLY THAN WE EXPECT. THE DISTANCES WHICH MAY BE COVERED BY NATURAL GAS POWERED VEHICLES DEPENDS UPON TECHNOLOGIES WHICH ARE BEING DEVELOPED, AND IT MAY NOT BE POSSIBLE TO CROSS THE UNITED STATES USING NATURAL GAS FUEL PURCHASED AT ONLY OUR LOCATIONS. FOR THESE AND OTHER REASONS, THE INFRASTRUCTURE NECESSARY FOR NATURAL GAS POWERED TRUCKS TO TRAVEL ACROSS THE UNITED STATES MAY REQUIRE MORE TRAVEL CENTER LOCATIONS THAN WE HAVE OR ARE ABLE TO CREATE;

THIS PROSPECTUS SUPPLEMENT AND THE INFORMATION INCORPORATED HEREIN STATES THAT AT SEPTEMBER 30, 2012, THERE WERE NO AMOUNTS OUTSTANDING UNDER OUR BANK CREDIT FACILITY ON SEPTEMBER 30, 2012, THAT DURING THE YEAR ENDED DECEMBER 31, 2011, AND THE NINE MONTHS ENDED SEPTEMBER 30, 2012, WE RECEIVED \$69.1 MILLION AND \$48.3 MILLION, RESPECTIVELY, FROM HPT FOR SALES TO HPT OF QUALIFYING IMPROVEMENTS, THAT WE INTEND TO SELL TO HPT IMPROVEMENTS WE HAVE MADE TO THE PROPERTIES WE LEASE FROM HPT AND THAT, AS OF SEPTEMBER 30, 2012, WE OWN 24 TRAVEL CENTERS IN FEE WITH AN UNDEPRECIATED BOOK VALUE OF \$192.0 MILLION THAT ARE UNENCUMBERED BY MORTGAGE DEBT. THESE

Table of Contents

STATEMENTS MAY IMPLY THAT WE HAVE ABUNDANT WORKING CAPITAL AND LIQUIDITY. IN FACT, OUR REGULAR OPERATIONS REQUIRE LARGE AMOUNTS OF WORKING CASH. AS OF SEPTEMBER 30, 2012, \$58.2 MILLION OF OUR BANK CREDIT FACILITY WAS USED TO PROVIDE LETTERS OF CREDIT TO OUR SUPPLIERS, INSURERS AND TAXING AUTHORITIES AND WE HAVE COLLATERALIZED OUR BANK FACILITY WITH SUBSTANTIALLY ALL OF OUR CASH, ACCOUNTS RECEIVABLE, INVENTORIES, EQUIPMENT AND INTANGIBLE ASSETS. IN ADDITION, OUR BUSINESS REQUIRES US TO MAKE SIGNIFICANT CAPITAL EXPENDITURES TO MAINTAIN OUR COMPETITIVENESS, HPT IS NOT OBLIGATED TO PURCHASE THE IMPROVEMENTS WE MAY REQUEST AND WE DO NOT KNOW THE EXTENT TO WHICH WE COULD MONETIZE OUR EXISTING UNENCUMBERED REAL ESTATE. ACCORDINGLY, WE MAY NOT HAVE SUFFICIENT WORKING CAPITAL OR LIQUIDITY; AND

THIS PROSPECTUS SUPPLEMENT AND THE INFORMATION INCORPORATED HEREIN STATES THAT WE HAVE A CREDIT FACILITY WITH A CURRENT MAXIMUM AVAILABILITY OF \$200 MILLION. HOWEVER, OUR BORROWING AND LETTER OF CREDIT AVAILABILITY UNDER THIS FACILITY IS SUBJECT TO OUR HAVING QUALIFIED COLLATERAL, INCLUDING ELIGIBLE CASH, ACCOUNTS RECEIVABLE AND INVENTORIES THAT VARY IN AMOUNT FROM TIME TO TIME. ACCORDINGLY, OUR BORROWING AND LETTER OF CREDIT AVAILABILITY AT ANY TIME MAY BE LESS THAN \$200 MILLION. AS OF SEPTEMBER 30, 2012, WE HAD \$186.8 MILLION OF BORROWING AND LETTER OF CREDIT AVAILABILITY UNDER OUR CREDIT FACILITY, OF WHICH \$58.2 MILLION WAS UTILIZED FOR OUTSTANDING LETTERS OF CREDIT. ALSO, OUR QUARTERLY REPORT ON FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2012 STATES THAT THE MAXIMUM AMOUNT AVAILABLE UNDER THE CREDIT FACILITY MAY BE INCREASED TO \$300 MILLION, SUBJECT TO AVAILABLE COLLATERAL AND LENDER PARTICIPATION. NONETHELESS, IF WE DO NOT HAVE SUFFICIENT COLLATERAL OR IF WE ARE UNABLE TO IDENTIFY LENDERS WILLING TO INCREASE THEIR COMMITMENTS OR JOIN OUR CREDIT FACILITY, WE MAY NOT BE ABLE TO INCREASE THE CREDIT FACILITY WHEN WE MAY NEED OR WANT TO DO SO.

THESE AND OTHER UNEXPECTED RESULTS MAY BE CAUSED BY VARIOUS FACTORS, SOME OF WHICH ARE BEYOND OUR CONTROL, INCLUDING:

THE IMPACT OF CHANGES IN THE ECONOMY AND THE CAPITAL MARKETS ON US, OUR CUSTOMERS AND OUR FRANCHISEES;

COMPLIANCE WITH, AND CHANGES TO, FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS, ACCOUNTING RULES, TAX RATES AND SIMILAR MATTERS;

COMPETITION WITHIN THE TRAVEL CENTER INDUSTRY;

FUTURE FUEL PRICE INCREASES, FUEL PRICE VOLATILITY OR OTHER FACTORS MAY CAUSE US TO NEED MORE WORKING CAPITAL TO MAINTAIN OUR INVENTORIES AND CARRY OUR ACCOUNTS RECEIVABLE THAN WE NOW EXPECT;

THE ACQUISITION OF TRAVEL CENTERS MAY SUBJECT US TO ADDITIONAL OR GREATER RISKS THAN OUR CONTINUING OPERATIONS, INCLUDING THE ASSUMPTION OF UNKNOWN LIABILITIES;

Table of Contents

MOST OF OUR TRUCKING CUSTOMERS TRANSACT BUSINESS WITH US BY USE OF FUEL CARDS, WHICH ARE ISSUED BY THIRD PARTY FUEL CARD COMPANIES. THE FUEL CARD INDUSTRY HAS ONLY A FEW SIGNIFICANT PARTICIPANTS. FUEL CARD COMPANIES FACILITATE PAYMENTS TO US, AND CHARGE US FEES FOR THESE SERVICES. COMPETITION, OR LACK THEREOF, AMONG THE FUEL CARD COMPANIES MAY RESULT IN FUTURE INCREASES IN OUR TRANSACTION FEE EXPENSES OR WORKING CAPITAL REQUIREMENTS, OR BOTH;

IN THE PAST, INCREASES IN FUEL PRICES HAVE REDUCED THE DEMAND FOR THE PRODUCTS AND SERVICES THAT WE SELL BECAUSE HIGH FUEL PRICES MAY HAVE ENCOURAGED FUEL CONSERVATION, DIRECTED FREIGHT BUSINESS AWAY FROM TRUCKING OR OTHERWISE ADVERSELY AFFECTED THE BUSINESS OF OUR CUSTOMERS. FUTURE INCREASES IN FUEL PRICES MAY HAVE SIMILAR AND OTHER ADVERSE EFFECTS ON OUR BUSINESS AND SOME OF THESE PAST CONSEQUENCES MAY CONTINUE, WHICH MAY ADVERSELY AFFECT OUR BUSINESS EVEN IF FUEL PRICES DO NOT INCREASE;

OUR SUPPLIERS MAY BE UNWILLING OR UNABLE TO MAINTAIN OUR CURRENT TERMS FOR OUR PURCHASES ON CREDIT. IF WE ARE UNABLE TO PURCHASE GOODS ON REASONABLE CREDIT TERMS, OUR REQUIRED WORKING CAPITAL MAY INCREASE AND WE MAY INCUR MATERIAL LOSSES. IN TIMES OF RISING FUEL AND NONFUEL PRICES OUR SUPPLIERS MAY BE UNWILLING OR UNABLE TO INCREASE THE CREDIT AMOUNTS THEY EXTEND TO US, WHICH MAY REQUIRE US TO INCREASE OUR WORKING CAPITAL INVESTMENT. ALSO, IN LIGHT OF THE RECENT CREDIT MARKET CONDITIONS AND OUR HISTORICAL OPERATING LOSSES, THE AVAILABILITY AND THE TERMS OF ANY CREDIT WE MAY BE ABLE TO OBTAIN ARE UNCERTAIN;

WE ARE ROUTINELY INVOLVED IN LITIGATION AND OTHER LEGAL MATTERS INCIDENTAL TO THE ORDINARY COURSE OF OUR BUSINESS. DISCOVERY AND COURT DECISIONS DURING LITIGATION OFTEN HAVE UNANTICIPATED RESULTS. LITIGATION IS USUALLY EXPENSIVE AND DISTRACTING TO MANAGEMENT. WE CAN PROVIDE NO ASSURANCE AS TO THE OUTCOME OF ANY OF THE LITIGATION MATTERS IN WHICH WE ARE OR MAY BECOME INVOLVED;

ACTS OF TERRORISM, GEOPOLITICAL RISKS, WARS, OUTBREAKS OF SO CALLED PANDEMICS OR OTHER MANMADE OR NATURAL DISASTERS BEYOND OUR CONTROL MAY ADVERSELY AFFECT OUR OPERATING RESULTS;

ALTHOUGH WE BELIEVE THAT WE BENEFIT FROM OUR CONTINUING RELATIONSHIPS WITH HPT, RMR AND AIC AND THEIR AFFILIATED AND RELATED PERSONS AND ENTITIES, ACTUAL AND POTENTIAL CONFLICTS OF INTEREST WITH OUR MANAGING DIRECTORS, HPT, RMR, AIC AND THEIR AFFILIATED AND RELATED PERSONS AND ENTITIES MAY PRESENT A CONTRARY PERCEPTION OR RESULT IN LITIGATION; AND

AS A RESULT OF CERTAIN TRADING IN OUR SHARES DURING 2007, WE EXPERIENCED AN OWNERSHIP CHANGE AS DEFINED BY SECTION 382 OF THE INTERNAL REVENUE CODE, OR THE CODE; CONSEQUENTLY, WE ARE UNABLE TO USE OUR NET OPERATING LOSS GENERATED IN 2007 TO OFFSET ANY FUTURE TAXABLE INCOME WE MAY GENERATE. IF WE EXPERIENCE ADDITIONAL OWNERSHIP CHANGES, AS DEFINED IN THE CODE, OUR NET OPERATING LOSSES GENERATED AFTER 2007 COULD ALSO BE SUBJECT TO USAGE LIMITATIONS.

Table of Contents

WE ACCUMULATED A SIGNIFICANT DEFICIT DURING THE YEARS 2007 THROUGH 2010. ALTHOUGH WE GENERATED NET INCOME FOR THE YEAR ENDED DECEMBER 31, 2011, AND THE NINE MONTHS ENDED SEPTEMBER 30, 2012, AND OUR PLANS ARE INTENDED TO GENERATE NET INCOME IN FUTURE PERIODS, THERE CAN BE NO ASSURANCE THAT THESE PLANS WILL SUCCEED.

RESULTS THAT DIFFER FROM THOSE STATED OR IMPLIED BY OUR FORWARD LOOKING STATEMENTS MAY ALSO BE CAUSED BY VARIOUS CHANGES IN OUR BUSINESS OR MARKET CONDITIONS AS DESCRIBED MORE FULLY IN THIS PROSPECTUS SUPPLEMENT UNDER THE CAPTION "RISK FACTORS" AND IN OUR QUARTERLY REPORT ON FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2012 AND IN OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2011, INCLUDING UNDER "WARNING CONCERNING FORWARD LOOKING STATEMENTS" AND "ITEM 1A. RISK FACTORS." THE ANNUAL REPORT AND QUARTERLY REPORT REFERRED TO IN THE PRECEDING SENTENCE ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS SUPPLEMENT.

YOU SHOULD NOT PLACE UNDUE RELIANCE UPON FORWARD LOOKING STATEMENTS. EXCEPT AS REQUIRED BY LAW, WE UNDERTAKE NO OBLIGATION TO UPDATE OR REVISE ANY FORWARD LOOKING STATEMENT AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE.

Table of Contents

PROSPECTUS

TRAVELCENTERS OF AMERICA LLC

COMMON SHARES PREFERRED SHARES DEBT SECURITIES WARRANTS

\$500,000,000

This prospectus relates to common shares, preferred shares (including convertible preferred shares), debt securities (including convertible debt securities) and warrants for debt and equity securities which we may sell from time to time in one or more offerings up to an aggregate public offering price of \$500,000,000. We may sell these securities to or through underwriters, directly to investors or through agents. We will specify the terms of the securities, and the names of any underwriters or agents, in supplements to this prospectus. You should read this prospectus and each supplement carefully before you invest. This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.

Our common shares are listed on the NYSE MKT LLC, or NYSE MKT, under the symbol "TA." As of June 21, 2012, the aggregate market value of our outstanding common shares held by non-affiliates is approximately \$121.9 million, based on 28,809,871 outstanding common shares, of which 23,940,783 shares are held by non-affiliates, and a per share price of \$5.09, based on the closing sale price of our common shares on June 21, 2012.

Investing in our securities involves significant risks. Before buying our securities you should refer to the risk factors included in our periodic reports, in prospectus supplements relating to specific offerings of securities and in other documents that we file with the Securities and Exchange Commission. See "Risk Factors" beginning on page 2 of this prospectus.

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 July 11, 2012.

Table of Contents

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>PROSPECTUS SUMMARY</u>	<u>1</u>
<u>RISK FACTORS</u>	<u>2</u>
<u>FORWARD LOOKING STATEMENTS</u>	<u>2</u>
<u>RATIO OF EARNINGS TO FIXED CHARGES AND RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED SHARE DIVIDENDS</u>	<u>6</u>
<u>USE OF PROCEEDS</u>	<u>6</u>
<u>DILUTION</u>	<u>6</u>
<u>DESCRIPTION OF THE COMMON SHARES AND PREFERRED SHARES WE MAY OFFER</u>	<u>7</u>
<u>DESCRIPTION OF THE DEBT SECURITIES WE MAY OFFER</u>	<u>18</u>
<u>DESCRIPTION OF THE WARRANTS WE MAY OFFER</u>	<u>23</u>
<u>PLAN OF DISTRIBUTION</u>	<u>24</u>
<u>VALIDITY OF SECURITIES</u>	<u>26</u>
<u>EXPERTS</u>	<u>26</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>26</u>
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	<u>27</u>

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using the "shelf" registration process. Under this shelf registration process, we may sell common shares, preferred shares (including convertible preferred shares), debt securities (including convertible debt securities) and warrants for debt and equity securities from time to time in one or more offerings up to an aggregate public offering price of \$500,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell any securities under this prospectus, we will provide a prospectus supplement containing specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference in this prospectus or any prospectus supplement the statement in the later-dated document modifies or supersedes the earlier statement.

You should read both this prospectus and any prospectus supplement together with additional information described below under the headings "Where You Can Find More Information" and "Incorporation of Certain Information By Reference."

References in this prospectus to "TA", "TravelCenters", the "Company", "we", "us" and "our" include TravelCenters of America LLC and its consolidated subsidiaries unless otherwise expressly stated or the context indicates otherwise.

PROSPECTUS SUMMARY

You should read the following summary together with the more detailed information regarding our Company and the securities being registered appearing elsewhere in this prospectus.

TravelCenters of America LLC

We operate and franchise travel centers primarily along the U.S. interstate highway system. Our customers include trucking fleets and their drivers, independent truck drivers and motorists. Our business includes travel centers located in a large number of states in the U.S. and the province of Ontario, Canada, including travel centers operated by us or our franchisees under the "TravelCenters of America" or "TA" brand names, and travel centers operated by us or our franchisees under the "Petro" brand name.

Many of our travel centers were originally developed years ago when prime real estate locations along the interstate highway system were more readily available than they are today, which we believe would make it difficult to replicate our business. We believe that our nationwide locations provide an advantage to large trucking fleets, particularly long haul trucking fleets, by enabling them to reduce the number of their suppliers by routing their trucks through our locations from coast to coast.

We offer a broad range of products and services, including diesel fuel and gasoline, truck repair and maintenance services, full service restaurants, more than 20 different brands of quick serve restaurants, travel and convenience stores and various driver amenities.

The U.S. travel center and truck stop industry in which we operate consists of travel centers, truck stops, diesel fuel outlets and similar properties. We believe that although the travel center and truck stop industry is highly fragmented generally, with in excess of 6,000 travel centers and truck stops in the U.S., the largest trucking fleets tend to purchase the majority of their over the road fuel from us or from our largest competitors.

Table of Contents

An investment in TA is subject to a number of risks and significant uncertainty. Please see the risk factors under the heading "Risk Factors," beginning on page 2 of this prospectus for a discussion of these and other risks relating to our business and investment in our securities.

Corporate Information

We were formed on October 10, 2006, as a wholly owned subsidiary of Hospitality Properties Trust, or HPT. Our initial capitalization in a nominal amount was provided by HPT on our formation date. From that time through January 31, 2007, we conducted no business activities. On January 31, 2007, HPT acquired TravelCenters of America, Inc., our predecessor, restructured this acquired business and distributed all of our then outstanding common shares to the shareholders of HPT. As of March 31, 2012, our business included 238 travel centers in 41 states in the U.S. and the province of Ontario, Canada, 168 of which were operated under the "TravelCenters of America" or "TA" brand names and 70 that were operated under the "Petro" brand name. We operated 195 of these travel centers, which we refer to as Company operated sites, and our franchisees operated 43 of these travel centers including 10 travel centers which our franchisees sublease from us and 33 travel centers which our franchisees own or lease from other lessors. As of March 31, 2012, we leased 185 of our 238 travel centers pursuant to lease agreements with HPT, including 175 Company operated sites and 10 travel centers subleased to franchisees.

Our principal executive offices are located at 24601 Center Ridge Road, Suite 200, Westlake, OH 44145-5639, and our telephone number is (440) 808-9100. Our website is www.tatravelcenters.com. The information on our website does not constitute a part of this prospectus.

RISK FACTORS

Investing in our securities involves significant risks and uncertainties that may result in a loss of all or part of your investment. You should carefully review the risk factors contained under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2011, which risk factors are incorporated by reference in this prospectus, the information contained under the heading "Forward Looking Statements" and other information incorporated by reference in this prospectus before making an investment decision. If any of such risks occur, our business, financial condition or results of operations could be materially harmed, the market price of our securities could decline, and you could lose all or part of your investment.

In addition, each applicable prospectus supplement will contain a discussion of risks applicable to the particular type of securities that we are offering under that prospectus supplement. Prior to making a decision about investing in our securities, you should carefully consider the risk factors in this prospectus in addition to the specific risk factors discussed under the caption "Risk Factors" in the applicable prospectus supplement, together with all other information contained in the applicable prospectus supplement or appearing in, or incorporated by reference in, this prospectus.

FORWARD LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents we incorporate by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, which we refer to as the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act. We may identify these statements by the use of words such as believe, expect, anticipate, intend, potential, strategy, plan, and similar expressions. These forward-looking statements involve known and unknown risks and uncertainties. Our actual results may differ materially from those set forth in these forward-looking statements as a result of a number of different factors, including those described under the caption

Table of Contents

"Risk Factors" and elsewhere in this prospectus. Among others, the forward-looking statements which appear in this prospectus or may be incorporated by reference herein that may not occur include:

Our description of the rent reductions and deferrals which have been agreed between us and HPT, taken together with the fact that we were profitable in 2011, may imply that we will be able to operate profitably in the future. In fact, there are many factors which will impact the profitability of our future operations in addition to those stated items, including some factors which are beyond our control, such as the condition of the U.S. economy generally, the future demand for our goods and services and competition in our business. We have accumulated a significant deficit from several years of net losses prior to 2011 since we became a separate publicly owned company in 2007. There is no assurance that we will be able to produce future net income;

Certain statements may imply that our expense controls and other initiatives may cause improved financial results. In fact, current economic conditions in the United States may not improve and may decline, future market conditions in the trucking industry or otherwise may worsen and our initiatives may not be successfully sustained, each or all of which circumstances could result in our financial results not improving or our experiencing material and continuing losses;

Our environmental liability may be greater than we currently anticipate and legislation and regulation regarding climate change, including greenhouse gas emissions, and other environmental matters may be adopted, administered or enforced differently in the future, which could require us to expend significant amounts and cause our business to decline materially;

Our statements regarding completed acquisitions of travel center locations and negotiations to acquire other properties may imply that we will be able to operate our new locations profitably and complete all of our pending purchases. Many of the travel centers we have acquired produced operating results which may have caused the prior owners to exit these businesses and our ability to operate locations profitably depends upon many factors, including our ability to integrate new operations into our existing operations and some factors which are beyond our control such as the level of demand for our goods and services arising from the U.S. economy generally. We may not be able to successfully integrate travel center operations or operate these locations, or any of them, profitably in the future. We also may not successfully complete our negotiations for the properties for which we are negotiating;

Our business requires regular significant capital expenditures. The amount and timing of capital expenditures are often difficult to predict. Some capital projects cost more than anticipated. Currently unanticipated projects that we may be required to complete in the future, as a result of government programs or regulation, advances or changes made by our competition, demands of our customers, acquisitions or other matters, may arise and cause us to spend more than currently anticipated. Some capital projects take more time than anticipated. As a result of market conditions or capital constraints, we may defer certain capital projects and such deferral may harm our business or require us to make larger capital expenditures in the future;

Our statements regarding our cash and cash equivalents, amounts outstanding under our bank credit facility, our sales to HPT under our leases with HPT of qualifying improvements and our receipt of cash from such sales, our generation of cash flows from operating activities and our ownership of unencumbered real estate and other assets that may be additional sources of liquidity over time may imply that we have abundant working capital, cash liquidity and borrowing capacity. In fact, our regular operations require large amounts of working cash and at any point in time a significant portion of our bank credit facility typically is used to provide letters of credit to our suppliers, insurers, and taxing authorities. In addition, our business requires us to make significant capital expenditures to maintain our competitiveness, HPT is not

Table of Contents

obligated to purchase the improvements we may request and we do not know the extent to which we could monetize our existing unencumbered real estate. Accordingly, we may not have sufficient working capital or cash liquidity;

Our amended and restated credit facility that we entered into in October 2011 has a current maximum availability of \$200 million. The maximum amount available under the credit facility may be increased to \$300 million, subject to available collateral and lender participation. However, our borrowing and letter of credit availability under this facility is subject to our having qualified collateral, including eligible cash, accounts receivable and inventories that vary in amount from time to time. Accordingly, our borrowing and letter of credit availability at any time may be less than \$200 million, and if we do not have sufficient collateral or if we are unable to identify lenders willing to increase their commitments or join our credit facility, we may not be able to increase the credit facility if we would like to do so;

Our current observations as to economic and industry conditions may imply that economic conditions in the U.S. generally and the trucking and travel center industries in particular are improving and that our results of operations and cash flows from operations will improve in the future. However, any positive trend in fuel sales volumes may be the result of increased market share and not an improving market or may not continue. Also, improvements, if any, in the U.S. economy or in the trucking or travel center industries may not continue, and our fuel sales volumes may not continue to increase or our sales volumes may decline;

Statements of our beliefs with respect to various pending litigation may imply that we will prevail in our litigation. In fact, we may be unable to prevail in our pending litigation and any settlement or adverse ruling may have a material adverse effect on our business. Also, the legal and other expenses we may incur in connection with litigation will depend, in part, upon actions taken by other parties, which actions are not within our control, and these litigation costs may have a material adverse effect on our business;

We may not realize our expectation that we will benefit financially by participating in Affiliates Insurance Company, or AIC; and

We may not realize the advantages and the opportunities to expand our business in the future that we believe our continuing relationships with HPT, RMR, AIC and their affiliated and related persons and entities afford us.

These and other unexpected results may be caused by various factors, some of which are beyond our control, including:

The impact of changes in the economy and the capital markets on us and our customers and franchisees;

Compliance with, and changes to, federal, state and local laws and regulations, accounting rules, tax rates and similar matters;

Competition within the travel center industry;

Future fuel price increases, fuel price volatility, competition or other factors may cause us to need more working capital to maintain our inventories and carry our accounts receivable than we now expect;

In the past, increases in fuel prices have reduced the demand for the products and services that we sell because high fuel prices may have encouraged fuel conservation, directed freight business away from trucking or otherwise adversely affected the business of our customers. Future increases in fuel prices may have similar and other adverse effects on our business;

Table of Contents

Our suppliers may be unwilling or unable to maintain our current terms for our purchases on credit. If we are unable to purchase goods on reasonable credit terms, our required working capital may increase and we may incur material losses. In times of rising fuel and nonfuel prices our suppliers may be unwilling or unable to increase the credit amounts they extend to us, which may require us to increase our working capital investment. Also, in light of the recent credit market conditions and our historical operating losses, the availability and the terms of any credit we may be able to obtain are uncertain;

We are currently involved in several litigation matters and from time to time may be involved in additional litigation matters. Discovery and court decisions during litigation often result in unanticipated results. Litigation is usually expensive and distracting to management. We can provide no assurance as to the outcome of any of the litigation matters in which we are involved;

Acts of terrorism, outbreaks of so called pandemics or other manmade or natural disasters beyond our control may adversely affect our operating results;

Although we believe that we benefit from our continuing relationships with HPT, RMR, AIC and their affiliated and related persons and entities, actual and potential conflicts of interest with our managing directors, HPT, RMR and related persons and entities may present a contrary perception or result in litigation; and

As a result of certain trading in our shares during 2007, we experienced an ownership change as defined by section 382 of the Internal Revenue Code of 1986, as amended, or the Code. Consequently, we are unable to use our net operating loss generated in 2007. If we experience additional ownership changes, as defined in the Code, our net operating losses generated after 2007 could also be subject to limitations on usage.

We accumulated a significant deficit from several years of net losses since we became a publicly owned company on January 31, 2007. Although we generated net income for the year ended December 31, 2011, and our plans are intended to generate net income in future periods, there can be no assurance that these plans will succeed.

Results that differ from those stated or implied by our forward looking statements may also be caused by various changes in our business or market conditions as described more fully elsewhere in this prospectus or in our Annual Report on Form 10-K.

You should not place undue reliance upon forward looking statements.

Except as required by law, we undertake no obligation to update or revise any forward looking statement as a result of new information, future events or otherwise. All forward-looking statements included in this registration statement are made as of the date hereof.

Table of Contents

**RATIO OF EARNINGS TO FIXED CHARGES AND
RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED SHARE DIVIDENDS**

The following table sets forth our ratio of earnings to fixed charges for each of the periods indicated. As of the date of this prospectus, we have no preferred shares outstanding and we were not required to pay, and we have not declared or paid, any preferred share dividends for the periods set forth below. Accordingly, our ratio of earnings to combined fixed charges and preferred share dividends did not differ from the ratios presented below during any of these periods.

	Three Months Ended March 31, 2012 ⁽²⁾	Company Years Ended December 31,				Eleven Months Ended December 31, 2007 ⁽²⁾⁽³⁾	Predecessor One Month Ended January 31, 2007 ⁽²⁾
		2011	2010 ⁽²⁾	2009 ⁽²⁾	2008 ⁽²⁾		
Ratio of Earnings to Fixed Charges ⁽¹⁾	N/A	1.32	N/A	N/A	N/A	N/A	N/A

- (1) For purposes of calculating the ratio of earnings to fixed charges, fixed charges are calculated by adding (a) interest expensed and capitalized, (b) amortized premiums, discounts and capitalized expenses related to indebtedness and (c) an estimate of the interest within rental expense. Earnings are calculated by adding (i) pretax income or loss from continuing operations, (ii) income from equity investees, (iii) fixed charges, and (iv) amortization of capitalized interest, and subtracting interest capitalized.
- (2) For these periods, earnings were inadequate to cover fixed charges. The amount of the coverage deficiencies were \$13,741,000, \$66,560,000, \$94,363,000, \$43,261,000, \$105,609,000 and \$62,511,000 for the three months ended March 31, 2012, the years ended December 31, 2010, 2009, 2008, the eleven months ended December 31, 2007 and the one month ended January 31, 2007, respectively.
- (3) Includes the operating results of Petro Stopping Centers, L.P., which has since been merged with TA Operating LLC, since our acquisition of Petro Stopping Centers, L.P., which was completed on May 30, 2007.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we anticipate that the net proceeds from the sale of the securities that we may offer under this prospectus and any accompanying prospectus supplement will be used for general corporate purposes. We will set forth in a prospectus supplement relating to a specific offering any intended use for the net proceeds received from the sale of securities in that offering. We will have significant discretion in the use of any net proceeds. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of securities. We may invest the net proceeds temporarily until we use them for their stated purpose.

DILUTION

We will set forth in a prospectus supplement the following information, as required, regarding any dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

the net tangible book value per share of our equity securities before and after the offering;

the amount of the change in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and

the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

Table of Contents

DESCRIPTION OF THE COMMON SHARES AND PREFERRED SHARES WE MAY OFFER

The following description of our Amended and Restated Limited Liability Company Agreement, or our LLC agreement, and our Amended and Restated Bylaws, or our bylaws, together with the additional information included in any applicable prospectus supplements, summarize the material terms and provisions of our limited liability company interests (known as common shares) and any preferred shares that may be issued by us, but is not complete. Please refer to our LLC agreement and bylaws, each of which is incorporated by reference into the registration statement of which this prospectus is a part. We will describe in the applicable prospectus supplement relating to any offering of common shares or preferred shares the specific terms of the offering, including the number of shares offered, the initial offering price, and market price and distribution information.

Organization

We were formed in October 2006 under the Delaware Limited Liability Company Act, or the Delaware LLC Act, and will remain in existence until we are dissolved in accordance with our LLC agreement. Pursuant to our LLC agreement, our board of directors adopted bylaws on November 7, 2008, as amended and restated on January 25, 2010.

Purposes

Under our LLC agreement, we are permitted to engage in any business, purpose or activity that a limited liability company formed under Delaware law may lawfully conduct. Our board of directors is authorized to perform all acts it deems necessary or appropriate to conduct our business.

Fiduciary Duties

Our LLC agreement and bylaws provide that our business shall be managed under the direction of our board of directors, which shall have the power to appoint our officers. Our LLC agreement further provides that, except as otherwise specifically stated in our LLC agreement, our bylaws or in Delaware law, the authority, powers, functions and duties of our board of directors and officers generally shall be identical to the authority, powers, functions and duties of a board of directors and officers of a corporation organized for profit under the Delaware General Corporation Law, or DGCL.

Our LLC agreement provides that, except as provided therein, the fiduciary duties and obligations owed to our company and to our shareholders by our directors and officers shall be the same as the respective duties and obligations owed by directors and officers of a corporation organized under the DGCL to their corporation and stockholders, respectively. However, notwithstanding any duty (including any fiduciary duty) that might otherwise exist in law or in equity, our LLC agreement and bylaws specifically permit our directors and their affiliates to engage in other business interests and activities, including those that compete with us, provided that none of our confidential information may be used. Also, business opportunities that become available to our directors or their affiliates need not first be presented to us. In addition, our LLC agreement eliminates the personal liability of each member of our board of directors to us and our shareholders for monetary damages for breach of fiduciary duty as a director; provided, however, that the foregoing shall not eliminate the liability of a director (i) for any breach of such director's duty of loyalty to us or our shareholders as modified by our LLC agreement, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law or (iii) for any transaction from which such director derived an improper personal benefit.

In addition, our bylaws provide that, to the fullest extent permitted by law, our board of directors or our shareholders may ratify and make binding on us any past action or inaction by us or our officers to the extent that our board of directors or our shareholders could have originally authorized the matter. Moreover, under our bylaws, to the fullest extent permitted by law, any past action or inaction

Table of Contents

questioned in any shareholder's derivative proceeding or any other proceeding on the ground of lack of authority, defective or irregular execution, adverse interests of a director, officer or shareholder, non-disclosure, miscalculation, the application of improper principles or practices of accounting, or otherwise, may be ratified, before or after judgment, by our board of directors or by our shareholders and, if so ratified, shall have the same force and effect as if the questioned action or inaction had been originally duly authorized, and such ratification shall be binding upon us and our shareholders and shall bar any claim or execution of any judgment in respect of such questioned action or inaction.

Agreement to be bound by LLC agreement and bylaws and disputes by shareholders

By acquiring a common share in us, you will be admitted as a member of our company (which we call a "shareholder") and will be bound by the terms of our LLC agreement and bylaws. Pursuant to our LLC agreement, each shareholder and each person who acquires a share from a shareholder grants our Chief Executive Officer, President and Secretary (and, in the event of dissolution, any liquidator appointed pursuant to the LLC agreement) the power to execute and file documents necessary or appropriate for our engaging in any lawful business and exercising all powers and privileges permitted under the Delaware LLC Act, and the authority to execute any duly adopted amendments to our LLC agreement. Our LLC agreement and our bylaws provide for arbitration of certain disputes, claims and controversies, including that any action brought against us or any director, officer, manager (including RMR or its successor), agent or employee of ours, by a shareholder, including derivative and class actions, shall, on the demand of any party to such dispute, be resolved through binding arbitration in accordance with the procedures set forth in our bylaws.

Conduct of business

Our LLC agreement and bylaws provide that our day to day business shall be conducted by or under the direction of our board of directors and such officers with such titles and duties as our board of directors may from time to time appoint. Our board of directors is authorized to amend or modify our bylaws, which such bylaws contain provisions that govern our activities. Our board of directors is also authorized to appoint committees, each of which shall have at least one director.

Capital contributions

Shareholders are not obligated to make capital contributions to us.

Shareholder liability and agreements

Limited liability in jurisdictions in which we do business. Although limitations on the liability of shareholders for the obligations of a limited liability company have not been clearly established in some jurisdictions, we will operate in a manner that our board of directors considers reasonably appropriate to preserve the limited liability of our shareholders.

Liability for breach of the LLC agreement or bylaws. Under our LLC agreement and bylaws, each of our shareholders has agreed to indemnify us and any of our subsidiaries or affiliates, to the fullest extent permitted by law, against losses arising from such shareholder's breach of or failure to fully comply with any covenant, condition or provision of our LLC agreement or bylaws. Such indemnification includes, without limitation, to the fullest extent permitted by law, indemnification against losses arising from any action by or against us or our subsidiaries or affiliates in which the shareholder is not the prevailing party.

Actions requiring regulatory compliance implicating us. Under our bylaws, if any shareholder, whether acting individually or in concert with a group, as determined by our board of directors, by virtue of the shareholder's ownership interest in us or actions taken by the shareholder affecting us, triggers the application of any requirement or regulation of any federal, state, municipal or other

Table of Contents

governmental or regulatory body on us or any of our subsidiaries (as defined in our bylaws) or any of our or our subsidiaries' businesses, assets or operations, including, without limitation, any obligations to make or obtain any governmental actions, consents or approvals, then such shareholder is required to promptly take all actions necessary and fully cooperate with us to ensure that such requirements or regulations are satisfied without restricting, imposing additional obligations on or in any way limiting our or our subsidiaries' businesses, assets, operations or prospects. If the shareholder fails or is otherwise unable to promptly take such actions so as to cause satisfaction of such requirements or regulations, then under our bylaws, the shareholder shall promptly divest a sufficient number of our shares necessary to cause the application of such requirement or regulation to not apply to us or any of our subsidiaries. If the shareholder fails to cause such satisfaction or divest itself of such sufficient number of our shares by not later than the 10th day after triggering such requirement or regulation, then any of our shares beneficially owned by such shareholder at and in excess of the level triggering the application of such requirement or regulation shall, to the fullest extent permitted by law, be automatically transferred to a trust for the exclusive benefit of one or more charitable beneficiaries designated by us and any actions triggering the application of such a requirement or regulation may be deemed by us to be of no force or effect. Additionally, if a shareholder who triggers the application of any regulation or requirement fails to satisfy the requirements or regulations or to take curative actions within ten (10) days of triggering such requirements or regulations, our board of directors is authorized to take all actions which the board of directors deems appropriate to require compliance or to preserve the value of our assets; and we may charge the offending shareholder for our costs and expenses as well as any damages which we may incur.

As an example and not as a limitation, as of the date of this prospectus, we hold a controlling interest in gaming businesses in Louisiana. Louisiana law provides that any person who owns five percent or more of gaming businesses in Louisiana shall provide detailed personal history and financial information and be approved by the Louisiana Gaming Control Board. Accordingly, if a shareholder acquires five percent or more of our company and refuses to provide us with information required to be submitted to the Louisiana Gaming Control Board or if the Louisiana Gaming Control Board declines to approve such a shareholder's ownership of our company, then, in either event, shares owned by such a shareholder necessary to reduce its ownership to less than five percent of our company may be deemed shares in excess of our 9.8% ownership limitation (described below under the sub-heading "Restrictions on share ownership and transfers") and shall be subject to the ownership limitation provisions of our LLC Agreement.

As a further example and not as a limitation, as of the date of this prospectus, we hold a controlling ownership position in a company formed and licensed as an insurance company in the State of Indiana. The laws of the State of Indiana have certain regulatory requirements for any person who seeks to control (as defined under Indiana law) a company which itself controls an insurance company domiciled in the State of Indiana, including by exercising proxies representing 10% or more of the company's voting securities. Accordingly, if a shareholder seeks to exercise proxies for a matter to be voted upon at a meeting of our shareholders without having obtained any applicable approvals from the Indiana insurance regulatory authorities, such proxies representing 10% or more of our voting securities will, subject to certain provisions of our bylaws addressing quorum requirements, be void and of no further force or effect.

Compliance with law. Under our bylaws, shareholders are required to comply with all applicable requirements of federal and state laws, rules and regulations in connection with a shareholder's ownership interest in us, as well as all other laws which apply to us or any of our subsidiaries or any of our or our subsidiaries' businesses, assets or operations and which require action or inaction on the part of a shareholder.

Table of Contents

Representations, warranties and covenants made to governmental or regulatory bodies. Under our bylaws, to the fullest extent permitted by law, any representation, warranty or covenant made by a shareholder with any governmental or regulatory body in connection with the shareholder's interest in us or any of our subsidiaries is deemed to be simultaneously made to, for the benefit of and enforceable by, us and any of our subsidiaries, as applicable.

Unlawful distributions. We do not currently intend to make any distributions to our shareholders. However, a shareholder who knowingly receives a distribution made in violation of the Delaware LLC Act is liable to return such distribution for three years from the date of the distribution if an action to recover the distribution from the shareholder is commenced prior to the end of the three year period and an adjudication of liability against the shareholder is made. Under the Delaware LLC Act, we generally cannot make a distribution that would cause our liabilities to exceed the fair value of our assets.

Description of the rights of our common shares

Our common shareholders are entitled to one vote for each share held of record on our books for all matters submitted to a vote of shareholders. The holders of our common shares are entitled to receive distributions, if any, ratably when, as and if authorized by our board of directors out of assets legally available therefor, subject to any preferential distribution rights of any newly created class or series of shares. Upon our dissolution, liquidation or winding up, the holders of common shares are entitled to receive our net assets available after the satisfaction (whether by payment or reasonable provision for payment) of all debts and other liabilities, ratably subject to the preferential rights of any newly created class or series of shares. Holders of common shares have no preemptive, subscription, redemption or conversion rights.

Shareholder voting rights

Generally, our board of directors has broad powers to conduct our business and manage our affairs without shareholder approval or voting. Whenever shareholder approval is required for any action either by the terms of our LLC agreement or by applicable law, the general rule under our LLC agreement is that, unless otherwise required by law, the affirmative vote of 75% of each class and series of shares with voting power outstanding, voting as a single class, will be required; provided, however, if our board of directors approves in advance a particular action, only a majority of the votes cast shall be required. In an uncontested election, the election of directors requires a majority vote of the votes cast. In a contested election, the election of directors requires a majority vote of the then outstanding common shares. Our board has the power to revise these requirements as may be allowed by law, our LLC agreement or our bylaws.

Our board of directors may issue additional securities, including preferred shares

Our LLC agreement authorizes us to issue an unlimited number of additional securities and rights to buy securities for the consideration and on the terms and conditions determined by our board of directors without the approval of our shareholders, including the right to issue any number of common shares and preferred shares or class or series of common or preferred shares. Our board of directors is authorized to set the preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications or terms or conditions of redemption for each such class or series. Whenever preferred shares are to be sold pursuant to this prospectus, we will file a prospectus supplement relating to that sale which will specify:

the number of shares in the series of preferred shares;

the designation for the series of preferred shares by number, letter or title that shall distinguish the series from any other series of preferred shares;

Table of Contents

the dividend rate, if any, and whether dividends on that series of preferred shares will be cumulative, noncumulative or partially cumulative;

the voting rights of that series of preferred shares, if any;

any conversion provisions applicable to that series of preferred shares;

any redemption or sinking fund provisions applicable to that series of preferred shares and any restrictions thereon;

the liquidation preference per share of that series of preferred shares, if any; and

the terms of any other preferences or rights, if any, applicable to that series of preferred shares.

Regardless of any rights of our common shareholders that are described in this section, the rights, preferences and privileges of our common shares and common shareholders are subject to, and may be adversely affected by, the rights of the holders of shares of any new class or series, whether common or preferred, that our board of directors may designate and issue in the future.

We believe that the ability of our board of directors to issue one or more classes or series of shares with specified preferences will provide us with flexibility in structuring possible future financings and acquisitions, and in meeting other business needs that may arise. All shares are available for issuance without action by our shareholders, unless such action is required by applicable law or the rules of the principal stock exchange on which our securities may be listed. Nonetheless, the unrestricted ability of our board to issue additional shares, classes and series of shares may have adverse consequences to existing shareholders. Please also see "Anti-takeover provisions".

Restrictions on share ownership and transfers

Our LLC agreement provides that no person or group of persons acting together may own, directly or indirectly, including through application of Section 318(a) of the Code, as modified by Section 856(d)(5) thereof, more than 9.8% of the number or value of any class or series of our outstanding shares. Any person who acquires or attempts to acquire ownership of our shares that will or may violate this 9.8% ownership limitation must give notice to us and provide us with any other information that we may request. The ownership limitations in our LLC agreement are effective against all of our shareholders. Our board of directors may grant an exemption from the ownership limitation if it is satisfied that the shareholder's ownership is in our best interests and would not cause a default under the terms of any contract to which we are a party or would reasonably expect to become a party, provided that any duties of our board of directors, including fiduciary duties, to the shareholder requesting the exemption shall not apply, to the fullest extent permitted by law, to such determination. In addition, our board of directors may from time to time increase or decrease our ownership limitations, provided that any decrease may be made only prospectively as to subsequent holders (other than a decrease as a result of a retroactive change in existing law, in which case such change shall be effective immediately).

If a person attempts a transfer of our shares in violation of our ownership limitations, then that number of shares which would cause the violation will be automatically deemed transferred to a trust for the exclusive benefit of one or more charitable beneficiaries designated by us. The prohibited owner will not acquire any rights in the shares held in trust, will not benefit economically from ownership of the shares held in trust, will have no rights to distributions and will not possess any rights to vote the shares held in trust. This automatic transfer will be deemed to be effective as of the close of business on the business day prior to the date of the violative transfer.

Table of Contents

Additionally, our bylaws impose certain restrictions on the transfer of our shares in order to help us preserve the tax treatment of our net operating losses and other tax benefits. These restrictions generally provide that transfers of our shares to a person, entity or group which is then, or would become as a result of such transfer, an owner of 5% or more of our outstanding shares (i) would be void in total, for transferees then already owning 5% or more of our shares and (ii) would be void to the extent the transfer would so result in such level of ownership by the proposed transferee, for other transferees. Furthermore, the restrictions generally provide that the shares sought to be transferred in violation of these provisions shall be automatically deemed transferred to a charitable trust in accordance with the provisions of our LLC agreement. The prohibited transfer threshold was set at 5% because transfers at or above that level could result in limitations on our ability to use our net operating losses and other tax benefits to reduce our future taxable income, as provided under the Code and related tax rules. Shareholders owning 5% or more of our outstanding shares as of November 9, 2009, would not have their shares owned at and above the 5% ownership threshold transferred to a charitable trust or otherwise divested solely as a result of the adoption of these restrictions. Additionally, these restrictions will not apply if the transferor or the transferee obtains the written approval of our board of directors, which such approval may be conditionally given.

Every owner of more than 5% of any class or series of our shares is required to give written notice to us within thirty (30) days after our request and after the end of each taxable year stating the name and address of the owner, the number of shares of each class and series of our shares which the owner beneficially owns, and a description of the manner in which those shares are held. In addition, upon our request, each owner of more than 5% of any class or series of our shares is required to provide us with any additional information that we may request in order to assist us in ensuring compliance with the foregoing share ownership limitations. Furthermore, as a condition to the registration of the transfer of any of our shares in our share register, any person who is a beneficial, legal or record holder of shares, and any proposed transferee, must provide such information as may be requested by us from time to time in order to determine compliance with the aforementioned restrictions or the status of our tax benefits.

The restrictions described above will not preclude the settlement of any transaction entered into through the facilities of any securities exchange through which our shares are traded. Our LLC agreement and our bylaws provide, however, that the fact that the settlement of any transaction occurs will not negate the effect of any of the foregoing limitations and any transferee in these kinds of transactions is subject to all of the provisions and limitations described above.

These ownership limitations could have the effect of delaying, deferring or preventing a takeover or other transaction in which our common shareholders might receive a premium for their shares over the then prevailing market price or which such holders might believe to be otherwise in their best interest. For more detail concerning these share ownership limitations, please see our LLC agreement and our bylaws, each of which is incorporated by reference into the registration statement of which this prospectus is a part.

Election and removal of members of our board of directors

As of the date of this prospectus, our board of directors consists of five members. Our LLC agreement and bylaws provide that our board of directors establishes the number of our directors. However, there may not be less than three nor more than seven directors, unless the directors then in office unanimously determine to change the permitted number of directors. In the event of a vacancy on our board, whether occurring due to an increase in size of our board of directors or by the death, resignation or removal of any director, a majority of the remaining directors will fill the vacancy and the director elected to fill the vacancy will serve for the remainder of the full term of the directorship in which the vacancy occurred or is created.

Table of Contents

Our LLC agreement divides our board of directors into three classes, or groups. The term of the directors in Group III will expire in 2013; the term of the directors in Group I will expire in 2014; and the term of the directors in Group II will expire in 2015. Shareholders elect directors of each group for three year terms upon the expiration of their current terms. Shareholders elect only one group of directors each year. There is no cumulative voting in the election of directors.

We believe that classification of the board of directors helps to ensure continuity of our business strategies and policies. However, the classified board provision could have the effect of making the replacement of incumbent directors more time consuming and difficult. At least two annual meetings of shareholders will generally be required to effect a change of a majority of our directors. Also, because our board of directors may increase the number of directors and set the classification of the expanded board, it may take more than two years to change a majority of our directors.

Our LLC agreement and bylaws provide that a director may be removed only for cause (as defined in our LLC agreement and bylaws) by the unanimous vote of the other directors then in office. In addition, our LLC agreement and bylaws provide that our entire board of directors (but not less than our entire board of directors) may be removed only for cause by the affirmative vote of at least 75% of the outstanding shares of each class and series of our shares with voting power, voting separately.

The provisions described in this section and any other provisions relating to the rights of a class or series of our shares may be subject to the rights of any class or series of shares that the board of directors may authorize from time to time.

Amendment of our LLC agreement

General. Amendments to our LLC agreement may be proposed only by or with the consent of our board of directors. In the event that applicable law requires that amendments may be proposed by our shareholders, the ownership percentage of shareholders required to propose an amendment shall be the ownership percentage specified by law, or, if shareholders are permitted by law to propose amendments but no required ownership percentage is set, then shareholders holding at least 25% of our outstanding shares shall be required. Amendments proposed by our board of directors which require a vote of our shareholders may be adopted by a plurality of shares voting, unless applicable law requires a greater number. Amendments proposed by shareholders, if any, which are not approved by our board of directors shall require the affirmative vote of 75% of each class and series of outstanding shares, unless applicable law requires a lesser vote.

No shareholder approval. Our board of directors generally may make amendments to our LLC agreement without the approval of our shareholders as follows:

to change our name, the location of our principal place of our business, our registered agent or our registered office;

to effect the admission, substitution or removal of shareholders in accordance with our LLC agreement and the Delaware LLC Act;

any change as to which our board of directors reasonably determines is customarily of the type contained in the bylaws of a corporation organized under the DGCL;

to create, dissolve, merge, consolidate or convert us or any of our subsidiaries, or to convey any or all of our assets, if the principal purpose of such action as determined by our board of directors is to effect a change in the legal form of our business, including, but not limited to, to change the form of our existence to a corporation, limited partnership, or trust or other legal entity or to change the jurisdiction under whose laws we are organized;

to make an amendment that our board of directors determines to be necessary or appropriate for the authorization or issuance of additional securities or rights to acquire securities;

Table of Contents

to change our fiscal year or taxable year and related changes; and

to make any amendment expressly permitted in our LLC agreement to be made by our board of directors acting without shareholder or member approval.

In addition, our board of directors may make amendments to our LLC agreement without the approval of our shareholders if our board of directors determines that those amendments:

do not adversely affect our shareholders (including any particular class or series of shares as compared to other classes or series of shares) in any material respect except that such limitation shall not apply to any change that our board of directors determines to be in the best interest of our shareholders as a whole and regardless of whether or not such provision is adverse to any class or series of our shares or particular shareholder or group of shareholders;

are necessary or appropriate to satisfy any requirements, conditions or guidelines contained in any opinion, directive, order, ruling or regulation of any federal or state agency or judicial authority or contained in any federal or state statute;

are necessary or appropriate to facilitate the trading of our shares or to comply with any rule, regulation, guideline or requirement of any securities exchange on which the shares are or will be listed for trading, compliance with any of which our board of directors deems to be in our and our shareholders' best interests;

are necessary or appropriate to implement a defensive shareholder rights plan, similar to a shareholder rights plan or "poison pill" for corporations;

are necessary or appropriate for any action taken by our board of directors relating to splits or combinations of shares; or

are required to effect the intent of the provisions of our LLC agreement, are otherwise contemplated by our LLC agreement or are required to correct any mistake or ambiguity in our LLC agreement, as determined by our board of directors.

Amendment to our bylaws

Our bylaws may be amended or repealed or new or additional bylaws may be adopted only with the vote or written consent of a majority of our board of directors.

Merger, sale or other disposition of assets

Except with respect to any transaction having as its principal purpose the changing of our legal form of existence and/or jurisdiction of organization (as described above), any merger, combination or consolidation of us into another entity may only be effected by an agreement approved by our board of directors and by our shareholders; provided, however, our board of directors without shareholder approval may mortgage, sell and leaseback, pledge, hypothecate or grant a security interest in some, all or substantially all of our assets and permit the sale upon foreclosure or other realization of such an encumbrance. If applicable law permits the foregoing action without board approval, the shareholder vote required shall be 75% of each class and series of outstanding shares voting separately, at the time of the vote, unless applicable law requires a lesser amount; but any such transaction which is approved by our board may be approved by shareholders holding a plurality of all classes and series of our shares, voting as a single class, unless applicable law requires a greater or different vote.

Our LLC agreement provides that our shareholders are not entitled to dissenters' rights of appraisal in the event of a merger, consolidation or conversion involving TA, a sale of all or substantially all of our assets, or any other transaction or event.

Table of Contents

Termination and dissolution

We were formed as a perpetual entity to continue in existence until dissolved pursuant to the terms of our LLC agreement. We will dissolve upon: (i) the election of our board of directors to dissolve us which is approved by our shareholders; (ii) the sale, exchange or other disposition of all or substantially all of our assets and properties unless otherwise determined by our board of directors; (iii) the entry of a decree of judicial dissolution of us; or (iv) the reduction of the number of our members to zero. The shareholder vote required to approve our board of directors' decision to dissolve our company shall be a majority of the votes cast of our voting shares, voting together as a single class, unless a greater amount or separate class voting is required by applicable law. Shareholders shall have no right to dissolve our company except as provided for in our LLC agreement.

Shareholder meetings, proxies and quorums

Any action required or permitted to be taken at a meeting of shareholders may be taken without a meeting only by a unanimous written consent of the shareholders entitled to vote on the matter.

Our LLC agreement and bylaws require that a meeting of shareholders, called by our board of directors, be held annually. The chairman of our board of directors, if any, or a majority of our entire board of directors may call a special meeting of our shareholders. Shareholders may cause a special meeting of the shareholders to be held only if applicable law or applicable rules of the principal exchange on which our common shares are listed so require, and then the percentage of shareholders required to cause a special meeting of shareholders shall be the maximum percentage specified by applicable law or stock exchange rule. If applicable law or stock exchange rule requires such an action but does not specify a maximum percentage, the percentage shall be specified from time to time by our board of directors, provided, however, that such percentage shall not be higher than 75%. If the shareholders have the right to call a special meeting, upon written request by the requisite number of shareholders in accordance with the procedures contained in our LLC agreement and bylaws, our secretary shall call such a meeting.

Shareholders may vote either in person or by proxy at meetings. Only shareholders of record may vote. The holders of a majority of the outstanding shares of the class or classes or series for which a meeting has been called represented in person or by proxy shall constitute a quorum unless any action by the shareholders requires approval by holders of a greater percentage of the shares, in which case the quorum for approval of that action shall be the greater percentage. If a quorum is not present at any meeting of shareholders, the chairperson of the meeting may adjourn the meeting from time to time without us being required to set a new record date or provide any additional notice of such meeting, other than by announcement at the meeting at which the adjournment is taken.

Anti-takeover provisions

The following provisions, among others, of our LLC agreement and bylaws may delay or prevent a change of control of us:

separate prohibitions on the ownership of 5% or more of our shares or in excess of 9.8% of any class or type of our equity securities by any person or group;

the regulatory compliance and disclosure requirements set forth in our bylaws, including provisions that require the divestment of our shares by a shareholder in the event that such shareholder, by virtue of such shareholder's ownership interest in us or actions taken by the shareholder affecting us, triggers the application of any requirement or regulation of any federal, state, municipal or other governmental or regulatory body on us or any of our subsidiaries or any of our or our subsidiaries' businesses, assets or operations and such shareholder fails or is otherwise unable to promptly take such actions so as to cause satisfaction of such requirements

Edgar Filing: TRAVELCENTERS OF AMERICA LLC - Form 424B5

Table of Contents

or regulations without imposing additional obligations on or in any way limiting our or our subsidiaries' businesses, assets, operations or prospects;

a provision in our LLC agreement to the effect that, with respect to any "Business Combination" (as such term is defined in Section 203 of the DGCL), the provisions of Section 203 of the DGCL shall be applied with respect to us as though we were a Delaware corporation, our shareholders were stockholders of such corporation and our board of directors was the board of directors of such corporation;

the ability of our board of directors, without a shareholders' vote, to issue additional common shares and other series or classes of shares with rights which may be established at the time of issuance;

the classification of our board of directors and the election of each class for three year staggered terms;

the qualifications required of any individual nominated for or elected to be a director that are set forth in our bylaws;

the requirement, given our ownership of AIC, which makes us an insurance holding company under applicable state law, that anyone who intends to solicit proxies for a person to serve as one of our directors or for another proposal of business not approved by our board of directors may be required to receive pre-clearance from the concerned insurance regulators;

requirements that any person nominated to be a director comply with clearance and pre-clearance requirements of state laws applicable to our business including clearance and pre-clearance by Nevada and Louisiana gambling authorities and Indiana insurance regulators;

the requirement that an individual director may only be removed for cause and then only by unanimous vote of the other directors, the requirement of a 75% shareholders' vote and cause requirements to remove our entire board of directors and the inability of shareholders to remove any single director without removing our entire board of directors;

the requirement of a 75% shareholders' vote to approve certain transactions, such as a merger or a sale of substantially all our assets, unless those transactions are approved by our board of directors;

the ability of our directors to expand our board and fill vacancies which may be created by the board of directors;

shareholder voting rights and standards which require larger majorities for approval of actions which are not approved by our directors than for actions which are approved by our directors;

the requirement that amendments to our LLC agreement may only be proposed by or with the consent of our board of directors;

the authority of our board of directors, and not our shareholders, to adopt, amend or repeal our bylaws;

the limitations on the ability of our shareholders to call a special meeting of shareholders, nominate directors or make shareholder proposals and the inability of our shareholders to act by written consent unless unanimous; and

Edgar Filing: TRAVELCENTERS OF AMERICA LLC - Form 424B5

the advance notice requirements for shareholder nominations for our directors and for shareholder proposals and restrictions which may prevent the presentation of such nominations or proposals in our proxy statements.

Table of Contents

These requirements may prevent you from realizing a takeover premium for any of our shares which you own.

In addition, our leases with HPT prevent the merger of us into another entity, the acquisition by any person or group of beneficial ownership of 9.8% or more of the voting shares or the power to direct the management and policies of us or any of our subsidiary tenants or guarantors; the sale of a material part of the assets of us or any such tenant or guarantor; or the cessation of certain continuing directors constituting a majority of the board of directors of us or any such tenant or guarantor; in each case without the consent of HPT. Our rent deferral agreement with HPT has change of control covenants so that amounts deferred will immediately be payable to HPT in the event we experience a change of control while deferred rent is unpaid. More specifically, events of default under our rent deferral agreement include any event of default under our leases with HPT, the election of any director to our board of directors who was not nominated or appointed by the then members of our board of directors or the adoption by our shareholders of any proposal (other than a precatory proposal) not recommended for adoption by the then members of the board of directors. Any default by us under our rent deferral agreement will also constitute an event of default under our existing lease agreements with HPT. Our shareholders agreement with respect to AIC, our business management and shared services agreement with RMR and our credit facility also contain change of control provisions, as described below.

Liability of shareholders for breach of restrictions on ownership

Our leases with HPT, our business management and shared services agreement with RMR, our credit facility and our shareholders agreement with respect to AIC each provide that our rights and benefits under those agreements may be terminated in the event that anyone acquires more than 9.8% of our shares or we experience some other change in control, as defined in those agreements, without the consent of HPT, RMR or the lenders under the credit facility, respectively, and that AIC and the other shareholders of AIC may have rights to acquire our interests in AIC if such an acquisition occurs or if we experience some other change of control. If a breach of the 9.8% ownership limitation results in a lease or credit facility default, a loss of the benefits of our management and shared services agreement or a loss of our ownership interests in AIC, the shareholder or shareholders causing the breach may be liable to us and may be liable to our other shareholders for damages. Additionally, any shareholder who knowingly violates the bylaw provisions pertaining to 5% ownership will be liable to us for damages suffered as a result of such violation, including but not limited to damages resulting from a reduction in, or elimination of, our ability or right to utilize our tax benefits. These damages may be in addition to the loss of beneficial ownership and voting rights of the shares owned by the breaching shareholder or shareholders, as described above, and these damages may be material.

Stock exchange listing; transfer agent and registrar

Our common shares are listed on the NYSE MKT under the symbol "TA." On June 21, 2012, the last reported sale price for our common shares on the NYSE MKT was \$5.09.

The transfer agent and registrar for our common shares is Wells Fargo Shareowner Services.

Table of Contents

DESCRIPTION OF THE DEBT SECURITIES WE MAY OFFER

The following description, together with the additional information we may include in any applicable prospectus supplements, describes the material terms and conditions of the debt securities that we may offer under this prospectus. This description is incomplete, and while the description below will apply generally to any future debt securities we may offer under this prospectus, we will describe the particular terms in more detail in the applicable prospectus supplement.

We may issue senior notes under one or more senior indentures, to be entered into with a trustee to be named in the senior indenture. We may issue subordinated notes under one or more subordinated indentures, to be entered into with a trustee to be named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus forms a part. We use the term "indentures" to refer to both the senior indenture and the subordinated indenture. The indentures will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We use the term "trustee" to refer to either the senior trustee or the subordinated trustee, as applicable.

We will describe in a prospectus supplement the specific terms of any debt securities we may offer pursuant to this prospectus. If indicated in a prospectus supplement, the terms of such debt securities may differ from the terms described below. The following summary of the material provisions of the senior notes, subordinated notes and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities, including the definitions of certain terms. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

If we decide to issue any senior notes or subordinated notes pursuant to this prospectus, we will describe in a prospectus supplement the terms relating to each series of notes that we may issue, including the following:

the title;

whether the notes will be senior or subordinated;

any limit on the amount that may be issued;

whether or not we will issue the series of notes in global form and, if so, who the depository will be;

the maturity date;

the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

the place(s) where payments will be payable;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

the date, if any, after which, and the price at which, we may, at our option, redeem the series of notes pursuant to any optional redemption provisions;

the date, if any, on which, and the price(s) at which we are obligated to redeem, or at the holder's option to purchase, the series of notes pursuant to any mandatory sinking fund provisions or otherwise;

Table of Contents

the denominations in which we will issue the series of notes, if other than denominations of \$1,000 and any integral multiple thereof;

any addition to, or modification or deletion of, any event of default or any covenant of TravelCenters specified in the applicable indenture with respect to such series of notes;

a discussion of any material or special U.S. federal income tax considerations;

whether or not the notes will be secured or unsecured, and the terms of any secured debt; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

The debt securities may be issued as original issue discount securities. An original issue discount security is a debt security, including any zero-coupon debt security, which:

is issued at a price lower than the amount payable upon its stated maturity; and

provides that upon redemption or acceleration of the maturity, an amount less than the amount payable upon the stated maturity, shall become due and payable.

Under the indentures, we will have the ability, in addition to the ability to issue debt securities with terms different from those of debt securities previously issued, without the consent of the holders, to reopen a previous issue of a series of debt securities and issue additional debt securities of that series, unless such reopening was restricted when the series was created, in an aggregate principal amount determined by us. All such debt securities including those issued pursuant to such reopening shall vote together as a single class.

Conversion or exchange rights

We will set forth in the applicable prospectus supplement the terms on which a series of notes may be convertible into or exchangeable for common shares or other securities of ours. Such terms will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of common shares or other securities of ours that the holders of such series of notes receive would be subject to adjustment.

Consolidation, merger or sale

Unless otherwise noted in a prospectus supplement, the indentures do not contain any covenant restricting our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. Any successor or acquirer of such assets, however, must assume all of our obligations under the indentures or the notes, as appropriate.

Events of default under the indentures

The following are events of default under the indentures with respect to any series of notes that we may issue:

if we fail to pay interest when due and our failure continues for thirty (30) days and the time for payment has not been extended or deferred;

if we fail to pay the principal, or premium, if any, when due;

if we fail to observe or perform any other covenant contained in the notes or the indentures, other than a covenant specifically relating to another series of notes, and our failure continues for ninety (90) days after we receive notice from the trustee or holders of at least ten percent (10%) in aggregate principal amount of the outstanding notes of that series; and

Table of Contents

if we experience specified events of bankruptcy, insolvency or reorganization.

The supplemental indenture or the form of note for a particular series of notes may include additional events of default or changes to the events of default described above. For any additional or different events of default applicable to a particular series of notes, see the prospectus supplement relating to such series.

If an event of default with respect to notes of any series occurs and is continuing, the trustee or the holders of at least twenty-five percent (25%) in aggregate principal amount of the outstanding notes of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, on the notes due and payable immediately.

The holders of a majority in principal amount of the outstanding notes of an affected series may waive any default or event of default with respect to such series and its consequences, except (i) uncured defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture; and (ii) certain covenants or provisions which under the terms of the indenture cannot be modified or amended without the consent of the holder of each outstanding note affected. Any such waiver shall cure such default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of notes, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding notes 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, with respect to the notes of that series, provided that:

the direction is not in conflict with any law or the applicable indenture;

the trustee may take any other action deemed proper by it which is not inconsistent with such direction; and

subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the notes of any series will only have the right to institute a proceeding under the indenture or to appoint a receiver or another trustee, or to seek other remedies if:

the holder has given written notice to the trustee of a continuing event of default with respect to that series;

the holders of at least twenty-five percent (25%) in aggregate principal amount of the outstanding notes of that series have made written request, and such holders have offered reasonable indemnity to the trustee to institute such proceedings as trustee; and

the trustee does not institute such proceeding within sixty (60) days after its receipt of such notice, request and offer of indemnity, and does not receive from the holders of a majority in aggregate principal amount of the outstanding notes of that series other conflicting directions within such sixty (60) day period.

These limitations do not apply to a suit instituted by a holder of notes if we default in the payment of the principal, premium, if any, or interest on, the notes.

Table of Contents

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

Modification of indentures; waiver

We and the trustee may change an indenture without the consent of any holders with respect to certain matters, including:

to cure any ambiguity, defect or inconsistency in such indenture;

to change anything that does not materially adversely affect the interests of any holder of notes of any series;

to provide for the assumption, by a successor or the acquirer of all or substantially all of our assets, of our obligations under such indenture;

to add to our covenants for the benefit of holders of notes of any series or to surrender any right or power conferred upon us; and

to comply with any requirement of the SEC in connection with the qualification of an indenture under the Trust Indenture Act.

In addition, under the indentures, the rights of holders of a series of notes may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding notes of each series that is affected. Certain changes, however, may only be made with the consent of each holder of any outstanding notes affected, including the following:

changing the fixed maturity of such series of notes;

reducing the principal amount, the rate of interest, or any premium payable upon the redemption of any notes; or

extending the time of payment of interest, or any premium payable upon the redemption of any such notes; or

reducing the percentage in principal amount of notes, the consent of whose holders is required for any such supplemental indenture, or the consent of whose holders is required for any waiver provided for in the indenture; or

changing our obligation to maintain an office or agency in the places and for the purposes specified in the indenture; or

modifying certain provisions of the indenture which require the consent of, or action by, a specified minimum percentage of holders, except to increase any such percentages or to provide that certain other provisions of the indenture cannot be modified or waived without the consent of each of the holders of the affected notes.

Form, exchange and transfer

We will issue the notes of any series only in fully registered form without coupons and, unless otherwise specified in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures will provide that notes of a series may be issuable in temporary or permanent global form and may be issued as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, or another depository named by us and identified in a prospectus supplement with respect to that series.

Edgar Filing: TRAVELCENTERS OF AMERICA LLC - Form 424B5

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, notes of any series will be

Table of Contents

exchangeable for other notes of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders may present their notes, duly endorsed or with the form of transfer duly executed if so required, at the office of the security registrar or at the office of any transfer agent designated by us for such purpose. Unless otherwise provided in the notes to be transferred or exchanged, no service charge will be made for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges. The security registrar and any transfer agent, in addition to the security registrar, initially designated by us for any notes will be named in the applicable prospectus supplement. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the notes of each series.

If the notes of any series are to be redeemed, we will not be required to:

issue, register the transfer of, or exchange any notes of that series during a period beginning at the opening of business fifteen (15) days before the day of mailing of a notice of redemption of any such notes that may be selected for redemption and ending at the close of business on the day of such mailing; or

register the transfer of or exchange any notes so selected for redemption, in whole or in part, except the unredeemed portion of any such notes being redeemed in part.

Information concerning the trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only such duties as are specifically set forth in the indentures. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of notes unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur. The trustee is not required to spend or risk its own money or otherwise become financially liable while performing its duties unless it reasonably believes that it will be repaid or receive adequate indemnity.

Payment and paying agents

Unless otherwise indicated in the applicable prospectus supplement, we will make payment of the interest on any notes on any interest payment date to the person in whose name such notes, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest payment.

Principal of and any premium and interest on the notes of a particular series will be payable at the office of the paying agents designated by TravelCenters, except that unless otherwise indicated in the applicable prospectus supplement, interest payments may be made by check mailed to the holder. Unless otherwise indicated in such prospectus supplement, the corporate trust office of the trustee in The City of New York will be designated as our sole paying agent for payments with respect to notes of each series. We will name in the applicable prospectus supplement any other paying agents initially designated by us for the notes of a particular series. We will maintain a paying agent in each place of payment for the notes of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any notes which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Table of Contents

Governing law

The indentures and the notes will be governed by and construed in accordance with the laws of the State of New York, except to the extent the Trust Indenture Act is applicable.

Subordination of subordinated notes

Any subordinated notes will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated notes that we may issue. The subordinated indenture also does not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF THE WARRANTS WE MAY OFFER

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement, of which this prospectus forms a part, or to an exhibit to a current report on Form 8-K or other document to be filed under the Exchange Act.

We may issue warrants, including warrants to purchase common shares, preferred shares, or debt securities in one or more series. We may issue warrants independently or together with common shares, preferred shares and debt securities, and the warrants may be attached to or separate from the securities.

We will evidence each series of warrants by warrant certificates that we will issue under warrant agreements. We may enter into a warrant agreement with a warrant agent as detailed in the prospectus supplement relating to warrants being offered. We will indicate the name and address and other information regarding the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

If we decide to issue warrants pursuant to this prospectus, we will specify in a prospectus supplement the terms of the series of warrants, including, if applicable, the following:

the title of the warrants;

the aggregate number of warrants offered;

the price or prices at which the warrants will be issued;

the currencies in which the price or prices of the warrants may be payable;

the designation, amount, and terms of the offered securities purchasable upon exercise of the warrants;

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

if applicable, the date on and after which the warrants and the offered securities purchasable upon exercise of the warrants will be separately transferable;

the price or prices at which and currency or currencies in which the offered securities purchasable upon exercise of the warrants may be purchased;

Table of Contents

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

the minimum or maximum amount of the warrants which may be exercised at any one time;

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

a discussion of any federal income tax considerations; and

any other material terms of the warrants, including terms, procedures, and limitations relating to the exchange and exercise of the warrants.

Before exercising their warrants, holders of warrants will not have voting rights or other rights as a shareholder of TravelCenters.

Exercise of warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants up to the close of business on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount in immediately available funds, as provided in the applicable prospectus supplement. We will describe in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

PLAN OF DISTRIBUTION

We may sell the securities being offered pursuant to this prospectus directly to purchasers, to or through underwriters, through dealers or agents, or through a combination of such methods. The prospectus supplement with respect to the securities being offered will set forth the terms of the offering, including the names of the underwriters, dealers or agents, if any, the purchase price, the net proceeds to TravelCenters, any underwriting discounts and other items constituting underwriters' compensation, and initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers and any securities exchanges on which such securities may be listed.

Underwriters

If we use underwriters in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. If we use an underwriting syndicate, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If we use underwriters for a sale of securities, the underwriters will acquire the securities for their own accounts. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time. Unless otherwise set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent and the underwriters will be obligated to purchase all of the offered securities if any are purchased.

Table of Contents

Dealers and agents

If dealers are used in an offering, we may sell the securities to the dealers as principals. The dealers then may resell the securities to the public at varying prices which they determine at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

If agents are used in an offering, the names of the agents and the terms of the agency will be specified in a prospectus supplement. Unless otherwise indicated in a prospectus supplement, the agents will act on a best-efforts basis for the period of their appointment.

Direct sales

We may sell securities directly to one or more purchasers without using underwriters or agents.

Dealers and agents named in a prospectus supplement may be underwriters as defined in the Securities Act and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify in the applicable prospectus supplement any underwriters, dealers or agents and will describe their compensation. We may have agreements with the underwriters, dealers and agents to indemnify them against specified civil liabilities, including liabilities under the Securities Act. The terms of any indemnification provisions will be set forth in a prospectus supplement. Certain underwriters, dealers or agents and their associates may engage in transactions with, and perform services for us in the ordinary course of business.

If so indicated in a prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by institutional investors to purchase securities pursuant to contracts providing for payment and delivery on a future date. We may enter contracts with commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutional investors. The obligations of any institutional investor will be subject to the condition that its purchase of the offered securities will not be illegal at the time of delivery. The underwriters and other agents will not be responsible for the validity or performance of contracts.

Trading markets and listing of securities

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common shares, which are listed on the NYSE MKT. We may elect to list any other class or series of securities on any exchange, but we are not obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the securities.

Stabilization activities

In connection with an offering, an underwriter may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional securities, if any, from us in the offering. If the underwriters have an over-allotment option to purchase additional securities from us, the underwriters may close out any covered short position by either exercising their over-allotment option or purchasing securities in the open market. In determining the source of securities to close out the covered short position, the underwriters may consider, among other things, the price of securities

Table of Contents

available for purchase in the open market as compared to the price at which they may purchase securities through the over-allotment option. "Naked" short sales are any sales in excess of such option or where the underwriters do not have an over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

Accordingly, to cover these short sales positions or to otherwise stabilize or maintain the price of the securities, the underwriters may bid for or purchase securities in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if securities previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. The impositions of a penalty bid may also affect the price of the securities to the extent that it discourages resale of the securities. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NYSE MKT or otherwise and, if commenced, may be discontinued at any time.

VALIDITY OF SECURITIES

The validity of the common shares, preferred shares, debt securities and warrants to purchase debt or equity securities offered pursuant to this prospectus will be passed upon by Skadden, Arps, Slate, Meagher & Flom LLP, special counsel to TravelCenters of America LLC.

EXPERTS

The consolidated financial statements of TravelCenters of America LLC appearing in TravelCenters of America LLC's Annual Report (Form 10-K) for the year ended December 31, 2011, and the effectiveness of TravelCenters of America LLC's internal control over financial reporting as of December 31, 2011, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in its reports thereon, which conclude, among other things, that TravelCenters of America LLC did not maintain effective internal control over financial reporting as of December 31, 2011, based on Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, because of the effects of the material weaknesses described therein, included therein, and incorporated herein by reference. Such financial statements have been incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file periodic reports, proxy statements and other information with the SEC as required by the Exchange Act. You may read and copy any materials we file with the SEC at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information about the Public Reference Room by calling the SEC at 1-800-SEC-0330. You can review our electronically filed reports, proxy and information statements, and other information regarding us on the SEC's Internet site at <http://www.sec.gov>. The information contained on the SEC's website is expressly not incorporated by reference into this prospectus.

Our SEC filings are also available on our website, <http://www.tatravelcenters.com>. The information on this website is expressly not incorporated by reference into, and does not constitute a part of, this prospectus.

Table of Contents

This prospectus contains summaries of provisions contained in some of the documents discussed in this prospectus, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to in this prospectus have been filed or will be filed or incorporated by reference as exhibits to the registration statement of which this prospectus is a part. If any contract, agreement or other document is filed or incorporated by reference as an exhibit to the registration statement, you should read the exhibit for a more complete understanding of the document or matter involved.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus information we file with the SEC in other documents. This means that we can disclose important information to you by referring to another document we filed with the SEC. The information relating to us contained in this prospectus should be read together with the information in the documents incorporated by reference.

We incorporate by reference, as of their respective dates of filing, the documents listed below:

- (a) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2011;
- (b) Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2012;
- (c) Our Current Report on Form 8-K filed May 11, 2012;
- (d) The information identified as incorporated by reference under Items 10, 11, 12, 13 and 14 of Part III of our Annual Report on Form 10-K for the fiscal year ended December 31, 2011, from our definitive Proxy Statement for our 2012 Annual Meeting of Shareholders filed March 16, 2012; and
- (e) The description of our common shares contained in our Registration Statement on Form 8-A filed with the SEC on January 25, 2007, including any amendments or reports filed for the purpose of updating that description (File No. 001-33274).

We are also incorporating by reference additional documents we may file under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial registration statement and prior to effectiveness of the registration statement and (ii) after the date of this prospectus and prior to the termination of the offering, other than any portion of the respective filings furnished, rather than filed, under applicable SEC rules. This additional information is a part of this prospectus from the date of filing for those documents.

The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC and incorporate by reference in this prospectus will automatically update and supersede this previously-filed information, including information in previously filed documents or reports that have been incorporated by reference in this prospectus. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request copies, which will be provided to you at no charge, upon your oral or written request, of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. Requests should be directed to the following contact information:

TravelCenters of America LLC
24601 Center Ridge Road, Suite 200
Westlake, OH 44145-5639
Attention: Corporate Secretary
Telephone: (440) 808-9100.

Table of Contents

\$

TravelCenters of America LLC

% Senior Notes due 2028

PROSPECTUS SUPPLEMENT

January , 2013

Citigroup

RBC Capital Markets

UBS Investment Bank

MLV & Co.

Janney Montgomery Scott

Oppenheimer & Co.

BB&T Capital Markets

