

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[TABLE OF CONTENTS](#)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-216194

CALCULATION OF REGISTRATION FEE

Class of securities registered	Amount to be registered	Offering price per unit	Aggregate offering price	Amount of registration fee
Class A shares representing limited partner interests	48,300,000	\$31.00	\$1,497,300,000	\$173,538(1)

(1) The filing fee, calculated in accordance with Rule 457(r), has been transmitted to the SEC in connection with the securities offered from Registration Statement File No. 333-216194 by means of this prospectus supplement.



PLAINS GP HOLDINGS

42,000,000 Class A Shares Representing Limited Partner Interests

We are selling 42,000,000 of our Class A shares in this offering. Our Class A shares are listed on the New York Stock Exchange (the "NYSE") under the symbol "PAGP." The last reported sale price of our Class A shares on the NYSE on February 22, 2017 was \$31.31 per Class A share.

The underwriters have agreed to purchase the Class A shares from us at a price of \$30.536 per share, which will result in \$1.302 billion of gross proceeds to us before expenses. The underwriters may offer the Class A shares from time to time for sale in one or more transactions on the NYSE in the over-the-counter market, through negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices.

Investing in our Class A shares involves risks. Limited partnerships are inherently different from corporations. You should carefully consider the risks relating to investing in our Class A shares and each of the risk factors described under "Risk Factors" on page S-6 of this prospectus supplement before you make an investment in our securities.

Delivery of the Class A shares is expected to be made on or about March 1, 2017.

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

We have granted the underwriters a 30-day option to purchase up to 6,300,000 additional Class A shares.

Sole Book-Running Manager

Citigroup

Co-Managers

BBVA

BNP PARIBAS

MUFG

SMBC Nikko

Suntrust Robinson Humphrey

CIBC Capital Markets

Fifth Third Securities

ING

PNC Capital Markets LLC

Regions Securities LLC

The date of this prospectus supplement is February 23, 2017.

TABLE OF CONTENTS

	<u>Page</u>
Prospectus Supplement	
Important Notice About Information in this Prospectus Supplement and the Accompanying Base Prospectus	S-ii
Forward-Looking Statements	S-iii
Prospectus Supplement Summary	S-1
Risk Factors	S-6
Use of Proceeds	S-7
Price Range of Class A Shares and Distributions	S-8
Capitalization	S-9
Underwriting	S-11
Legal Matters	S-15
Experts	S-15
Where You Can Find More Information	S-15
Prospectus	
About This Prospectus	ii
Where You Can Find More Information	iii
Forward-Looking Statements	iv
About Plains GP Holdings, L.P.	1
Risk Factors	2
Use of Proceeds	3
Our Cash Distribution Policy	4
The Partnership Agreement	6
Description of Our Shares	19
Material U.S. Federal Income Tax Consequences	21
Investment in Plains GP Holdings, L.P. by Employee Benefit Plans	27
Plan of Distribution	29
Legal Matters	30
Experts	30

**IMPORTANT NOTICE ABOUT INFORMATION IN THIS PROSPECTUS SUPPLEMENT AND THE
ACCOMPANYING BASE PROSPECTUS**

We are providing information to you about this offering of our Class A shares in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific terms of this offering, and (2) the accompanying base prospectus, which provides general information, some of which may not apply to this offering. This prospectus supplement may also add to, update or change information contained in the accompanying base prospectus. If information in this prospectus supplement is inconsistent with the accompanying base prospectus, you should rely on this prospectus supplement. Generally, when we refer to this "prospectus," we are referring to both documents combined.

This prospectus supplement and the accompanying base prospectus contain and incorporate by reference information that you should consider when making your investment decision. Neither we nor the underwriters or their affiliates and agents have authorized anyone to provide you with additional or different information. You should not assume that the information contained in this prospectus supplement or the accompanying base prospectus is accurate as of any date other than the date on the front of those documents or that any information we have incorporated by reference is accurate as of any date other than the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since those dates.

We are not making an offer to sell our Class A shares in any jurisdiction where the offer is not permitted.

The information in this prospectus supplement is not complete. You should carefully read this prospectus supplement and the accompanying base prospectus, including the information incorporated by reference herein and therein, before you invest, as these documents contain information you should consider when making your investment decision.

None of Plains GP Holdings, L.P., the underwriters or any of their respective representatives is making any representation to you regarding the legality of an investment in our Class A shares by you under applicable laws. You should consult with your own advisors as to legal, tax, business, financial and related aspects of an investment in the Class A shares.

For purposes of this prospectus supplement and the accompanying base prospectus, unless the context clearly indicates otherwise:

- "our," "ours," "we," "us," "the Partnership," "Plains GP Holdings, L.P." or "PAGP" refers to Plains GP Holdings, L.P., the registrant itself, or to Plains GP Holdings, L.P. and its operating subsidiaries collectively, as the context requires (we currently have no operating activities apart from those of PAA; accordingly, any references in this prospectus to "we," "our" and similar terms describing assets, business characteristics or other related matters refer to PAA's assets, business characteristics or other matters involving PAA's assets and operating activities);
- "PAA" refers to Plains All American Pipeline, L.P. (NYSE: PAA), individually, or to Plains All American Pipeline, L.P. and its operating subsidiaries collectively, as the context requires;
- "PAA GP" refers to PAA GP LLC, the general partner of PAA;
- "AAP" refers to Plains AAP, L.P., which owns a 100% membership interest in PAA GP;
- "GP LLC" refers to Plains All American GP LLC, the general partner of AAP;
- our "general partner" refers to PAA GP Holdings LLC;
- our "Simplification Agreement" refers to the Simplification Agreement entered into on July 11, 2016 with our general partner, GP LLC, AAP, PAA GP and PAA, pursuant to which the parties

agreed to, among other things, the permanent elimination of PAA's incentive distribution rights and the economic rights associated with its 2% general partner interest; and

- our "Omnibus Agreement" refers to the Omnibus Agreement entered into on November 15, 2016 with our general partner, GP LLC, AAP, PAA GP and PAA in connection with the transactions contemplated by the Simplification Agreement, pursuant to which the parties agreed to, among other things, the maintenance of a one-to-one relationship between the number of our outstanding Class A shares and the number of PAA common units we indirectly own through AAP and the payment by PAA or reimbursement of our general partner, us and our subsidiaries (other than PAA and its subsidiaries) for all direct and indirect expenses incurred (other than income taxes incurred by us or our subsidiaries (other than PAA and its subsidiaries)).

FORWARD-LOOKING STATEMENTS

All statements included in or incorporated by reference into this prospectus supplement or the accompanying base prospectus, other than statements of historical fact, are forward-looking statements, including but not limited to statements incorporating the words "anticipate," "believe," "estimate," "expect," "plan," "intend" and "forecast," as well as similar expressions and statements regarding our business strategy, plans and objectives for future operations. The absence of such words, expressions or statements, however, does not mean that the statements are not forward-looking. Any such forward-looking statements reflect our current views with respect to future events, based on what we believe to be reasonable assumptions. Certain factors could cause actual results or outcomes to differ materially from the results or outcomes anticipated in the forward-looking statements. The most important of these factors include, but are not limited to:

- our ability to pay distributions to our Class A shareholders;
- our expected receipt of, and amounts of, distributions from AAP (as defined below);
- declines in the volume of crude oil and natural gas liquids ("NGL") shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of our assets, whether due to declines in production from existing oil and gas reserves, reduced demand, failure to develop or slowdown in the development of additional oil and gas reserves, whether from reduced cash flow to fund drilling or the inability to access capital, or other factors;
- the effects of competition;
- market distortions caused by producer over-commitments to new or recently constructed infrastructure projects, which impacts volumes, margins, returns and overall earnings;
- unanticipated changes in crude oil market structure, grade differentials and volatility (or lack thereof);
- environmental liabilities or events that are not covered by an indemnity, insurance or existing reserves;
- maintenance of PAA's credit rating and ability to receive open credit from suppliers and trade counterparties;
- fluctuations in refinery capacity in areas supplied by our mainlines and other factors affecting demand for various grades of crude oil, refined products and natural gas and resulting changes in pricing conditions or transportation throughput requirements;
- the occurrence of a natural disaster, catastrophe, terrorist attack (including eco-terrorist attacks) or other event, including attacks on our electronic and computer systems;

- failure to implement or capitalize, or delays in implementing or capitalizing, on expansion projects, whether due to permitting delays, permitting withdrawals or other factors;
- tightened capital markets or other factors that increase our cost of capital or limit our ability to obtain debt or equity financing on satisfactory terms to fund additional acquisitions, expansion projects, working capital requirements and the repayment or refinancing of indebtedness;
- the successful integration and future performance of acquired assets or businesses and the risks associated with operating in lines of business that are distinct and separate from historical operations;
- the currency exchange rate of the Canadian dollar;
- continued creditworthiness of, and performance by, our counterparties, including financial institutions and trading companies with which we do business;
- inability to recognize current revenue attributable to deficiency payments received from customers who fail to ship or move more than minimum contracted volumes until the related credits expire or are used;
- non-utilization of our assets and facilities;
- increased costs, or lack of availability, of insurance;
- weather interference with business operations or project construction, including the impact of extreme weather events or conditions;
- the availability of, and our ability to consummate, acquisition or combination opportunities;
- the effectiveness of our risk management activities;
- shortages or cost increases of supplies, materials or labor;
- the impact of current and future laws, rulings, governmental regulations, accounting standards and statements, and related interpretations;
- fluctuations in the debt and equity markets, including the price of PAA's units at the time of vesting under its long-term incentive plans;
- risks related to the development and operation of our assets, including our ability to satisfy our contractual obligations to our customers;
- factors affecting demand for natural gas and natural gas storage services and rates;
- general economic, market or business conditions and the amplification of other risks caused by volatile financial markets, capital constraints and pervasive liquidity concerns; and
- other factors and uncertainties inherent in the transportation, storage, terminalling and marketing of crude oil and refined products, as well as in the storage of natural gas and the processing, transportation, fractionation, storage and marketing of NGLs.

Other factors described or incorporated by reference herein, as well as factors that are unknown or unpredictable, could also have a material adverse effect on future results. Please read "Risk Factors" on page S-6 of this prospectus supplement and as discussed in Item 1A. "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (File No. 001-36132), which is incorporated in this prospectus supplement by reference, for information regarding risks you should consider before making an investment decision. Except as required by applicable securities laws, we do not intend to update these forward-looking statements and information.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information included or incorporated by reference in this prospectus supplement. It does not contain all of the information that you should consider before making an investment decision. You should read carefully the entire prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein and the other documents to which we refer herein and therein for a more complete understanding of this offering of Class A shares. Please read "Risk Factors" on page S-6 of this prospectus supplement and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which is incorporated by reference herein, for information regarding risks you should consider before investing in our Class A shares.

Plains GP Holdings, L.P.

We are a Delaware limited partnership formed in July 2013 that has elected to be treated as a corporation for United States federal income tax purposes. We do not directly own any operating assets; our principal sources of cash flow are derived from our indirect investment in PAA. As of February 22, 2017, we directly and indirectly owned 103,277,067 Class A Units of AAP, which we refer to as AAP Class A units, which represented a 42.8% limited partner interest in AAP. AAP owns a non-economic general partner interest in PAA and, as of February 22, 2017, owned 243,391,545 common units of PAA. Our general partner, PAA GP Holdings LLC, has responsibility for managing the business and affairs of PAA, in addition to AAP and PAGP.

PAA is a publicly traded Delaware limited partnership formed in 1998. PAA's operations are conducted directly and indirectly through its primary operating subsidiaries. PAA owns and operates midstream energy infrastructure and provides logistics services for crude oil, NGL, natural gas and refined products. PAA owns an extensive network of pipeline transportation, terminalling, storage and gathering assets in key crude oil and NGL producing basins and transportation corridors and at major market hubs in the United States and Canada.

Ongoing Acquisition, Divestiture and Investment Activities

Consistent with our business strategy, we are continuously engaged in the evaluation of potential acquisitions, joint ventures and capital projects. In addition, we continue to evaluate our asset portfolio to determine whether additional sales of non-core assets would further optimize our portfolio and strengthen our balance sheet. As a part of these efforts, we often engage in discussions with potential third parties regarding the possible purchase of or investment in assets and operations that are strategic and complementary to our existing operations, or the potential sale of assets that we believe might have more value to a third-party buyer. In addition, in the past we have evaluated and pursued, and intend in the future to evaluate and pursue, the acquisition of or investment in other energy-related assets that have characteristics and provide opportunities similar to our existing business lines and enable us to leverage our assets, knowledge and skill sets. Such efforts may involve participation by us in processes that have been made public and involve a number of potential buyers or investors, commonly referred to as "auction" processes, as well as situations in which we believe we are the only party or one of a limited number of parties who are in negotiations with the potential seller or other party. With respect to a potential divestiture, we may also conduct an auction process or may negotiate a transaction with one or a limited number of potential buyers. These acquisition and investment efforts often involve assets which, if acquired, constructed or sold, as applicable, could have a material effect on our financial condition and results of operations.

We typically do not announce a transaction until after we have executed a definitive agreement. However, in certain cases in order to protect our business interests or for other reasons, we may defer public announcement of a transaction until closing or a later date. Past experience has demonstrated that discussions and negotiations regarding a potential transaction can advance or terminate in a short

period of time. Moreover, the closing of any transaction for which we have entered into a definitive agreement may be subject to customary and other closing conditions, which may not ultimately be satisfied or waived. Accordingly, we can give no assurance that our current or future acquisition, divestiture or investment efforts will be successful. Although we expect the acquisitions and investment we make to be accretive in the long term, we can provide no assurance that our expectations will ultimately be realized.

Recent Developments

Alpha Crude Connector Acquisition

On February 14, 2017, pursuant to (1) that certain Securities Purchase Agreement dated as of January 19, 2017, by and between Plains Pipeline, L.P. ("PPLP"), a wholly owned subsidiary of PAA and COG Operating LLC, a wholly owned subsidiary of Concho Resources Inc. (the "Class A Agreement"), and (2) that certain Securities Purchase Agreement, dated as of January 19, 2017, by and between PPLP and Frontier Midstream Solutions, LLC (together, with the Class A Agreement, the "Agreements"), a wholly owned subsidiary of PPLP acquired all of the issued and outstanding membership interests in Alpha Holding Company, LLC (collectively, the "ACC Acquisition") for approximately \$1.215 billion, subject to certain adjustments provided under the Agreements. The ACC Acquisition was funded with borrowings under PAA's senior unsecured revolving credit facility. Prior to the closing of the ACC Acquisition, PPLP assigned all of its right, title and interest in and to the Agreements to its wholly owned subsidiary, Plains ACC Holdings LLC ("Plains ACC").

As a result of the ACC Acquisition, Plains ACC is the indirect owner of the FERC-regulated crude oil gathering system known as "Alpha Crude Connector" (the "System") located in Eddy and Lea Counties, New Mexico and Culberson, Loving and Winkler Counties, Texas. The System is comprised of 515 miles of gathering and transmission lines and five market interconnects, including PAA's Basin Pipeline system at Wink. Following closing of the ACC Acquisition, PAA intends to make three additional interconnects to PAA's existing Northern Delaware Basin system as well as additional enhancements intended to increase the system capacity to approximately 350,000 barrels per day, depending on the level of volume at each delivery point. The System is supported by acreage dedications covering approximately 315,000 gross acres, the majority of which have 10-year terms, and include a significant acreage dedication from Concho Resources, Inc., one of the largest Permian Basin producers.

Advantage Pipeline Joint Venture

On February 13, 2017, PAA and Noble Midstream Partners LP ("Noble") entered into definitive agreements to form a 50/50 joint venture (the "Joint Venture") to acquire Advantage Pipeline, LLC ("Advantage"), which owns a 70-mile, 16-inch crude oil pipeline located in the southern Delaware Basin (the "Advantage Pipeline"). The Joint Venture will acquire Advantage for \$133 million. The majority of PAA's 50% share is expected to be paid in PAA common units issued to certain of the sellers at closing. The acquisition is subject to customary closing conditions, including the receipt of regulatory approvals.

Noble will serve as operator and will construct a 15-mile pipeline to deliver crude oil to the Advantage Pipeline from its central gathering facility in the southern Delaware Basin. PAA will construct a pipeline to connect its Wolfbone Ranch facility to the Advantage Pipeline near Highway 285. The connections are estimated to be completed in the second quarter of 2017. The Advantage Pipeline will be contractually supported by an acreage dedication from Noble Energy, Inc. and a volume commitment from Plains Marketing, L.P., our wholly-owned subsidiary ("Plains Marketing").

Continuous Offering Programs

On December 27, 2016, we entered into an equity distribution agreement pursuant to which we may, from time to time through sales agents, sell Class A shares representing limited partnership interests having an aggregate offering price of up to \$500 million (the "PAGP Continuous Offering Program"). We did not issue any Class A shares prior to December 31, 2016. Subsequent to December 31, 2016, we issued approximately 1.8 million Class A shares, generating proceeds of approximately \$60 million, net of \$1 million of commissions to sales agents. Pursuant to the Omnibus Agreement, we used the net proceeds from the sale of these Class A shares to purchase an equal number of AAP units from AAP, and AAP in turn used the net proceeds from the sale of such AAP units to purchase an equal number of common units from PAA.

On November 30, 2016, PAA entered into an equity distribution agreement pursuant to which it may, from time to time through sales agents, sell PAA common units with an aggregate offering price of up to \$750 million (the "PAA Continuous Offering Program"). Subsequent to December 31, 2016, PAA has issued approximately 4.0 million PAA common units under the PAA Continuous Offering Program, generating proceeds of approximately \$129 million, net of \$1 million of commissions to sales agents.

Other Activity

During the first quarter of 2017, we completed the sale of an undivided interest in a segment of our Red River Pipeline for proceeds of approximately \$70 million. In addition, we entered into definitive agreements to sell two non-core assets for aggregate proceeds of approximately \$310 million. These remaining sales transactions include a natural gas storage facility and a non-core pipeline segment. We expect the remaining sales transactions to close during the first half of 2017, subject to customary closing conditions, including receipt of regulatory approvals.

Principal Executive Offices and Internet Address

Our principal executive offices are located at 333 Clay Street, Suite 1600, Houston, TX 77002 and our telephone number is (713) 646-4100. Our website is located at *ir.pagp.com*. We make our periodic and current reports and other information filed with or furnished to the SEC available, free of charge, through our website, as soon as reasonably practicable after those reports and other information are electronically filed with or furnished to the SEC. Information on our website or any other website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

Additional Information

For additional information about us, including our partnership structure and management, please refer to the documents set forth under "Where You Can Find More Information" in this prospectus supplement, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, which is incorporated by reference herein.

The Offering

Class A Shares Offered	42,000,000 Class A shares; (48,300,000 Class A shares if the underwriters exercise in full their option to purchase additional Class A shares).
Class A Shares Outstanding After This Offering	145,277,067 Class A shares (151,577,067 Class A shares if the underwriters exercise in full their option to purchase additional Class A shares).
Use of Proceeds	<p>We expect the net proceeds of this offering will be approximately \$1.282 billion, after deducting the underwriters' discounts and commissions and estimated offering expenses. Pursuant to the Omnibus Agreement, we have agreed to use the net proceeds, after deducting the sales agents commissions and offering expenses, from any public or private offering and sale of Class A shares, including this offering, to purchase from AAP a number of AAP Class A units equal to the number of Class A shares sold in such offering at a price equal to the net proceeds from such offering. The Omnibus Agreement also provides that immediately following such purchase and sale, AAP will use the net proceeds it receives from such sale of AAP Class A units to us to purchase from PAA an equivalent number of PAA common units.</p> <p>PAA is expected to use the net proceeds it receives from the sale of such common units to AAP to repay outstanding borrowings under its senior unsecured revolving credit facility and for general partnership purposes, which may include, among other things, repayment of indebtedness, acquisitions, capital expenditures and additions to working capital.</p> <p>Amounts repaid under PAA's senior unsecured revolving credit facility may be reborrowed to fund its ongoing expansion capital program, future acquisitions and investments or for general partnership purposes. Please read "Use of Proceeds" in this prospectus supplement for further information.</p>

Cash Distributions

Our partnership agreement requires that within 55 days following the end of each quarter, we distribute all of our available cash to Class A shareholders of record upon the applicable record date. Available cash generally means, for any quarter ending prior to liquidation, all cash and cash equivalents on hand at the date of determination of available cash for the distribution in respect of such quarter (including expected distributions from AAP in respect of such quarter), less the amount of cash reserves established by our general partner, which will not be subject to a cap, to (i) comply with applicable law or any agreement binding upon us or our subsidiaries (exclusive of PAA and its subsidiaries), (ii) provide funds for future distributions to shareholders, (iii) provide for future capital expenditures, debt service and other credit needs as well as any federal, state, provincial or other income tax that may affect the Partnership in the future or (iv) provide for the proper conduct of our business, including with respect to the matters described under "The Partnership Agreement" of the accompanying base prospectus. For a description of our cash distribution policy, please read "Cash Distribution Policy" in the accompanying base prospectus.

On February 14, 2017, we paid a quarterly cash distribution of \$0.55 per unit (\$2.20 per unit on an annualized basis) to holders of record of such Class A shares at the close of business on January 31, 2017. This distribution represented a year-over-year distribution decrease of approximately 11% over the quarterly distribution of \$0.615 per Class A share (\$2.46 per Class A share on an annualized basis) we paid in February 2016 and no increase over the quarterly distribution per Class A share we paid in November 2016 on a reverse split adjusted basis.

Cash distributions in respect of the first quarter 2017 have not been declared or paid. Because this offering is expected to close before the record date for the first quarter 2017 distribution, purchasers in this offering will be entitled to receive the first quarter 2017 distribution so long as they are holders of record on the record date for such distribution.

Exchange Listing

Our Class A shares are traded on the NYSE under the symbol "PAGP."

RISK FACTORS

Before making an investment in the Class A shares offered hereby, you should carefully consider the risk factors included in Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (File No. 001-36132), which is incorporated by reference herein, together with all of the other information included in, or incorporated by reference into, this prospectus supplement and the accompanying base prospectus. If any of these risks were to occur, our business, financial condition or results of operations could be materially adversely affected. In such case, the trading price of our Class A shares could decline, and you could lose all or part of your investment.

USE OF PROCEEDS

We expect the net proceeds of this offering will be approximately \$1.282 billion, after deducting the underwriting discounts and commissions and estimated offering expenses. Pursuant to the Omnibus Agreement, we have agreed to use the net proceeds from any public or private offering and sale of Class A shares to purchase from AAP a number of AAP Class A units equal to the number of Class A shares sold in such offering at a price equal to the net proceeds from such offering. The Omnibus Agreement also provides that immediately following such purchase and sale, AAP will use the net proceeds it receives from such sale of AAP Class A units to us to purchase from PAA an equivalent number of common units of PAA.

PAA is expected to use the net proceeds it receives from the sale of such common units to AAP to repay outstanding borrowings under its senior unsecured revolving credit facility and for general partnership purposes, including acquisitions, joint venture investments and other expansion capital expenditures. Amounts repaid under PAA's unsecured revolving credit facility may be reborrowed to fund its ongoing expansion capital program, future acquisitions and investments or for general partnership purposes.

Affiliates of certain of the underwriters are lenders under PAA's senior unsecured revolving credit facility. In accordance with PAA's expected use of proceeds from the sale of common units to AAP as a result of concurrent sales of Class A shares pursuant to this offering (as provided in the Omnibus Agreement) to repay indebtedness under its senior unsecured revolving credit facility, such affiliates may receive a portion of the net proceeds from this offering. Please read "Underwriting" in this prospectus supplement for further information.

As of February 22, 2017, PAA had approximately \$1.0 billion of borrowings outstanding under its senior unsecured revolving credit facility with a weighted average interest rate of 1.99%. PAA's senior unsecured revolving credit facility matures in August 2021. Borrowings under PAA's senior unsecured revolving credit facility were used to finance the ACC Acquisition.

PRICE RANGE OF CLASS A SHARES AND DISTRIBUTIONS

Our Class A shares are listed and traded on the NYSE under the symbol "PAGP." As of February 22, 2017, the closing market price for our Class A shares was \$31.31 per share and there were approximately 38,000 record holders and beneficial owners (held in street name). As of February 22, 2017, there were 103,277,067 Class A shares outstanding.

The following table sets forth high and low sales prices for our Class A shares and the cash distributions declared per Class A share for the periods indicated.

	Class A share Range		Cash Distributions per Share(1)(2)
	High	Low	
2017			
1st Quarter (through February 22, 2017)	\$ 35.58	\$ 31.02	(3)
2016			
4th Quarter	\$ 36.59	\$ 28.84	\$ 0.55
3rd Quarter	\$ 35.10	\$ 25.59	\$ 0.55
2nd Quarter	\$ 30.70	\$ 20.98	\$ 0.62
1st Quarter	\$ 25.80	\$ 12.57	\$ 0.62
2015			
4th Quarter	\$ 51.90	\$ 19.12	\$ 0.62
3rd Quarter	\$ 70.94	\$ 43.35	\$ 0.62
2nd Quarter	\$ 79.54	\$ 68.73	\$ 0.60
1st Quarter	\$ 77.12	\$ 63.94	\$ 0.59

- (1) Cash distributions associated with the quarter presented. These distributions were declared and paid in the following calendar quarter.
- (2) All historical distributions have been adjusted to give effect to the 1:2.663 reverse split that occurred on November 15, 2016 in connection with the closing of the Simplification Agreement.
- (3) Cash distributions in respect of the first quarter 2017 have not been declared or paid. Because this offering is expected to close before the record date for the first quarter 2017 distribution, purchasers in this offering will be entitled to receive the first quarter 2017 distribution so long as they are holders of record on the record date for such distribution.

CAPITALIZATION

The following table sets forth our capitalization as of December 31, 2016:

- on a historical basis;
- on an adjusted basis to give effect to:
 - the ACC Acquisition; and
 - the sale of (i) 1.8 million Class A shares under the PAGP Continuous Offering Program, plus the corresponding issuance of 1.8 million PAA common units pursuant to the Omnibus Agreement, and (ii) 4.0 million PAA common units under PAA's Continuous Offering Program, each after December 31, 2016, generating aggregate proceeds of approximately \$190 million, net of commissions to our sales agents; and
- on an as further adjusted basis to give effect to the sale of the Class A shares offered hereby and the application of the net proceeds therefrom as described under "Use of Proceeds" in this prospectus supplement, net of offering expenses.

This table should also be read in conjunction with our financial statements and the notes thereto that are incorporated by reference into this prospectus supplement.

	December 31, 2016		
	Historical	As adjusted (In millions)	As further adjusted
CASH AND CASH EQUIVALENTS	\$ 50	\$ 50	\$ 307
SHORT-TERM DEBT(1)(2)(3)			
PAA commercial paper notes	\$ 563	\$ 563	\$ 563
PAA senior secured hedged inventory facility	750	750	750
PAA senior notes:			
6.13% senior notes due January 2017	400	400	400
Other	2	2	2
Total short-term debt	<u>\$ 1,715</u>	<u>\$ 1,715</u>	<u>\$ 1,715</u>
LONG-TERM DEBT(3)			
PAA Senior notes, net of unamortized discounts and debt issuance cost	\$ 9,874	\$ 9,874	\$ 9,874
PAA commercial paper notes(1)(2)	247	247	247
PAA senior unsecured revolving credit facility	—	1,025	—
Other	3	3	3
Total long-term debt	<u>\$ 10,124</u>	<u>\$ 11,149</u>	<u>\$ 10,124</u>
PARTNERS' CAPITAL			
Class A shareholders	\$ 1,737	\$ 1,763	\$ 2,140
Noncontrolling interests	8,970	9,134	10,039
Total partners' capital	<u>\$ 10,707</u>	<u>\$ 10,897</u>	<u>\$ 12,179</u>
Total capitalization	<u>\$ 20,831</u>	<u>\$ 22,046</u>	<u>\$ 22,303</u>

- (1) PAA commercial paper notes are backstopped by the PAA senior unsecured revolving credit facility and the PAA senior secured hedged inventory facility, which mature in August 2021 and August 2019, respectively; as such, any borrowings under the PAA commercial paper program reduce the available capacity under these facilities. As of December 31, 2016, we classified \$563 million of the

borrowings under PAA's commercial paper program as short-term debt, as these borrowings were primarily designated as working capital borrowings, were required to be repaid within one year and were primarily for hedged NGL and crude oil inventory and NYMEX and ICE margin deposits. As of December 31, 2016, we classified \$247 million of the borrowings under PAA's commercial paper program as long-term based on PAA's ability and intent to refinance these commercial paper notes on a long-term basis under its credit facilities.

- (2) Our Canadian subsidiary, Plains Midstream Canada ULC ("PMCULC"), is an obligor of PAA's commercial paper program and PAA's senior secured hedged inventory facility. On a historical, as adjusted and as further adjusted basis as of December 31, 2016, \$247 million was outstanding for PMCULC under PAA's commercial paper program and \$600 million was outstanding for PMCULC under PAA's senior secured hedged inventory facility. As of February 22, 2017, PAA had approximately \$962 million of borrowings outstanding under its commercial paper program, \$1.125 billion of borrowings outstanding under its senior secured hedged inventory facility, \$1.0 billion of borrowings outstanding under its senior unsecured revolving credit facility and no borrowings under its senior unsecured 364-day revolving credit facility.
- (3) PAA's fixed-rate senior notes (including current maturities) had a face value of approximately \$10.3 billion as of December 31, 2016. We estimated the aggregate fair value of these notes as of December 31, 2016 to be approximately \$10.4 billion. PAA's fixed-rate senior notes are traded among institutions, and these trades are routinely published by a reporting service. Our determination of fair value is based on reported trading activity near year end. We estimate that the carrying value of outstanding borrowings under the credit facilities and the PAA commercial paper program approximates fair value as interest rates reflect current market rates. The fair value estimates for the PAA senior notes, the credit facilities and the PAA commercial paper program are based upon observable market data and are classified in Level 2 of the fair value hierarchy.

UNDERWRITING

Subject to the terms and conditions set forth in an underwriting agreement between us and Citigroup Global Markets Inc., as sole book-running manager and representative of the underwriters named below (the "underwriters"), we have agreed to sell to the underwriters and the underwriters have agreed, severally and not jointly, to purchase the number of Class A shares listed next to its name in the following table:

<u>Underwriter</u>	<u>Number of Class A Shares to be Purchased</u>
Citigroup Global Markets Inc.	38,017,241
BBVA Securities Inc.	853,448
BNP Paribas Securities Corp.	426,724
MUFG Securities Americas Inc.	426,724
SMBC Nikko Securities America, Inc.	426,724
SunTrust Robinson Humphrey, Inc.	426,724
CIBC World Markets Corp.	284,483
Fifth Third Securities, Inc.	284,483
ING Financial Markets LLC	284,483
PNC Capital Markets LLC	284,483
Regions Securities LLC	284,483
Total	42,000,000

The underwriting agreement provides that the obligations of the underwriters to purchase the Class A shares included in this offering are subject to approval of legal matters by counsel and to other conditions. Under the terms of the underwriting agreement, the underwriters are committed to purchase all of the Class A shares (other than those covered by the underwriters' option to purchase additional Class A shares described below).

Greg L. Armstrong, Chairman, Chief Executive Officer and Director of the board of directors of our general partner, has informed us that he intends to purchase up to approximately 50,000 Class A shares in this offering. However, there can be no assurance that Mr. Armstrong will participate in this offering, and if he does participate, there can be no assurance as to the number of shares that Mr. Armstrong will purchase.

Commissions and Discounts

The underwriters may receive from purchasers of Class A shares normal brokerage commissions in amounts agreed with such purchasers. The underwriters may offer the Class A shares from time to time for sale in one or more transactions on the NYSE, in the over-the-counter market, through negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or at negotiated prices, subject to receipt and acceptance by it and subject to its right to reject any order in whole or in part. In connection with the sale of the Class A shares offered hereby, the underwriters may be deemed to have received compensation in the form of underwriting discounts and commissions. The underwriters may effect such transactions by selling Class A shares to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or purchasers of Class A shares for whom they may act as agents or to whom they may sell as principal.

Option to Purchase Additional Units

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to 6,300,000 additional Class A shares at the public offering price less the underwriting discounts and commissions.

Lock-Up Agreements

We, PAA, our general partner, certain officers and directors of our general partner and certain of their affiliates have agreed that, for a period of 60 days from the date of this prospectus supplement, we and they will not, without the prior written consent of Citigroup Global Markets Inc., offer, sell, contract to sell, pledge or otherwise dispose of any Class A shares, PAA common units or any securities convertible into, or exercisable or exchangeable for or that represent the right to receive Class A shares, PAA common units or any securities that are senior to or *pari passu* with Class A shares or PAA common units, including the grant of any options or warrants to purchase Class A shares. Certain Kayne Anderson entities, which collectively own approximately 6.1 million Class A shares and approximately 9.9 million PAA common units and which are affiliated with Robert V. Sinnott, a director of our general partner, are not subject to this agreement and may sell some or all of their Class A shares and PAA common units during the lock-up period. In addition, approximately 2.0 million Class A shares and/or PAA common units owned by certain Kayne Anderson entities attributable to unaffiliated limited partners of such entities are not subject to this agreement. This agreement also will not apply to (i) grants under existing employee benefit plans (including long-term incentive plans adopted by our general partner, PAA GP, Plains AAP, L.P. or Plains All American GP LLC), (ii) issuances of Class A shares, PAA common units or any securities convertible or exchangeable into Class A shares or PAA common units as payment of any part of the purchase price in connection with acquisitions by us and our affiliates or any third parties (with any transferees in such acquisitions agreeing to be bound by the lock-up agreement for the remainder of the term), (iii) certain sales of Class A shares or PAA common units by the officers or directors of the company that controls our general partner to pay tax liabilities associated with the vesting of units, (iv) transfers of Class A shares or PAA common units by the officers and directors of our general partner in connection with gifts or charitable donations, (v) issuances or deliveries of Class A shares or PAA common units in connection with the conversion, vesting or exercise of securities (including long-term incentive plan awards and the right of holders of AAP Class A units to exchange such AAP Class A Units and our Class B shares for our Class A shares) currently outstanding, (vi) issuances of PAA common units to AAP pursuant to the Omnibus Agreement in connection with this offering. Citigroup Global Markets Inc., in its sole discretion, may release any of the Class A shares or PAA common units subject to these lock-up agreements at any time without notice.

Listing

Our Class A shares are listed on the NYSE under the symbol "PAGP."

Price Stabilizations, Short Positions and Penalty Bids

In connection with the offering, the underwriters may purchase and sell Class A shares in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of Class A shares in excess of the number of Class A shares to be purchased by the underwriters in the offering, which creates a syndicate short position. "Covered" short sales are sales of Class A shares made in an amount up to the number of Class A shares represented by the underwriters' option to purchase additional Class A shares. In determining the source of Class A shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of Class A shares available for purchase in the open market as compared to the price at which they may purchase units through the option to purchase additional

Class A shares. Transactions to close out the covered syndicate short position involve either purchases of the Class A shares in the open market after the distribution has been completed or the exercise of the option to purchase additional Class A shares. The underwriters may also make "naked" short sales of Class A shares in excess of the option to purchase additional Class A shares. The underwriters must close out any naked short position by purchasing Class A shares 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 Class A shares in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of bids for or purchases of Class A shares in the open market while the offering is in progress.

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 repurchase Class A shares originally sold by that syndicate member in order to cover syndicate short positions or make stabilizing purchases.

Any of these activities may have the effect of preventing or slowing a decline in the market price of the Class A shares. They may also cause the price of the Class A shares 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 on the NYSE or in the over-the-counter market, or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

Partnership Expenses

We estimate that our total expenses of this offering, excluding underwriting discounts and commissions, will be approximately \$500,000.

Other Relationships

Affiliates of certain of the underwriters are lenders under PAA's senior unsecured revolving credit facility. In accordance with PAA's expected use of proceeds from the sale of common units to AAP as a result of concurrent sales of Class A shares pursuant to this offering (as provided in the Omnibus Agreement) to repay indebtedness under its senior unsecured revolving credit facility, such affiliates may receive a portion of the net proceeds from this offering.

Each of the underwriters and their affiliates have performed or may in the future perform investment and commercial banking and advisory services for us and our affiliates or engage in transactions with us and our affiliates, from time to time, in the ordinary course of their business for which they have received or will receive customary payments, fees and expenses.

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. If the underwriters or their affiliates have lending relationships with us, they may hedge their credit exposure to us consistent with their customary risk management policies. 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.

Electronic Distribution

This prospectus supplement and the accompanying base prospectus in electronic format may be made available on the website maintained by the underwriters. The underwriters may agree to allocate a number of Class A shares for sale to their online brokerage account holders. The Class A shares will

be allocated to the underwriters, which may make Internet distributions on the same basis as other allocations. In addition, Class A shares may be sold by the underwriters to securities dealers who resell Class A shares to online brokerage account holders.

Other than this prospectus supplement and the accompanying base prospectus in electronic format, information contained in any website maintained by the underwriters is not part of this prospectus supplement or the accompanying base prospectus or registration statement of which the accompanying base prospectus forms a part, has not been endorsed by us and should not be relied on by investors in deciding whether to purchase Class A shares. The underwriters are not responsible for information contained in websites that they do not maintain.

Indemnification

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

LEGAL MATTERS

The validity of the Class A shares offered in this prospectus supplement will be passed upon for us by Vinson & Elkins L.L.P., Houston, Texas. Certain legal matters will be passed upon for the underwriters by Baker Botts L.L.P., Houston, Texas.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this Prospectus Supplement by reference to the Annual Report on Form 10-K for the fiscal year ended December 31, 2016 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are "incorporating by reference" into this prospectus supplement information we file with the SEC. This procedure means that we can disclose important information to you by referring you to documents filed with the SEC. The information we incorporate by reference is deemed to be part of this prospectus supplement and later information that we file with the SEC will automatically update and supersede this information.

We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (excluding any information furnished and not filed pursuant to any Current Report on Form 8-K) until the offering and sale of the Class A shares contemplated by this prospectus supplement are complete:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2016;
- our Current Reports on Form 8-K filed on January 24, 2017, February 14, 2017 and February 21, 2017; and
- the description of our Class A shares contained in our Registration Statement on Form 8-A/A, filed on November 16, 2016, and any subsequent amendment or report filed for the purpose of updating such description.

You may request a copy of these filings (other than any exhibits unless specifically incorporated by reference into this prospectus supplement and the accompanying base prospectus) at no cost by making written or telephone requests for copies to:

Plains GP Holdings, L.P.
Investor Relations
333 Clay Street, Suite 1600
Houston, Texas 77002
(713) 646-4100

Additionally, you may read and copy any materials that we have filed with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

The SEC maintains a website that contains reports, proxy and information statements, and other information regarding us. The SEC's website address is www.sec.gov.

We have not, and the underwriters and their affiliates and agents have not, authorized anyone else to provide you with any other information. You should not assume that the information incorporated by reference or provided in this prospectus supplement or the accompanying base prospectus is accurate as of any date other than its date.



**Class A Shares
Representing Limited Partner Interests**

We may offer and sell Class A shares representing limited partner interests in Plains GP Holdings, L.P. from time to time in one or more offerings and in amounts, at prices and on terms to be determined by market conditions and other factors at the time of our offerings.

This prospectus describes only the general terms of the Class A shares and the general manner in which we will offer the Class A shares. The specific terms of any Class A shares we offer will be included in a supplement to this prospectus. The prospectus supplement will also describe the specific manner in which we will offer the Class A shares.

You should read this prospectus and any applicable prospectus supplement and the documents incorporated by reference herein or therein carefully before you invest in any of our Class A shares. You should also read the documents we have referred you to in the "Where You Can Find More Information" section of this prospectus for information about us, including our financial statements.

Our Class A shares are listed on the New York Stock Exchange ("NYSE") under the symbol "PAGP."

Limited partnerships are inherently different than corporations, and investing in our Class A shares involves a high degree of risk. You should carefully consider the risks relating to investing in our Class A shares and each of the other risk factors described under "Risk Factors" on page 2 of this prospectus before you make an investment in our Class A shares.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of the Class A shares or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is February 23, 2017

TABLE OF CONTENTS

	<u>Page</u>
About This Prospectus	ii
Where You Can Find More Information	iii
Forward-Looking Statements	iv
About Plains GP Holdings, L.P.	1
Risk Factors	2
Use of Proceeds	3
Our Cash Distribution Policy	4
The Partnership Agreement	6
Description of Our Shares	19
Material U.S. Federal Income Tax Consequences	21
Investment in Plains GP Holdings, L.P. by Employee Benefit Plans	27
Plan of Distribution	29
Legal Matters	30
Experts	30

You should rely only on the information contained in or incorporated by reference into this prospectus. We have not authorized anyone to provide you with additional or different information. If any other person provides you with additional, different or inconsistent information, you should not rely on it. This prospectus and any prospectus supplement is not an offer to sell or the solicitation of an offer to buy any securities other than the securities to which it relates and is not an offer to sell or the solicitation of an offer to buy securities in any jurisdiction where an offer or sale of such securities is not permitted. You should not assume that the information appearing in this prospectus is accurate as of any date other than the date on the front cover of this prospectus, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of such document, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

The information in this prospectus is not complete. You should review carefully all of the detailed information appearing in this prospectus, any prospectus supplement, any free writing prospectus relating to this offering and the documents we have incorporated by reference before making any investment decision.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC utilizing a "shelf" registration process. Under this shelf registration process, we may, over time, offer and sell our Class A shares in one or more offerings. This prospectus generally describes Plains GP Holdings, L.P. and the Class A shares. Each time we sell securities with this prospectus, we will provide you with a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may add to, update or change information in this prospectus. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information in such prospectus supplement. Before you invest in our securities, you should carefully read both this prospectus and any prospectus supplement, together with additional information described under the heading "Where You Can Find More Information," and any additional information you may need to make your investment decision.

The following information should help you understand some of the conventions used in this prospectus. All references in this prospectus to:

- "our," "we," "us," "the Partnership" or "Plains GP Holdings, L.P." refer to Plains GP Holdings, L.P., the registrant itself, or to Plains GP Holdings, L.P. and its consolidated subsidiaries collectively, as the context requires (we currently have no operating activities apart from those of PAA; accordingly, any references in this prospectus to "we," "our" and similar terms describing assets, business characteristics or other related matters refer to PAA's assets, business characteristics or other matters involving PAA's assets and operating activities);
- "PAA" refer to Plains All American Pipeline, L.P. (NYSE: PAA), individually, or to Plains All American Pipeline, L.P. and its operating subsidiaries collectively, as the context requires;
- "PAA GP" refer to PAA GP LLC, the general partner of PAA;
- "AAP" refer to Plains AAP, L.P., which owns a 100% membership interest in PAA GP;
- "GP LLC" refer to Plains All American GP LLC, the general partner of AAP;
- our "general partner" refer to PAA GP Holdings LLC;
- our "partnership agreement" refer to the Second Amended and Restated Agreement of Limited Partnership of Plains GP Holdings, L.P., dated as of November 15, 2016, as it may be amended or restated from time to time;
- "Legacy Owners" refer to owners of AAP immediately prior to our initial public offering (our "IPO") that continue to own an interest in AAP as of the date of this prospectus, together with any additional persons or entities, other than PAGP and GP LLC, that have become owners of AAP since the consummation of the IPO and continue to own an interest in AAP as of the date of this prospectus, including, but not limited to: certain entities and individuals affiliated with The Energy & Minerals Group ("EMG"), Kayne Anderson Investment Management Inc. ("Kayne Anderson"), and Occidental Petroleum Corporation ("Occidental"). Unless the context requires otherwise, references to Kayne Anderson include KAFU Holdings, L.P., KAFU Holdings (QP), L.P., KAFU Holdings II, L.P., Kayne Anderson MLP Investment Company, Kayne Anderson Energy Development Company and Kayne Anderson Midstream/Energy Fund, Inc.;
- our "Simplification Agreement" refers to the Simplification Agreement entered into on July 11, 2016 with our general partner, GP LLC, AAP, PAA GP and PAA, pursuant to which the parties agreed to, among other things, eliminate PAA's incentive distribution rights and the economic rights associated with PAA's general partner interest;

- our "Omnibus Agreement" refers to the Omnibus Agreement entered into on November 15, 2016 with our general partner, GP LLC, AAP, PAA GP and PAA in connection with the transactions contemplated by the Simplification Agreement, pursuant to which the parties agreed to, among other things, the maintenance of a one-to-one relationship between the number of our outstanding Class A shares and the number of PAA common units we indirectly own through AAP and the payment by PAA or reimbursement of our general partner, us and our subsidiaries (other than PAA and its subsidiaries) for all direct and indirect expenses incurred (other than income taxes incurred by us or our subsidiaries (other than PAA and its subsidiaries)); and
- "affiliates" of our general partner do not include the Legacy Owners.

WHERE YOU CAN FIND MORE INFORMATION

We "incorporate by reference" information into this prospectus, which means that we disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, except for any information superseded by information contained expressly in this prospectus or any prospectus supplement, and the information we file later with the SEC will automatically supersede this information. You should not assume that the information in this prospectus is current as of any date other than the date on the front page of this prospectus, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of such document.

We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (excluding any information furnished rather than filed), until all offerings under this registration statement are completed:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2016;
- our Current Reports on Form 8-K filed on January 24, 2017, February 14, 2017 and February 21, 2017; and
- the description of our Class A shares contained in our Registration Statement on Form 8-A/A, filed on November 16, 2016, and any subsequent amendment or report filed for the purpose of updating such description.

You may request a copy of any document incorporated by reference in this prospectus and any exhibit specifically incorporated by reference in those documents, at no cost, by writing or telephoning us at the following address or phone number:

Plains GP Holdings, L.P.
Investor Relations
333 Clay Street, Suite 1600
Houston, Texas 77002
(713) 646-4100

Additionally, you may read and copy any documents filed by us at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-732-0330 for further information on its Public Reference Room. Our SEC filings are also available to the public from commercial document retrieval services and at the SEC's website www.sec.gov.

We also make available free of charge on our website at ir.pagp.com our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with the SEC. Information contained on our website is not incorporated by reference into this

prospectus and you should not consider information contained on our website as part of this prospectus.

FORWARD-LOOKING STATEMENTS

All statements included or incorporated by reference in this prospectus, other than statements of historical fact, are forward-looking statements, including but not limited to statements incorporating the words "anticipate," "believe," "estimate," "expect," "plan," "intend" and "forecast," as well as similar expressions and statements regarding our business strategy, plans and objectives for future operations. The absence of such words, expressions or statements, however, does not mean that the statements are not forward-looking. Any such forward-looking statements reflect our current views with respect to future events, based on what we believe to be reasonable assumptions. Certain factors could cause actual results or outcomes to differ materially from the results or outcomes anticipated in the forward-looking statements. The most important of these factors include, but are not limited to:

- our ability to pay distributions to our Class A shareholders;
- our expected receipt of, and amounts of, distributions from AAP;
- declines in the volume of crude oil and NGL shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of our assets, whether due to declines in production from existing oil and gas reserves, reduced demand, failure to develop or slowdown in the development of additional oil and gas reserves, whether from reduced cash flow to fund drilling or the inability to access capital, or other factors;
- the effects of competition;
- market distortions caused by producer over-commitments to new or recently constructed infrastructure projects, which impacts volumes, margins, returns and overall earnings;
- unanticipated changes in crude oil market structure, grade differentials and volatility (or lack thereof);
- environmental liabilities or events that are not covered by an indemnity, insurance or existing reserves;
- maintenance of PAA's credit rating and ability to receive open credit from suppliers and trade counterparties;
- fluctuations in refinery capacity in areas supplied by our mainlines and other factors affecting demand for various grades of crude oil, refined products and natural gas and resulting changes in pricing conditions or transportation throughput requirements;
- the occurrence of a natural disaster, catastrophe, terrorist attack (including eco-terrorist attacks) or other event, including attacks on our electronic and computer systems;
- failure to implement or capitalize, or delays in implementing or capitalizing, on expansion projects, whether due to permitting delays, permitting withdrawals or other factors;
- tightened capital markets or other factors that increase our cost of capital or limit our ability to obtain debt or equity financing on satisfactory terms to fund additional acquisitions, expansion projects, working capital requirements and the repayment or refinancing of indebtedness;
- the successful integration and future performance of acquired assets or businesses and the risks associated with operating in lines of business that are distinct and separate from historical operations;
- the currency exchange rate of the Canadian dollar;

- continued creditworthiness of, and performance by, our counterparties, including financial institutions and trading companies with which we do business;
- inability to recognize current revenue attributable to deficiency payments received from customers who fail to ship or move more than minimum contracted volumes until the related credits expire or are used;
- non-utilization of our assets and facilities;
- increased costs, or lack of availability, of insurance;
- weather interference with business operations or project construction, including the impact of extreme weather events or conditions;
- the availability of, and our ability to consummate, acquisition or combination opportunities;
- the effectiveness of our risk management activities;
- shortages or cost increases of supplies, materials or labor;
- the impact of current and future laws, rulings, governmental regulations, accounting standards and statements, and related interpretations;
- fluctuations in the debt and equity markets, including the price of PAA's units at the time of vesting under its long-term incentive plans;
- risks related to the development and operation of our assets, including our ability to satisfy our contractual obligations to our customers;
- factors affecting demand for natural gas and natural gas storage services and rates;
- general economic, market or business conditions and the amplification of other risks caused by volatile financial markets, capital constraints and pervasive liquidity concerns; and
- other factors and uncertainties inherent in the transportation, storage, terminalling and marketing of crude oil and refined products, as well as in the storage of natural gas and the processing, transportation, fractionation, storage and marketing of natural gas liquids.

Other factors described or incorporated by reference herein, as well as factors that are unknown or unpredictable, could also have a material adverse effect on future results. Please read "Risk Factors" beginning on page 2 of this prospectus and as discussed in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (File No. 001-36132), which is incorporated in this prospectus by reference, for information regarding risks you should consider before making an investment decision. Except as required by applicable securities laws, we do not intend to update these forward-looking statements and information.

ABOUT PLAINS GP HOLDINGS, L.P.

Overview

We are a Delaware limited partnership formed in July 2013 that has elected to be treated as a corporation for U.S. federal income tax purposes. We do not directly own any operating assets; our principal sources of cash flow are derived from our indirect investment in PAA. As of February 22, 2017, we directly and indirectly owned 103,277,067 Class A Units of AAP, which we refer to as AAP Class A units, which represented a 42.8% limited partner interest in AAP. AAP owns a non-economic general partner interest in PAA and, as of February 22, 2017, owned 243,391,545 common units of PAA. Our general partner, PAA GP Holdings LLC, has responsibility for managing the business and affairs of PAA, in addition to AAP and PAGP.

PAA is a publicly traded Delaware limited partnership formed in 1998. PAA's operations are conducted directly and indirectly through its primary operating subsidiaries. PAA owns and operates midstream energy infrastructure and provides logistics services for crude oil, natural gas liquids ("NGL"), natural gas and refined products. PAA owns an extensive network of pipeline transportation, terminalling, storage and gathering assets in key crude oil and NGL producing basins and transportation corridors and at major market hubs in the United States and Canada.

Principal Executive Offices and Internet Address

Our principal executive offices are located at 333 Clay Street, Suite 1600, Houston, TX 77002 and our telephone number is (713) 646-4100. Our website is located at www.plainsallamerican.com. We make our periodic and current reports and other information filed with or furnished to the SEC available, free of charge, through our website, as soon as reasonably practicable after those reports and other information are electronically filed with or furnished to the SEC. Information on our website or any other website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

RISK FACTORS

An investment in our Class A shares involves a high degree of risk. Before you invest in our Class A shares, you should carefully consider those risks described in our Annual Report on Form 10-K for the year ended December 31, 2016 (File No. 001-36132), which is incorporated into this prospectus by reference, together with all of the other information included in this prospectus, any prospectus supplement and the documents we incorporate by reference, in evaluating an investment in our Class A shares. If any such risks were actually to occur, our business, financial condition or results of operations could be materially adversely affected. In that case, the trading price of our Class A shares could decline, and you could lose all or part of your investment. Please read "Forward-Looking Statements."

USE OF PROCEEDS

Unless otherwise indicated to the contrary in an accompanying prospectus supplement, we will use the net proceeds from the sale of securities covered by this prospectus for general partnership purposes, which may include, among other things, investment in the equity of PAA (acting through AAP as provided in the Omnibus Agreement), repayment of indebtedness, acquisitions, capital expenditures and additions to working capital.

Pursuant to the Omnibus Agreement, we have agreed to use the net proceeds from any sale of Class A shares to purchase from AAP a number of AAP Class A units equal to the number of Class A shares sold at a price equal to the net proceeds from such sale. The Omnibus Agreement also provides that immediately following such purchase and sale, AAP will use the net proceeds it receives from such sale of AAP Class A units to PAGP to purchase from PAA an equivalent number of common units of PAA. It is anticipated that PAA will, in turn, use the net proceeds from such sale of common units to AAP for general partnership purposes, which may include, among other things, repayment of indebtedness, acquisitions, capital expenditures and additions to working capital.

Any specific allocation of the net proceeds of an offering of securities to a specific purpose will be determined at the time of the offering and will be described in a prospectus supplement.

OUR CASH DISTRIBUTION POLICY

Our Cash Distribution Policy

Our partnership agreement requires that, within 55 days after the end of each quarter, we distribute all of our available cash to Class A shareholders of record on the applicable record date.

Available cash generally means, for any quarter ending prior to liquidation, all cash and cash equivalents on hand at the date of determination of available cash for the distribution in respect of such quarter (including expected distributions from AAP in respect of such quarter), less the amount of cash reserves established by our general partner, which will not be subject to a cap, to:

- comply with applicable law or any agreement binding upon us or our subsidiaries (exclusive of PAA and its subsidiaries);
- provide funds for future distributions to shareholders;
- provide for future capital expenditures, debt service and other credit needs as well as any federal, state, provincial or other income tax that may affect the Partnership in the future; or
- provide for the proper conduct of our business, including with respect to the matters described under "The Partnership Agreement."

Our available cash also includes cash on hand resulting from borrowings, if any, made after the end of the quarter.

Our Sources of Available Cash

Our principal sources of cash flow are derived from our indirect investment in PAA. As of February 22, 2017, we directly and indirectly owned 103,277,067 AAP Class A units, which represented a 42.8% limited partnership interest in AAP. AAP owns a non-economic general partner interest in PAA and, as of February 22, 2017, owned 243,391,545 common units of PAA. Therefore, our cash flow and resulting ability to make distributions will be completely dependent upon the ability of PAA to make distributions to AAP in respect of the common units AAP owns. The actual amount of cash that PAA, and correspondingly AAP, will have available for distribution will primarily depend on the amount of cash PAA generates from its operations. Also, under the terms of the agreements governing PAA's debt, it is prohibited from declaring or paying any distribution to unitholders if a default or event of default (as defined in such agreements) exists.

In addition, the actual amount of cash that PAA and AAP will have available for distribution will depend on other factors, some of which are beyond PAA's or our control, including:

- the level of revenue PAA is able to generate from its business;
- the level of capital expenditures PAA makes;
- the level of PAA's operating, maintenance and general and administrative expenses or related obligations;
- the cost of acquisitions, if any;
- PAA's debt service requirements and other liabilities;
- PAA's working capital needs;
- restrictions on distributions contained in PAA's debt agreements and any future debt agreements;
- PAA's ability to borrow under its revolving credit agreements to make distributions; and
- the amount, if any, of cash reserves established by each of PAA GP and our general partner, in their sole discretion, for the proper conduct of PAA's and our business.

General Partner Interest

Our general partner owns a non-economic general partner interest in us, which does not entitle it to receive cash distributions.

Distributions of Cash Upon Liquidation

If we dissolve in accordance with the partnership agreement, we will sell or otherwise dispose of our assets in a process called liquidation. We will first apply the proceeds of liquidation to the payment of our creditors and, thereafter, holders of our Class A shares would be entitled to share ratably in the distribution of any remaining proceeds.

THE PARTNERSHIP AGREEMENT

The following is a summary of the material provisions of our partnership agreement. We summarize the following provisions of our partnership agreement elsewhere in this prospectus:

- with regard to distributions of available cash, please read "Our Cash Distribution Policy";
- with regard to the rights of holders of Class A shares, please read "Description of Our Shares"; and
- with regard to allocations of taxable income and taxable loss, please read "Material U.S. Federal Income Tax Consequences."

Organization and Duration

We were formed in July 2013 and have a perpetual existence.

Purpose

Under our partnership agreement, we are permitted to engage, directly or indirectly, in any business activity that is approved by our general partner and that lawfully may be conducted by a limited partnership organized under Delaware law.

Although our general partner has the ability to cause us, our affiliates and our subsidiaries to engage in activities other than the indirect ownership of partnership interests in PAA, our general partner has no current plans to do so and may decline to do so free of any fiduciary duty or obligation whatsoever to us or our shareholders, including any duty to act in good faith or in the best interest of us or our shareholders. Our general partner is authorized in general to perform all acts it determines to be necessary or appropriate to carry out our purposes and to conduct our business, including, but not limited to, the following:

- the making of expenditures and the incurrence of debt and other obligations;
- the acquisition, disposition, mortgage, pledge, encumbrance, hypothecation or exchange of any or all of our assets or the merger or other combination of us with or into another person;
- the negotiation, execution and performance of contracts;
- the distribution of our cash;
- the purchase, sale or other acquisition or disposition of our partnership securities or the issuance of partnership securities or options or other rights relating thereto; and
- any action in connection with our participation and management of PAA.

Capital Contributions

Our shareholders are not obligated to make additional capital contributions, except as described below under "—Limited Liability."

Applicable Law; Forum, Venue and Jurisdiction

Our partnership agreement is governed by Delaware law. Our partnership agreement requires that any claims, suits, actions or proceedings:

- arising out of or relating in any way to the partnership agreement (including any claims, suits or actions to interpret, apply or enforce the provisions of the partnership agreement or the duties, obligations or liabilities among shareholders or of shareholders to us, or the rights or powers of, or restrictions on, the shareholders or us);

- brought in a derivative manner on our behalf;
- asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of us or our general partner, or owed by our general partner to us or the shareholders;
- asserting a claim arising pursuant to any provision of the Delaware Revised Uniform Limited Partnership Act (the "Delaware Act"); or
- asserting a claim governed by the internal affairs doctrine,

shall be exclusively brought in the Court of Chancery of the State of Delaware (or, if such court does not have subject matter jurisdiction thereof, any other court located in the State of Delaware with subject matter jurisdiction), regardless of whether such claims, suits, actions or proceedings sound in contract, tort, fraud or otherwise, are based on common law, statutory, equitable, legal or other grounds, or are derivative or direct claims. By purchasing a Class A share, a shareholder is irrevocably consenting to these limitations and provisions regarding claims, suits, actions or proceedings and submitting to the exclusive jurisdiction of the Court of Chancery of the State of Delaware (or such other Delaware courts) in connection with any such claims, suits, actions or proceedings.

Limited Liability

Assuming that a shareholder does not participate in the control of our business within the meaning of the Delaware Act and that he otherwise acts in conformity with the provisions of our partnership agreement, his liability under the Delaware Act will be limited, subject to possible exceptions, to the amount of capital he is obligated to contribute to us for his shares plus his share of any undistributed profits and assets. If it were determined, however, that the right, or exercise of the right, by the shareholders as a group:

- to remove or replace our general partner,
- to approve some amendments to our partnership agreement,
- to vote for eligible directors as provided under our partnership agreement, or
- to take other action under our partnership agreement,

constituted "participation in the control" of our business for the purposes of the Delaware Act, then our shareholders could be held personally liable for our obligations under the laws of Delaware, to the same extent as our general partner. This liability would extend to persons who transact business with us who reasonably believe that the shareholder is a general partner. Neither our partnership agreement nor the Delaware Act specifically provides for legal recourse against our general partner if a shareholder were to lose limited liability through any fault of our general partner. Although this does not mean that a shareholder could not seek legal recourse, we know of no precedent for this type of a claim in Delaware case law.

Under the Delaware Act, a limited partnership may not make a distribution to a partner if, after the distribution, all liabilities of the limited partnership, other than liabilities to partners on account of their partnership interests and liabilities for which the recourse of creditors is limited to specific property of the partnership, would exceed the fair value of the assets of the limited partnership. For the purpose of determining the fair value of the assets of a limited partnership, the Delaware Act provides that the fair value of property subject to liability for which recourse of creditors is limited will be included in the assets of the limited partnership only to the extent that the fair value of that property exceeds the nonrecourse liability. The Delaware Act provides that a limited partner who receives a distribution and knew at the time of the distribution that the distribution was in violation of the Delaware Act will be liable to the limited partnership for the amount of the distribution for three years. Under the Delaware Act, a substituted limited partner of a limited partnership is liable for the

obligations of his assignor to make contributions to the partnership, except that such person is not obligated for liabilities unknown to him at the time he became a limited partner and that could not be ascertained from the partnership agreement.

Limitations on the liability of limited partners for the obligations of a limited partner (or in our case, a shareholder) have not been clearly established in many jurisdictions. Although we currently have no operations distinct from PAA, if in the future, by our ownership in an operating company or otherwise, it were determined that we were conducting business in any state without compliance with the applicable limited partnership or limited liability company statute, or that the right or exercise of the right by the shareholders as a group to remove or replace our general partner, to approve some amendments to our partnership agreement, or to take other action under our partnership agreement constituted "participation in the control" of our business for purposes of the statutes of any relevant jurisdiction, then the shareholder could be held personally liable for our obligations under the law of that jurisdiction to the same extent as our general partner under the circumstances. We operate in a manner that our general partner considers reasonable and necessary or appropriate to preserve the limited liability of the shareholders.

Limited Voting Rights

Our general partner manages us and our operations. You will have only limited voting rights on matters affecting our business. You will not have the right to elect our general partner or, except as described below under "—Public Election of Directors," its directors on an annual or other continuing basis.

Our Class C shares are not entitled to vote on any matter other than for the election of directors and on certain amendments to our partnership agreement that would enlarge the obligations of holders of Class C shares thereunder or that would have a material adverse effect on the rights or preferences of the Class C shares relative our other classes of limited partner interests. Accordingly, except as otherwise indicated, references in this section to requisite shareholder approvals and "outstanding shares" refer to requisite approvals by holders of Class A shares and Class B shares and outstanding Class A shares and Class B shares, respectively, in each case voting together as a single class.

The following is a summary of the shareholder vote required for the matters specified below. On all matters where our shareholders are entitled to vote (other than the election of directors of our general partner as described below under "—Public Election of Directors"), the Class A shares and Class B shares will vote together as a single class and will be entitled to one vote per share. The holders of a majority of the outstanding shares, represented in person or by proxy, will 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 will be the greater percentage. In voting any shares it owns, our

general partner will have no fiduciary duty or obligation whatsoever to us or the shareholders, including any duty to act in good faith or in the best interests of us or the shareholders.

Issuance of additional shares (or other partnership securities)	No approval right.
Amendment of our partnership agreement	Amendments to our partnership agreement may be proposed only by or with the consent of our general partner. Certain amendments may be made by our general partner without the approval of our shareholders. Other amendments generally require the approval of a majority of our outstanding shares (including under certain circumstances, our Class C shares). Please read "—Amendments to Our Partnership Agreement."
Merger of our partnership or the sale of all or substantially all of our assets	A majority of our outstanding shares in certain circumstances. Please read "—Merger, Sale or Other Disposition of Assets."
Dissolution	A majority of our outstanding shares. Please read "—Termination or Dissolution."
Reconstitution upon dissolution	A majority of our outstanding shares. Please read "—Termination or Dissolution."
Withdrawal of our general partner	No approval right. Please read "—Withdrawal or Removal of the General Partner."
Removal of our general partner	Not less than 66 ² / ₃ % of our outstanding shares, including shares held by our general partner, the Legacy Owners and their respective affiliates. Please read "—Withdrawal or Removal of the General Partner."
Transfer of the general partner interest	No approval right. Please read "—Transfer of General Partner Interest."

Transfer of Ownership Interests in Our General Partner

At any time, the owners of our general partner may sell or transfer all or part of their ownership interest in our general partner without the approval of our shareholders, subject to certain rights of first refusal and other transfer restrictions contained in AAP's partnership agreement.

Our general partner's limited liability company agreement includes provisions linking the ownership of the membership interests in our general partner to the ownership of the outstanding AAP Class A units. Membership interests in our general partner are not allowed to be transferred without transferring the same number of AAP Class A units and vice versa.

Issuance of Additional Securities

Our partnership agreement authorizes us to issue an unlimited number of additional limited partner interests and other equity securities for the consideration and on the terms and conditions established by our general partner in its sole discretion without the approval of our shareholders.

It is possible that we will fund acquisitions through the issuance of additional shares or other equity securities. Holders of any additional shares we issue will be entitled to share equally with the then-existing shareholders in our cash distributions. In addition, the issuance of additional partnership interests may dilute the value of the interests of the then-existing holders of shares in our net assets.

In accordance with Delaware law and the provisions of our partnership agreement, we may also issue additional partnership interests that have special voting rights to which the Class A shares, Class B shares and Class C Shares are not entitled.

Amendments to Our Partnership Agreement

General

Amendments to our partnership agreement may be proposed only by or with the consent of our general partner. However, our general partner will have no duty or obligation to propose any amendment and may decline to do so free of any fiduciary duty or obligation whatsoever to us or our shareholders, including any duty to act in good faith or in the best interests of us or our shareholders. To adopt a proposed amendment, other than the amendments discussed below, our general partner must seek written approval of the holders of the number of shares required to approve the amendment or call a meeting of our shareholders to consider and vote upon the proposed amendment. Except as described below, an amendment must be approved by a majority of our outstanding shares.

Prohibited Amendments

No amendment may be made that would:

- (1) enlarge the obligations of any shareholder without its consent (including the Class C shareholder), unless approved by at least a majority of the type or class of shareholder interests so affected; or
- (2) enlarge the obligations of, restrict in any way any action by or rights of, or reduce in any way the amounts distributable, reimbursable or otherwise payable by us to our general partner or any of its affiliates without the consent of our general partner, which may be given or withheld in its sole discretion.

The provision of our partnership agreement preventing amendments having the effects described in clauses (1) or (2) above can be amended upon the approval of the holders of at least 90% of the outstanding shares.

No Shareholder Approval

Our general partner may generally make amendments to our partnership agreement without the approval of any shareholder or assignee to reflect:

- (1) any change in our name, the location of our principal place of business, our registered agent or its registered office;
- (2) the admission, substitution, withdrawal or removal of partners in accordance with our partnership agreement;
- (3) a change that our general partner determines to be necessary or appropriate to qualify or continue the qualification of our partnership as a limited partnership or a partnership in which the limited partners have limited liability under the laws of any state;
- (4) an amendment that is necessary, in the opinion of our counsel, to prevent us or our general partner or its directors, officers, agents or trustees, from in any manner being subjected to the provisions of the Investment Company Act of 1940, the Investment Advisors Act of 1940, or

"plan asset" regulations adopted under the Employee Retirement Income Security Act of 1974, whether or not substantially similar to plan asset regulations currently applied or proposed;

- (5) an amendment that our general partner determines to be necessary or appropriate for the authorization of additional partnership securities or rights to acquire partnership securities;
- (6) any amendment expressly permitted in our partnership agreement to be made by our general partner acting alone;
- (7) an amendment effected, necessitated or contemplated by a merger agreement that has been approved under the terms of our partnership agreement;
- (8) an amendment that our general partner determines to be necessary or appropriate for the formation by us, or our investment in, any corporation, partnership or other entity, as otherwise permitted by our partnership agreement;
- (9) a change in our fiscal year or taxable year and related changes;
- (10) a merger with or conveyance to another limited liability entity that is newly formed and has no assets, liabilities or operations at the time of the merger or conveyance other than those it receives by way of the merger or conveyance, provided that the sole purpose of such merger is to effect a legal change into a different form of limited liability entity;
- (11) an amendment effected, necessitated or contemplated by an amendment to PAA's partnership agreement that requires PAA unitholders to provide a statement, certificate or other proof of evidence to PAA regarding whether such unitholder is subject to United States federal income tax on the income generated by PAA; or
- (12) any other amendments substantially similar to any of the matters described in (1) through (11) above.

In addition, our general partner may make amendments to our partnership agreement without the approval of any shareholder or assignee if those amendments, in the discretion of our general partner:

- (1) do not adversely affect our shareholders (or any particular class of holders of partnership interests, including our Class C shares) in any material respect;
- (2) 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;
- (3) 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 our shares are or will be listed for trading;
- (4) are necessary or appropriate for any action taken by our general partner relating to splits or combinations of shares under the provisions of our partnership agreement;
- (5) are necessary or appropriate to implement certain governance procedures following the closing of the transactions contemplated by the Simplification Agreement, including the staggering of our board of directors and the public election of directors; or
- (6) are required to effect the intent of the statements contained in the registration statement filed in connection with the initial public offering of Class A shares by us and in the provisions of our partnership agreement or as are otherwise contemplated by our partnership agreement.

Opinion of Counsel and Shareholder Approval

Any amendment described as requiring shareholder approval will require an opinion of counsel to the effect that the amendment will not affect the limited liability under applicable law of any of our shareholders. Our general partner will not be required to obtain such an opinion of counsel for any of the amendments described above under "—No Shareholder Approval." In the absence of such an opinion where required, the approval of 90% of the outstanding shares is required for an amendment to become effective.

In addition to the above restrictions, any amendment that would have a material adverse effect on the rights or preferences of any type or class of outstanding shares in relation to other classes of shares will require the approval of at least a majority of the type or class of shares so affected. Also, any amendment that reduces the voting percentage required to take any action must be approved by the affirmative vote of shareholders whose aggregate outstanding shares constitute not less than the voting requirement sought to be reduced.

Merger, Sale or Other Disposition of Assets

Our partnership agreement generally prohibits our general partner, without the prior approval of a majority of our outstanding shares, from causing us to, among other things, sell, exchange or otherwise dispose of all or substantially all of our assets in a single transaction or a series of related transactions. Our general partner may, however, mortgage, pledge, hypothecate or grant a security interest in all or substantially all of our assets without that approval. Our general partner may also sell all or substantially all of our assets under a foreclosure or other realization upon those encumbrances without that approval.

A merger, consolidation or conversion of us requires the prior consent of our general partner. In addition, our partnership agreement provides that, to the maximum extent permitted by law, our general partner will have no duty or obligation to consent to any merger, consolidation or conversion of us and may decline to do so free of any fiduciary duty or obligation whatsoever to us, or any of our shareholders. Further, in declining to consent to a merger, consolidation or conversion, our general partner will not be required to act in good faith or pursuant to any other standard imposed by our partnership agreement, any other agreement, under the Delaware Act or any other law, rule or regulation or at equity.

If conditions specified in our partnership agreement are satisfied, our general partner may merge us or any of our subsidiaries into, or convey some or all of our assets to, a newly formed entity if the sole purpose of that merger or conveyance is to effect a mere change in our legal form into another limited liability entity. Our shareholders are not entitled to dissenters' rights or appraisal rights (and, therefore, will not be entitled to demand payment of a fair price for their shares) under our partnership agreement or applicable Delaware law in the event of a merger or consolidation, a sale of substantially all of our assets or any other transaction or event.

Termination or Dissolution

We will continue as a limited partnership until terminated under our partnership agreement. We will dissolve upon:

- (1) the election of our general partner to dissolve us, if approved by a majority of our outstanding shares;
- (2) there being no holders of partnership interests, unless we are continued without dissolution in accordance with applicable Delaware law;
- (3) the entry of a decree of judicial dissolution of us; or

- (4) the withdrawal or removal of our general partner or any other event that results in its ceasing to be our general partner other than by reason of a transfer of its general partner interest in accordance with our partnership agreement or withdrawal or removal of our general partner following approval and admission of a successor.

Upon a dissolution under clause (4) above, the holders of a majority of our outstanding shares may also elect, within specific time limitations, to continue our business on the same terms and conditions described in our partnership agreement by appointing as a successor general partner an entity approved by the holders of a majority of the outstanding shares, subject to our receipt of an opinion of counsel to the effect that the action would not result in the loss of limited liability of any limited partner.

Liquidation and Distribution of Proceeds

Upon our dissolution, unless we are reconstituted and continued as a new limited partnership, the person authorized to wind up our affairs (the liquidator) will, acting with all of the powers of our general partner that the liquidator deems necessary or appropriate, liquidate our assets. The proceeds of the liquidation will be applied as follows:

- first, towards the payment of all of our creditors and the settlement of or creation of a reserve for contingent liabilities; and
- then, to all partners in accordance with the positive balance in the respective capital accounts.

If the liquidator determines that a sale would be impractical or would cause a loss to our partners, it may defer liquidation of our assets for a reasonable period of time or distribute assets to partners in kind if it determines that a sale would be impractical or would cause undue loss to the partners.

Withdrawal or Removal of the General Partner

Our general partner may withdraw as general partner in compliance with our partnership agreement after giving 90 days' written notice to our shareholders, and that withdrawal will not constitute a violation of our partnership agreement.

Upon the voluntary withdrawal of our general partner, the holders of a majority of our outstanding shares may elect a successor to that withdrawing general partner. If a successor is not elected, or is elected but an opinion of counsel regarding limited liability cannot be obtained, we will be dissolved, wound up and liquidated, unless within 180 days after that withdrawal, the holders of a majority of the outstanding shares agree in writing to continue our business and to appoint a successor general partner. Please read "—Termination or Dissolution" above.

Our general partner may not be removed unless that removal is approved by the vote of the holders of not less than $66\frac{2}{3}\%$ of our outstanding shares, including shares held by our general partner, the Legacy Owners and their respective affiliates, and we receive an opinion of counsel regarding limited liability. Any removal of our general partner is also subject to the approval of a successor general partner by the vote of the holders of a majority of the outstanding shares. The ownership of more than $33\frac{1}{3}\%$ of our outstanding shares by any person or group would give such persons the practical ability to prevent our general partner's removal. The Legacy Owners currently own substantially more than $33\frac{1}{3}\%$ of our outstanding shares.

In addition, we will be required to reimburse the departing general partner for all amounts due the departing general partner, including, without limitation, all employee-related liabilities, including severance liabilities, incurred for the termination of any employees employed by the departing general partner or its affiliates for our benefit.

Transfer of General Partner Interest

Our general partner may transfer all or any of its general partner interest in us without obtaining approval of any shareholder. As a condition of this transfer, the transferee must assume the rights and duties of the general partner to whose interest that transferee has succeeded, agree to be bound by the provisions of our partnership agreement and furnish an opinion of counsel regarding limited liability.

Change of Management Provision

Our partnership agreement contains specific provisions that are intended to discourage a person or group from attempting to remove our general partner as general partner or otherwise change management. If any person or group other than our general partner, the Legacy Owners and their permitted transferees or their respective affiliates acquires beneficial ownership of 20% or more of any class of our shares, that person or group loses voting rights on all of its shares other than with regards to the nomination of persons to serve as members of our general partner's board of directors; provided, however that such holders shall be entitled to vote in an election for the directors of our general partner an amount of their shares constituting up to 19.9% of our outstanding Class A, Class B and Class C shares. This loss of voting rights does not apply to (i) any person or group that acquires the shares directly from us, our general partner, any of the Legacy Owners, any Qualifying Interest Holder (as defined in our partnership agreement) or their respective affiliates, (ii) any transferees that acquired the shares from a person or group described in clause (i), or (iii) any person or group that acquires 20% of any class of shares with the prior approval of the board of directors of our general partner.

Limited Call Right

If at any time more than 80% of our outstanding Class A shares and Class B shares on a combined basis (including Class A shares issuable upon the exchange of Class B shares and including any other additional limited partner interests we may issue in the future) are owned by our general partner, the Legacy Owners (or their permitted transferees) or their respective affiliates, our general partner will have the right (which it may assign to us or any other designee), but not the obligation, to acquire all, but not less than all, of the remaining Class A shares held by public shareholders at a price equal to the greater of (x) the current market price of such shares as of the date three days before notice of exercise of the call right is first mailed and (y) the highest price paid by our general partner, the Legacy Owners or their respective affiliates for such shares during the 90 day period preceding the date such notice is first mailed.

As a result of our general partner's right to purchase outstanding limited partner interests, a holder of limited partner interests may have his limited partner interests purchased at an undesirable time or price. The tax consequences to a shareholder of the exercise of this call right are the same as a sale by that shareholder of his shares in the market. Please read "Material U.S. Federal Income Tax Consequences."

Meetings; Voting

Except as described below regarding a person or group owning 20% or more of shares then outstanding, shareholders on the record date will be entitled to notice of, and to vote at, meetings of our limited partners and to act upon matters for which approvals may be solicited. The only matters for which approvals may be solicited will be those matters submitted by our general partner's board of directors. Our shareholders will not be able to submit matters for consideration at any meeting of our shareholders. Class A shares and Class B shares that are owned by non-citizen assignees will be voted by our general partner on behalf of non-citizen assignees and our general partner will distribute the votes on those shares in the same ratios as the votes of limited partners on other shares are cast.

Our general partner does not anticipate that any meeting of shareholders will be called in the foreseeable future (excluding the election of directors beginning in 2018 described below under "—Public Election of Directors.") Our shareholders will not be entitled to act by written consent. Meetings of the shareholders may be called by our general partner or by shareholders owning at least 20% of the outstanding shares. Shareholders may vote either in person or by proxy at meetings. The holders of a majority of the outstanding shares, represented in person or by proxy, will constitute a quorum (other than as described under "—Public Election of Directors") unless any action by the shareholders requires approval by holders of a greater percentage of the shares, in which case the quorum will be the greater percentage.

Each record holder of a share has a vote according to his percentage interest in us, although additional partnership interests having special voting rights could be issued. Please read "—Issuance of Additional Securities" above. However, if at any time any person or group, other than our general partner, the Legacy Owners and their respective affiliates, or a direct or subsequently approved transferee of our general partner, the Legacy Owners and their respective affiliates, acquires, in the aggregate, beneficial ownership of 20% or more of any class of shares then outstanding, that person or group will lose voting rights on all of its shares and the shares may not be voted on any matter and will not be considered to be outstanding when sending notices of a meeting of shareholders, calculating required votes, determining the presence of a quorum or for other similar purposes. Notwithstanding the foregoing sentence, for meetings called for the purpose of electing the directors of our general partner described below under "—Public Election of Directors," 19.9% of the outstanding Class A shares, Class B shares and Class C shares held by any beneficial owner of 20% or more of any class of shares shall be considered outstanding when sending notices and determining the presence of a quorum for such a meeting, and such holders will be entitled to vote up to 19.9% of the outstanding Class A shares, Class B shares and Class C shares in such an election. For more information on persons and groups to which this loss of voting rights does not apply, please read "—Change of Management Provisions" above. Shares held in nominee or street name account will be voted by the broker or other nominee in accordance with the instruction of the beneficial owner unless the arrangement between the beneficial owner and his nominee provides otherwise.

Any notice, demand, request, report or proxy material required or permitted to be given or made to record holders of shares under our partnership agreement will be delivered to the record holder by us or by the transfer agent.

Public Election of Directors

Our general partner's board of directors is divided into three classes of directors such that each class is comprised of one designated director and two independent directors. As provided in our general partner's limited liability company agreement, the officers of our general partner that are serving as directors will not be included in a class or subject to election by our shareholders. In addition, the CEO of our general partner is automatically designated as the Chairman of the board of directors of our general partner. Furthermore, any director subject to appointment by the holders of PAA's Series A preferred units (as described below) will not be included in a class or subject to election by our shareholders. Each class of directors will serve a three-year term.

Our partnership agreement provides that, beginning in 2018, we will hold a meeting of our shareholders for the purpose of electing successors for any directors whose terms are about to expire, excluding, however, any designated directors whose designating party still has the right to designate a director. Voting at any such shareholder meetings will be non-cumulative. Notice of such meeting will be given not less than 10 days nor more than 60 days prior to the date of such meeting. The presence in person or by proxy of the holders of a majority of our outstanding Class A shares, Class B shares and Class C shares, voting together as a single class, will constitute a quorum; provided that 19.9% of the outstanding Class A shares, Class B shares and Class C shares beneficially owned by a greater than

20% owner will be counted for purposes of determining a quorum for the election of our general partner's board of directors.

The individuals to stand for election as elected directors will be nominated by a majority of the directors of our general partner's board of directors, except that any director whose term is about to expire will not be eligible to vote on such nomination. In addition, any shareholder (other than any designating party holding a designation right) or common unitholder of PAA (other than AAP) that owns of record at least 10% of the combined Class A shares, Class B shares and Class C shares, or, in the case of a PAA common unitholder (other than AAP), a number of common units of PAA representing a number of Class C shares equal to at least 10% of the combined Class A shares, Class B shares and Class C shares, will have the right to nominate a single director for inclusion on the ballot at the applicable shareholder meeting. In order for a shareholder to make such nomination, it must provide notice of the nomination to our general partner not earlier than 120 days or later than 90 days prior to the anniversary of the preceding year's annual meeting (or, in the case of our first annual meeting, such date as shall be set by our general partner) and comply with certain other requirements set forth in our partnership agreement.

The holders of PAA's Series A preferred units have the right to designate a director to our general partner's board of directors in the event that PAA does not declare and pay distributions on its Series A preferred units for three quarters, whether or not consecutive.

In addition to the provisions described above and in our partnership agreement, a shareholder must also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder; provided, however, that any references in our partnership agreement to the Exchange Act or the rules promulgated thereunder are not intended to and do not limit any requirements applicable to nominations pursuant to our partnership agreement, and compliance with our partnership agreement is the exclusive means for a shareholder to make nominations.

The elected directors will be elected by a plurality of the votes cast, and the designating parties will be entitled to vote in any election of elected directors.

No more than one director subject to designation by the designating parties is included in any class of directors. As such, for so long as a designating party holds a designation right, such designating party will designate a director at our annual meeting to replace such party's designated director whose term expires at such annual meeting, to hold office until such successor director is elected at the third succeeding annual meeting or until such director's earlier death, resignation or removal.

An elected director may be removed only for cause by vote of a majority of other elected directors. A designated director may be removed at any time by the designating party responsible for such director's designation or for cause by a majority of the remaining directors. In addition, as the designating parties reduce their ownership of limited partner interests in AAP (including for this purpose any indirect ownership interest in AAP through ownership of Class A shares and any ownership of PAA common units due to the exercise of the redemption right provided for under the AAP limited partnership agreement) below the minimum ownership requirement, the director position held by such designated director will become an elected director position upon the expiration of such designated director's term. If each designating party's ownership of limited partner interests (calculated as described above) in AAP falls below the minimum ownership requirement, then all of our directors (other than the CEO as a management director and any director subject to appointment by the holders of PAA's Series A preferred units) will become subject to election by our shareholders.

Any vacancies in elected directors (whether due to death, resignation or removal of an elected director or an increase in the total number of elected directors) may be filled, until the next annual meeting at which the term of such class expires, by a majority of the remaining directors then in office.

Any vacancies in designated directors may be filled by the applicable designating party in its sole discretion.

Status as Limited Partner

By transfer of shares in accordance with our partnership agreement, each transferee of shares shall be admitted as a limited partner with respect to the shares transferred when such transfer and admission is reflected in our books and records. Except as described under "—Limited Liability" above, the shares will be fully paid, and shareholders will not be required to make additional contributions.

Non-Citizen Assignees; Redemption

If we are or become subject to federal, state or local laws or regulations that, in the reasonable determination of our general partner, create a substantial risk of cancellation or forfeiture of any property that we have an interest in because of the nationality, citizenship or other related status of any shareholder, we may redeem the shares held by the limited partner or assignee at their current market price. To avoid any cancellation or forfeiture, our general partner may require each shareholder or assignee to furnish information about his nationality, citizenship or related status. If a shareholder or assignee fails to furnish information about his nationality, citizenship or other related status within 30 days after a request for the information or our general partner determines after receipt of the information that the limited partner or assignee is not an eligible citizen, the shareholder or assignee may be treated as a non-citizen assignee. In addition to other limitations on the rights of an assignee that is not a substituted limited partner, a non-citizen assignee does not have the right to direct the voting of his shares and may not receive distributions in kind upon our liquidation.

Indemnification

Under our partnership agreement, in most circumstances, we will indemnify the following persons, to the fullest extent permitted by law, from and against all losses, claims, damages or similar events:

- our general partner;
- any departing general partner;
- the Legacy Owners;
- any Qualifying Interest Holders (as defined in our partnership agreement);
- any person who is or was an affiliate of our general partner, any departing general partner, the Legacy Owners or any Qualifying Interest Holder;
- any person who is or was a managing member, manager, general partner, director, officer, fiduciary, agent or trustee of our general partner or any departing general partner or any affiliate of our general partner, any departing general partner or the Legacy Owners;
- any person who is or was serving at the request of our general partner or any departing general partner or any affiliate of our general partner, any departing general partner, the Legacy Owners or a Qualifying Interest Holder as an officer, director, member, partner, fiduciary or trustee of another person; or
- any person designated by our general partner.

Any indemnification under these provisions will only be out of our assets. Unless it otherwise agrees, our general partner will not be personally liable for, or have any obligation to contribute or loan funds or assets to us to enable it to effectuate, indemnification. We may purchase insurance against liabilities asserted against and expenses incurred by persons for our activities, regardless of

whether we would have the power to indemnify the person against liabilities under our partnership agreement.

Reimbursement of Expenses

Pursuant to the Omnibus Agreement, PAA is required to pay or reimburse our general partner, us and our subsidiaries (other than PAA and its subsidiaries) for all direct and indirect expenses incurred (other than income taxes incurred by us or our subsidiaries (other than PAA and its subsidiaries)). These expenses include any amounts paid to persons who perform services for us or on our behalf, as well any expenses and expenditures incurred or paid as a result of us being a publicly traded entity, including expenses associated with (i) compensation for directors of our general partner, (ii) director and officer liability insurance, (iii) listing on the New York Stock Exchange, (iv) investor relations, (v) legal, (vi) tax, (vii) financial advisor services and (viii) accounting. There is no limit on the amount of fees and expenses PAA may be required to pay or reimburse pursuant to the Omnibus Agreement.

Books and Reports

Our general partner is required to keep appropriate books of our business at our principal offices. The books will be maintained for both tax and financial reporting purposes on an accrual basis. For fiscal reporting and tax reporting purposes, our year ends on December 31 each year.

We will furnish or make available to record holders of shares, within 120 days after the close of each fiscal year, an annual report containing audited financial statements and a report on those financial statements by our independent public accountants. Except for our fourth quarter, we will also furnish or make available summary financial information within 90 days after the close of each quarter.

Right to Inspect Our Books and Records

Our partnership agreement provides that a limited partner can, for a purpose reasonably related to his interest as a limited partner, upon reasonable written demand and at his own expense, have furnished to him:

- a current list of the name and last known address of each record holder; and
- copies of our partnership agreement, our certificate of limited partnership of the partnership, related amendments and powers of attorney under which they have been executed.

Under our partnership agreement, however, our limited partners and other persons who acquire interests in us do not have rights to receive information from us or any of the persons we indemnify as described under "—Indemnification" for the purpose of determining whether to pursue litigation or assist in pending litigation against us or those indemnified persons relating to our affairs, except pursuant to the applicable rules of discovery relating to the litigation commenced by the person seeking information.

Our general partner may, and intends to, keep confidential from our shareholders trade secrets or other information the disclosure of which our general partner believes is not in our best interests or which we are required by law or by agreements with third parties to keep confidential. Our partnership agreement limits the rights to information that a limited partner would otherwise have under Delaware law.

DESCRIPTION OF OUR SHARES

Our Share Structure

Our partnership agreement provides for three classes of shares, Class A shares, Class B shares and Class C shares, each of which represents limited partner interests in us. The holders of our Class A and Class B shares are entitled to exercise the rights or privileges available to limited partners under our partnership agreement, but only holders of our Class A shares are entitled to participate in our distributions. The Class C shares are non-economic, and provide PAA, as the sole holder of the Class C shares, rights with respect to director nominations and voting rights in director elections. For a description of the rights and preferences of holders of our Class A shares in and to our distributions, please read "Our Cash Distribution Policy." For a description of the rights and privileges of limited partners under our partnership agreement, including voting rights, please read "The Partnership Agreement."

Our Class A shares are listed on the NYSE under the symbol "PAGP"; we do not intend to list the Class B shares or the Class C shares on any stock exchange. All of our Class B shares are owned by the Legacy Owners, including holders of the Class B Units of AAP (the "AAP management units") who have exchanged such AAP management units for AAP Class A units and a like number of Class B shares, or their permitted transferees. All of the Class C shares are owned by PAA.

Exchange Right

The Legacy Owners and any permitted transferees of their AAP Class A units each have the right to exchange (the "Exchange Right") all or a portion of their AAP Class A units into Class A shares at an exchange ratio of one Class A share for each AAP Class A unit exchanged. The above exchange right may be exercised only if, simultaneously therewith, an equal number of our Class B shares and general partner units are transferred by the exercising party to us.

For purposes of any transfer or exchange of AAP Class A units owned by the Legacy Owners, the AAP partnership agreement, our general partner's limited liability company agreement and our partnership agreement contain provisions linking each such AAP Class A unit with one of our Class B shares and a general partner unit. Our Class B shares and general partner units cannot be transferred without transferring an equal number of AAP Class A units and vice versa.

As long as the Class A shares are publicly traded, a holder of vested AAP management units will be entitled to convert his or her AAP management units into AAP Class A units and a like number of Class B shares based on a conversion ratio of approximately 0.941 AAP Class A units and Class B shares for each AAP management unit. Following any such conversion, the holder will have the Exchange Right for our Class A shares. Holders of AAP management units who convert such units into AAP Class A units and Class B shares will not receive general partner units and thus will not need to include any general partner units in a transfer or the exercise of their Exchange Right.

The above mechanisms are subject to customary conversion rate adjustments for equity splits, equity dividends and reclassifications.

Transfer of Class A Shares, Class B Shares and Class C Shares

By transfer of our Class A shares and Class B shares in accordance with our partnership agreement, each transferee of our Class A shares and Class B shares will be admitted as a shareholder with respect to the class of shares transferred when such transfer and admission is reflected in our books and records. Additionally, each transferee of our Class A shares and Class B shares:

- represents that the transferee has the capacity, power and authority to become bound by our partnership agreement;

- automatically agrees to be bound by the terms and conditions of, and is deemed to have executed, our partnership agreement; and
- gives the consents and approvals contained in our partnership agreement.

A transferee will become a substituted limited partner for the transferred shares automatically upon the recording of the transfer on our books and records. Our general partner will cause any transfers to be recorded on our books and records no less frequently than quarterly.

We may, at our discretion, treat the nominee holder of a Class A share or Class B share as the absolute owner. In that case, the beneficial holder's rights are limited solely to those that it has against the nominee holder as a result of any agreement between the beneficial owner and the nominee holder.

Class A shares and Class B shares are securities and are transferable according to the laws governing transfers of securities. In addition to other rights acquired upon transfer, the transferor gives the transferee the right to become a substituted limited partner in our partnership for the transferred shares.

Until a Class A share or Class B share has been transferred on our books, we and the transfer agent, notwithstanding any notice to the contrary, may treat the record holder of the share as the absolute owner for all purposes, except as otherwise required by law or stock exchange regulations.

For purposes of any transfer or exchange of AAP Class A units and our Class B shares, the AAP partnership agreement, our general partner's limited liability company agreement and our partnership agreement contain provisions linking each AAP Class A unit with one of our Class B shares and a general partner unit. Please read "—Exchange Right" above.

Pursuant to the Omnibus Agreement, PAA may not transfer the Class C shares without our prior consent.

Transfer Agent and Registrar

Duties

American Stock Transfer and Trust Company serves as registrar and transfer agent for our Class A shares. We will pay all fees charged by the transfer agent for transfers of our shares except the following fees that will be paid by shareholders:

- surety bond premiums to replace lost or stolen certificates, taxes and other governmental charges;
- special charges for services requested by a holder of a share; and
- other similar fees or charges.

There will be no charge to holders of Class A shares for disbursements of our cash distributions. We will indemnify the transfer agent, its agents and each of their shareholders, directors, officers and employees against all claims and losses that may arise out of acts performed or omitted for its activities in that capacity, except for any liability due to any gross negligence or intentional misconduct of the indemnified person or entity.

Resignation or Removal

The transfer agent may at any time resign, by notice to us, or be removed by us. The resignation or removal of the transfer agent will become effective upon our appointment of a successor transfer agent and registrar and its acceptance of the appointment. If no successor has been appointed and accepted the appointment within 30 days after notice of the resignation or removal, we are authorized to act as the transfer agent and registrar until a successor is appointed.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following is a summary of the material U.S. federal income tax consequences related to the purchase, ownership and disposition of our Class A shares by a taxpayer that holds our Class A shares as a "capital asset" (generally property held for investment). This summary is based on the provisions of the Internal Revenue Code of 1986, as amended, or the Code, U.S. Treasury regulations, administrative rulings and judicial decisions, all as in effect on the date of this filing, and all of which are subject to change, possibly with retroactive effect. We have not sought any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

Legal conclusions contained in this section, unless otherwise noted, are the opinion of Vinson & Elkins L.L.P. This summary does not address all aspects of U.S. federal income taxation. In addition, this summary does not address the Medicare tax on certain investment income, U.S. federal estate or gift tax laws, any state, local or non-U.S. tax laws or any tax treaties. This summary also does not address tax considerations applicable to investors that may be subject to special treatment under the U.S. federal income tax laws, such as (without limitation):

- banks, insurance companies or other financial institutions;
- tax-exempt or governmental organizations;
- qualified foreign pension funds (or any entities all of the interests of which are held by a qualified foreign pension fund);
- dealers in securities or foreign currencies;
- traders in securities that use the mark-to-market method of accounting for U.S. federal income tax purposes;
- "controlled foreign corporations," "passive foreign investment companies" and corporations that accumulate earnings to avoid U.S. federal income tax;
- persons subject to the alternative minimum tax;
- partnerships or other pass-through entities for U.S. federal income tax purposes or holders of interests therein;
- persons deemed to sell our Class A shares under the constructive sale provisions of the Code;
- persons that acquired our Class A shares through the exercise of employee stock options or otherwise as compensation or through a tax-qualified retirement plan;
- certain former citizens or long-term residents of the United States;
- real estate investment trusts or regulated investment companies; and
- persons that hold our Class A shares as part of a straddle, appreciated financial position, synthetic security, hedge, conversion transaction or other integrated investment or risk reduction transaction.

If a partnership (including an entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our Class A shares, the tax treatment of a partner in the partnership generally will depend upon the status of the partner, upon the activities of the partnership, and upon certain determinations made at the partner level. Accordingly, we urge partners in partnerships (including entities or arrangements treated as partnerships for U.S. federal income tax purposes) investing in our Class A shares to consult their tax advisors regarding the U.S. federal income tax considerations of the purchase, ownership and disposition of our Class A shares by such partnership.

YOU ARE ENCOURAGED TO CONSULT YOUR TAX ADVISOR WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO YOUR PARTICULAR SITUATION, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR CLASS A SHARES ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL, NON-U.S. OR OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Corporate Status

Although we are a Delaware limited partnership, we have elected to be treated as a corporation for U.S. federal income tax purposes. As a result, we are subject to tax as a corporation and distributions on our Class A shares will be treated as distributions on corporate stock for U.S. federal income tax purposes. No Schedule K-1 will be issued with respect to our Class A shares. Instead, holders of Class A shares will receive a Form 1099 from us with respect to distributions received on our Class A shares.

Consequences to U.S. Holders

The discussion in this section is addressed to holders of our Class A shares who are U.S. holders for U.S. federal income tax purposes. For the purposes of this discussion, a "U.S. holder" is a beneficial owner of our Class A shares that, for U.S. federal income tax purposes, is:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) 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 U.S. federal income tax regardless of its source; or
- a trust (i) the administration of which is subject to the primary supervision of a U.S. court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (ii) which has made a valid election under applicable U.S. Treasury regulations to be treated as a United States person.

Distributions

Distributions with respect to our Class A shares will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent that the amount of a distribution with respect to our Class A shares exceeds our current and accumulated earnings and profits, such distribution will be treated first as a tax-free return of capital to the extent of the U.S. holder's adjusted tax basis in such Class A shares, which reduces such basis dollar-for-dollar, and thereafter as capital gain from the sale or exchange of such Class A shares. See "—Gain on Disposition of Class A Shares." Non-corporate holders that receive distributions on our Class A shares that are treated as dividends for U.S. federal income tax purposes generally will be subject to U.S. federal income tax at a reduced rate (currently at a maximum rate of 20%) provided certain holding period requirements are met.

Both AAP and PAA have made elections permitted by Section 754 of the Code. As a result, our acquisition of AAP Class A units in connection with our IPO and in connection with exchanges since the IPO by the Legacy Owners and their permitted transferees of their AAP Class A units and Class B shares for Class A shares have resulted in basis adjustments with respect to our interest in the assets of AAP (and indirectly in PAA). Such adjustments have resulted in depreciation and amortization deductions that we anticipate will offset a substantial portion of our taxable income for an extended period of time. In addition, future exchanges of AAP Class A units and Class B shares for our Class A

shares will result in additional basis adjustments with respect to our interest in the assets of AAP (and indirectly in PAA). We expect to benefit from additional tax deductions resulting from those adjustments, the amount of which will vary depending on the value of our Class A shares at the time of the exchange.

We do not expect to have any earnings and profits for an extended period of time, which we estimate will include, at a minimum, each of the periods ending December 31, 2017, 2018 and 2019, and we may not have sufficient earnings and profits during future tax years for any distributions on our Class A shares to qualify as dividends for U.S. federal income tax purposes. If a distribution on our Class A shares fails to qualify as a dividend for U.S. federal income tax purposes, U.S. corporate holders will be unable to utilize the corporate dividends-received deduction with respect to such distribution.

You are encouraged to consult your tax advisor as to the tax consequences of receiving distributions on our Class A shares that do not qualify as dividends for U.S. federal income tax purposes, including, in the case of prospective corporate investors, the inability to claim the corporate dividends received deduction with respect to such distributions.

Gain on Disposition of Class A Shares

A U.S. holder generally will recognize capital gain or loss on a sale, exchange, certain redemptions, or other taxable disposition of our Class A shares equal to the difference, if any, between the amount realized upon the disposition of such Class A shares and the U.S. holder's adjusted tax basis in those shares. A U.S. holder's tax basis in the shares generally will be equal to the amount paid for such shares reduced (but not below zero) by distributions received on such shares that are not treated as dividends for U.S. federal income tax purposes. Such capital gain or loss generally will be long-term capital gain or loss if the U.S. holder's holding period for the shares sold or disposed of is more than one year. Long-term capital gains of individuals generally are subject to U.S. federal income tax at a reduced rate (currently at a maximum rate of 20%). The deductibility of net capital losses is subject to limitations.

Backup Withholding and Information Reporting

Information returns generally will be filed with the IRS with respect to distributions on our Class A shares and the proceeds from a disposition of our Class A shares. U.S. holders may be subject to backup withholding on distributions with respect to our Class A shares and on the proceeds of a disposition of our Class A shares unless such U.S. holders furnish the applicable withholding agent with a taxpayer identification number, certified under penalties of perjury, and certain other information, or otherwise establish, in the manner prescribed by law, an exemption from backup withholding. Penalties apply for failure to furnish correct information and for failure to include reportable payments in income.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be creditable against a U.S. holder's U.S. federal income tax liability, and the U.S. holder may be entitled to a refund, provided the U.S. holder timely furnishes the required information to the IRS. U.S. holders are urged to consult their own tax advisors regarding the application of the backup withholding rules to their particular circumstances and the availability of, and procedure for, obtaining an exemption from backup withholding.

Consequences to Non-U.S. Holders

The discussion in this section is addressed to holders of our Class A shares who are non-U.S. holders for U.S. federal income tax purposes. For purposes of this discussion, a "non-U.S. holder" is a

beneficial owner of our Class A shares that is an individual, corporation, estate or trust that is not a U.S. holder as defined above.

Distributions

Distributions with respect to our Class A shares will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Subject to the withholding requirements under FATCA (as defined below) and with respect to effectively connected dividends, each of which is discussed below, any distribution treated as a dividend paid to a non-U.S. holder on our Class A shares generally will be subject to U.S. withholding tax at a rate of 30% of the gross amount of the distribution or such lower rate as may be specified by an applicable income tax treaty. To the extent a distribution exceeds our current and accumulated earnings and profits, such distribution will reduce the non-U.S. holder's adjusted tax basis in its Class A shares (but not below zero). The amount of any such distribution in excess of the non-U.S. holder's adjusted tax basis in its Class A shares will be treated as gain from the sale of such shares and will have the tax consequences described below under "Gain on Disposition of Class A Shares." The rules applicable to distributions by a United States real property holding corporation (a "USRPHC") to non-U.S. persons that exceed current and accumulated earnings and profits are not clear. As a result, it is possible that U.S. federal income tax at a rate not less than 15% (or such lower rate as may be specified by an applicable income tax treaty for distributions from a USRPHC) may be withheld from distributions received by non-U.S. holders that exceed our current and accumulated earnings and profits. To receive the benefit of a reduced treaty rate on distributions, a non-U.S. holder must provide the applicable withholding agent with an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable or successor form) certifying qualification for the reduced rate.

Non-U.S. holders are encouraged to consult their tax advisors regarding the withholding rules applicable to distributions on our Class A shares, the requirement for claiming treaty benefits, and any procedures required to obtain a refund of any overwithheld amounts.

Distributions treated as dividends that are paid to a non-U.S. holder and are effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment maintained by the non-U.S. holder in the United States) generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons (as defined under the Code). Such effectively connected dividends will not be subject to U.S. withholding tax if the non-U.S. holder satisfies certain certification requirements by providing the applicable withholding agent a properly executed IRS Form W-8ECI (or successor form) certifying eligibility for exemption. If a non-U.S. holder is a non-U.S. corporation, it may also be subject to a "branch profits tax" (at a 30% rate or such lower rate as may be specified by an applicable income tax treaty) on its effectively connected earnings and profits (as adjusted for certain items), which will include effectively connected dividends.

Gain on Disposition of Class A Shares

Subject to the discussion below under "—Additional Withholding Requirements under FATCA," a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our Class A shares unless:

- the non-U.S. holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met;
- the gain is effectively connected with a trade or business conducted by the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States); or

- our Class A shares constitute a United States real property interest by reason of our status as a USRPHC for U.S. federal income tax purposes.

A non-U.S. holder described in the first bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty) on the amount of such gain, which generally may be offset by U.S. source capital losses.

A non-U.S. holder whose gain is described in the second bullet point above or, subject to the exceptions described in the next paragraph, the third bullet point above, generally will be taxed on a net income basis at the rates and in the manner generally applicable to United States persons (as defined under the Code) unless an applicable income tax treaty provides otherwise. If the non-U.S. holder is a corporation whose gain is described in the second bullet point above, then such gain would also be included in its effectively connected earnings and profits (as adjusted for certain items), which may be subject to a branch profits tax (at a 30% rate or such lower rate as may be specified by an applicable income tax treaty).

Generally, a corporation is a USRPHC if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business. We believe that we currently are, and expect to remain for the foreseeable future, a USRPHC for U.S. federal income tax purposes. However, as long as our Class A shares continue to be regularly traded on an established securities market, only a non-U.S. holder that actually or constructively owns, or owned at any time during the shorter of the five-year period ending on the date of the disposition or the non-U.S. holder's holding period for the Class A shares, more than 5% of our Class A shares will be taxable on gain realized on the disposition of our Class A shares as a result of our status as a USRPHC. If our Class A shares were not considered to be regularly traded on an established securities market, such non-U.S. holder (regardless of the percentage of our Class A shares owned) would be subject to U.S. federal income tax on a taxable disposition of our Class A shares (as described in the preceding paragraph), and a withholding tax would apply to the gross proceeds from such disposition at the applicable withholding rate (currently at a rate of 15%).

Non-U.S. holders should consult their tax advisors with respect to the application of the foregoing rules to their ownership and disposition of our Class A shares.

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS and to each non-U.S. holder the amount of dividends paid to such holder, the name and address of the recipient, and the amount, if any, of tax withheld with respect to those dividends. These information reporting requirements apply even if withholding was not required. Pursuant to tax treaties or other agreements, the IRS may make such reports available to tax authorities in the recipient's country of residence. Payments of dividends to a non-U.S. holder generally will not be subject to backup withholding if the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate version of IRS Form W-8, provided that the withholding agent does not have actual knowledge, or reason to know, that the beneficial owner is a United States person that is not an exempt recipient.

Payments of the proceeds from a sale or other disposition by a non-U.S. holder of our Class A shares effected by or through a U.S. office of a broker generally will be subject to information reporting and backup withholding (at the applicable rate) unless the non-U.S. holder establishes an exemption by properly certifying its non-U.S. status on an IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate version of IRS Form W-8 and certain other conditions are met. Information reporting and backup withholding generally will not apply to any payment of the proceeds from a sale or other disposition of our Class A shares effected outside the United States by a non-U.S. office of a

broker. However, unless such broker has documentary evidence in its records that the holder is not a United States person and certain other conditions are met, or the non-U.S. holder otherwise establishes an exemption, information reporting will apply to a payment of the proceeds of the disposition of our Class A shares effected outside the United States by such a broker if it has certain relationships within the United States.

Backup withholding is not an additional tax. Rather, the U.S. income tax liability (if any) of persons subject to backup withholding will be reduced by the amount of tax withheld. If backup withholding results in an overpayment of taxes, a refund may be obtained, provided that the required information is timely furnished to the IRS.

Additional Withholding Requirements under FATCA

Sections 1471 through 1474 of the Code, and the Treasury regulations and administrative guidance issued thereunder ("FATCA"), impose a 30% withholding tax on any dividends paid on our Class A shares and on the gross proceeds from a disposition of our Class A shares (if such disposition occurs after December 31, 2018), in each case if paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code) (including, in some cases, when such foreign financial institution or non-financial foreign entity is acting as an intermediary), unless (i) in the case of a foreign financial institution, such institution enters into an agreement with the U.S. government to withhold on certain payments, and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are non-U.S. entities with U.S. owners), (ii) in the case of a non-financial foreign entity, such entity certifies that it does not have any "substantial United States owners" (as defined in the Code) or provides the applicable withholding agent with a certification identifying each direct and indirect substantial United States owner of the entity (in either case, generally on an IRS Form W-8BEN-E), or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules and provides appropriate documentation (such as an IRS Form W-8BEN-E). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these rules may be subject to different rules. Under certain circumstances, a holder might be eligible for refunds or credits of such taxes.

INVESTORS CONSIDERING THE PURCHASE OF OUR CLASS A SHARES ARE URGED TO CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE APPLICABILITY AND EFFECT OF U.S. FEDERAL ESTATE AND GIFT TAX LAWS AND ANY STATE, LOCAL OR NON-U.S. TAX LAWS AND TAX TREATIES.

INVESTMENT IN PLAINS GP HOLDINGS, L.P. BY EMPLOYEE BENEFIT PLANS

An investment in our Class A shares by an employee benefit plan is subject to additional considerations because the investments of these plans are subject to the fiduciary responsibility and prohibited transaction provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and restrictions imposed by Section 4975 of the Code and provisions under any federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, "Similar Laws"). For these purposes, the term "employee benefit plan" includes, but is not limited to, qualified pension, profit-sharing and stock bonus plans, Keogh plans, simplified employee pension plans and tax deferred annuities or individual retirement accounts ("IRAs") established or maintained by an employer or employee organization.

ERISA and the Code impose certain duties on persons who are fiduciaries of a plan subject to Title I of ERISA or Section 4975 of the Code (an "ERISA Plan") and prohibit certain transactions involving the assets of an ERISA Plan and its fiduciaries or other interested parties. Under ERISA and the Code, any person who exercises any discretionary authority or control over the administration of an ERISA Plan or the management or disposition of the assets of an ERISA Plan, or who renders investment advice for a fee or other compensation to an ERISA Plan, is generally considered to be a fiduciary of the ERISA Plan. In addition, the fiduciaries of any ERISA Plan with investment discretion with respect to the assets of an employee benefit plan should determine whether an investment in our Class A shares is authorized by the appropriate governing instrument and is a proper investment for the plan.

Among other things, consideration should be given to:

- whether the investment is prudent under Section 404(a)(1)(B) of ERISA and any applicable Similar Laws;
- whether in making the investment, the plan will satisfy the diversification requirements of Section 404(a)(1)(C) of ERISA and applicable Similar Laws;
- whether the investment will result in recognition of unrelated business taxable income by the plan and, if so, the potential after-tax investment return;
- whether the acquisition or holding of Class A shares will constitute a "prohibited transaction" under Section 406 of ERISA or Section 4975 of the Code; and
- whether the plan will be considered to hold, as plan assets, (i) only our Class A shares or (ii) an undivided interest in our underlying assets.

Section 406 of ERISA and Section 4975 of the Code prohibit ERISA Plans from engaging in specified transactions involving "plan assets" with parties that are "parties in interest" under ERISA or "disqualified persons" under the Code with respect to the plan, unless an exemption is available. Therefore, a fiduciary of an employee benefit plan or an IRA accountholder that is considering an investment in our Class A shares should consider whether the entity's purchase or ownership of such Class A shares would or could result in the occurrence of such a prohibited transaction.

In addition to considering whether the purchase of Class A shares is or could result in a prohibited transaction, a fiduciary of an employee benefit plan should consider whether the plan will, by investing in our Class A shares, be deemed to own an undivided interest in our assets, with the result that our general partner also would be a fiduciary of the plan and our operations would be subject to the regulatory restrictions of ERISA, including fiduciary standards and its prohibited transaction rules, as well as the prohibited transaction rules of the Code or other applicable Similar Laws.

ERISA and the Department of Labor regulations provide guidance with respect to whether the assets of an entity in which employee benefit plans acquire equity interests would be deemed "plan

assets" under certain circumstances. Under these rules, an entity's assets generally would not be considered to be "plan assets" if, among other things:

- the equity interests acquired by employee benefit plans are publicly offered securities; i.e., the equity interests are widely held by 100 or more investors independent of the issuer and each other, "freely transferable" (as defined in the applicable Department of Labor regulations) and registered under some provision of the federal securities laws;
- the entity is an "operating company"; i.e., it is primarily engaged in the production or sale of a product or service other than the investment of capital either directly or through a majority owned subsidiary or subsidiaries; or
- there is no significant investment by benefit plan investors, which is defined to mean that less than 25% of the value of each class of equity interest, disregarding some interests held by our general partner, its affiliates, and some other persons, is held by (1) employee benefit plans subject to the fiduciary responsibility provisions of ERISA, (2) plans to which the prohibited transaction rules of Section 4975 of the Code apply, and (3) entities whose underlying assets include plan assets by reason of a plan's investment in such entity.

The summary above is based on the provisions of ERISA and the Code (and related regulations and administrative and judicial interpretations) as of the date of this filing. This summary does not purport to be complete, and no assurance can be given that future legislation, court decisions, regulations, rulings or pronouncements will not significantly modify the requirements summarized above. Any of these changes may be retroactive and may thereby apply to transactions entered into prior to the date of their enactment or release. This discussion is general in nature and is not intended to be all inclusive, nor should it be construed as investment or legal advice.

Plan fiduciaries contemplating a purchase of Class A shares should consult with their own counsel regarding the consequences under ERISA, the Code and other Similar Laws in light of the serious penalties imposed on persons who engage in prohibited transactions or other violations. The sale of our Class A shares to any plan is in no respect a representation by us or any of our affiliates or representatives that such an investment meets all relevant legal requirements with respect to investments by any such plan or that such investment is appropriate for any such plan.

PLAN OF DISTRIBUTION

We will sell the Class A shares offered hereby through one or more underwriters on a firm commitment basis.

The prospectus supplement with respect to any offering of Class A shares will set forth the terms of the offering, including: (i) the name or names of any underwriters; (ii) the purchase price of the Class A shares and the proceeds to us from the sale; (iii) any underwriting discounts and commissions and other items constituting underwriters' compensation; and (iv) any delayed delivery arrangements.

We will enter into an underwriting agreement with the underwriters at the time of sale to them. We will set forth the names of these underwriters and the terms of the transaction in the prospectus supplement, which will be used by the underwriters to make resales of the Class A shares in respect of which this prospectus is delivered to the public. We may indemnify the underwriters under the relevant underwriting agreement against specific liabilities, including liabilities under the Securities Act. The underwriters may also be our customers or may engage in transactions with or perform services for us in the ordinary course of business.

LEGAL MATTERS

The validity of the Class A shares will be passed upon for us by Vinson & Elkins L.L.P., Houston, Texas. Vinson & Elkins L.L.P. will also render an opinion on the material federal income tax consequences regarding the Class A shares. If certain legal matters in connection with an offering of the Class A shares made by this prospectus and a related prospectus supplement are passed on by counsel for the underwriters of such offering, that counsel will be named in the applicable prospectus supplement related to that offering.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2016 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.



42,000,000 Class A Shares

PROSPECTUS SUPPLEMENT

February 23, 2017

Sole Book-Running Manager

Citigroup

Co-Managers

BBVA

BNP PARIBAS

MUFG

SMBC Nikko

Suntrust Robinson Humphrey

CIBC Capital Markets

Fifth Third Securities

ING

PNC Capital Markets LLC

Regions Securities LLC
