

PHILLIPS 66 PARTNERS LP
Form 424B2
February 17, 2015

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The information in this prospectus supplement is not complete and may be changed. This prospectus supplement and the accompanying base prospectus are not an offer to sell the securities described herein or therein and we are not soliciting offers to buy such securities in any jurisdiction where such offer or sale is not permitted.

**Filed pursuant to Rule 424(b)(2)
Registration File No. 333-197797**

Subject to Completion, dated February 17, 2015

PROSPECTUS SUPPLEMENT
(To Prospectus dated August 1, 2014)

Phillips 66 Partners LP

5,250,000 Common Units

Representing Limited Partner Interests

We are selling 5,250,000 common units representing limited partner interests in Phillips 66 Partners LP. Our common units are listed on the New York Stock Exchange under the symbol "PSXP." The last reported sales price of our common units on the New York Stock Exchange on February 13, 2015 was \$78.83 per common unit.

Investing in our common units involves risks. Limited partnerships are inherently different from corporations. You should consider carefully each of the factors described under "Risk Factors" beginning on page S-15 of this prospectus supplement and on page 2 of the accompanying prospectus before you make an investment in our securities.

	Per common unit	Total
Public offering price	\$	\$
Underwriting discounts	\$	\$
Proceeds to Phillips 66 Partners LP (before expenses)	\$	\$

We have granted the underwriters a 30-day option to purchase up to an additional 787,500 common units on the same terms and conditions as set forth above if the underwriters sell more than 5,250,000 common units in this offering.

None of the Securities and Exchange Commission, any state securities commission or any other regulatory body has approved or disapproved the securities described herein or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the common units to purchasers on or about _____, 2015.

Joint Book-Running Managers

Barclays

J.P. Morgan

BofA Merrill Lynch

Citigroup

Goldman, Sachs & Co.

Morgan Stanley

RBC Capital Markets

Wells Fargo Securities

Prospectus Supplement dated

, 2015.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of common units. The second part is the accompanying base prospectus, which provides more general information. Generally, when we use the term "prospectus," we are referring to both parts combined. If the information varies between this prospectus supplement and the accompanying base prospectus, you should rely on the information in this prospectus supplement.

In making an investment decision, prospective investors must rely on their own examination of the partnership and the terms of the offering, including the merits and risks involved. Prospective investors should not construe anything in this prospectus as legal, business or tax advice. Each prospective investor should consult its own advisors as needed to make its investment decision and to determine whether it is legally permitted to purchase the securities under applicable laws and regulations.

Any statement made in this prospectus, any free writing prospectus authorized by us or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document that is also incorporated by reference into this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. Please read "Incorporation by Reference" on page S-25 of this prospectus supplement.

You should rely only on the information contained in or incorporated by reference into this prospectus supplement, the accompanying base prospectus and any free writing prospectus prepared by or on behalf of us relating to this offering of common units. Neither we nor the underwriters have authorized anyone to provide you with additional or different information. If anyone provides you with additional, different or inconsistent information, you should not rely on it. We are offering to sell the common units, and seeking offers to buy the common units, only in jurisdictions where offers and sales are permitted. You should not assume that the information contained in this prospectus supplement, the accompanying base prospectus or any free writing prospectus is accurate as of any date other than the dates shown in these documents or that any information we have incorporated by reference herein 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 such dates.

Unless the context otherwise requires, references in this prospectus supplement to the "Partnership" and uses of the first person refer to Phillips 66 Partners LP and its subsidiaries. Our "general partner" refers to Phillips 66 Partners GP LLC. References to "Phillips 66" refer collectively to Phillips 66 and its subsidiaries, other than us, our subsidiaries and our general partner.

FORWARD-LOOKING STATEMENTS

This prospectus supplement includes forward-looking statements. You can identify our forward-looking statements by the words "anticipate," "estimate," "believe," "budget," "continue," "could," "intend," "may," "plan," "potential," "predict," "seek," "should," "will," "would," "expect," "objective," "projection," "forecast," "goal," "guidance," "outlook," "effort," "target" and similar expressions.

We based the forward-looking statements on our current expectations, estimates and projections about us and the industries in which we operate in general. We caution you that these statements are not guarantees of future performance as they involve assumptions that, while made in good faith, may prove to be incorrect, and involve risks and uncertainties we cannot predict. In addition, we based many of these forward-looking statements on assumptions about future events that may prove to be inaccurate. Accordingly, our actual outcomes and results may differ materially from what we have

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expressed or forecast in the forward-looking statements. Any differences could result from a variety of factors, including the following:

The continued ability of Phillips 66 to satisfy its obligations under our commercial and other agreements.

The volume of crude oil, natural gas liquids and refined petroleum products we transport, terminal and store.

The tariff rates with respect to volumes that we transport through our regulated assets, which rates are subject to review and possible adjustment by federal and state regulators.

Changes in revenue we realize under the loss allowance provisions of our regulated tariffs resulting from changes in underlying commodity prices.

Fluctuations in the prices for crude oil, natural gas liquids and refined petroleum products.

Changes in global economic conditions and the effects of a global economic downturn on the business of Phillips 66 and the business of its suppliers, customers, business partners and credit lenders.

Liabilities associated with the risks and operational hazards inherent in transporting, terminaling and storing crude oil, natural gas liquids and refined petroleum products.

Curtailed operations due to severe weather disruption; riots, strikes, lockouts or other industrial disturbances; or failure of information technology systems due to various causes, including unauthorized access or attack.

Inability to timely obtain or maintain permits, including those necessary for capital projects; comply with government regulations; or make capital expenditures required to maintain compliance.

Failure to timely complete construction of announced and future capital projects.

Costs or liabilities associated with federal, state and local laws and regulations relating to environmental protection and safety, including spills, releases and pipeline integrity.

Costs associated with compliance with evolving environmental laws and regulations on climate change.

Costs associated with compliance with safety regulations, including pipeline integrity management program testing and related repairs.

Changes in the cost or availability of third-party vessels, pipelines, rail cars and other means of delivering and transporting crude oil, natural gas liquids and refined petroleum products.

Direct or indirect effects on our business resulting from actual or threatened terrorist incidents or acts of war.

The operation and financing decisions of our joint ventures.

Our ability to complete the Pipeline Transaction (as defined herein).

Other factors that could cause our actual results to differ from our projected results are described under the caption "Risk Factors" and elsewhere in this prospectus supplement, the accompanying base prospectus and in our reports filed from time to time with the Securities and Exchange Commission ("SEC") and incorporated by reference in this prospectus supplement.

Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise.

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SUMMARY

This summary provides a brief overview of information contained elsewhere in this prospectus. This summary does not contain all of the information that you should consider before investing in our common units. For a more complete understanding of this offering and our common units, you should read the entire prospectus supplement, the accompanying base prospectus and the documents incorporated by reference, including our historical financial statements and the notes to those financial statements, which are incorporated herein by reference from our annual report on Form 10-K for the year ended December 31, 2014. Please read "Where You Can Find More Information" on page S-25 of this prospectus supplement. Please read "Risk Factors" beginning on page S-15 of this prospectus supplement, on page 2 of the accompanying base prospectus and in the other documents incorporated by reference to which that section refers for more information about important risks that you should consider before investing in our common units.

About Phillips 66 Partners LP

We are a growth-oriented master limited partnership formed in 2013 by Phillips 66 to own, operate, develop and acquire primarily fee-based crude oil, refined petroleum product and natural gas liquids (NGL) pipelines, terminals and other transportation and midstream assets. Our assets consist of crude oil and refined petroleum product pipeline, terminal, rail rack and storage systems in the Central, Gulf Coast, Atlantic Basin and Western regions of the United States that are integral to the Phillips 66 refining and marketing operations they support.

We generate revenue primarily by charging tariffs and fees for transporting crude oil and refined petroleum products through our pipelines, and terminaling and storing crude oil and refined petroleum products at our terminals, rail racks and storage facilities. We do not take ownership of the crude oil or refined petroleum products that we transport, terminal and store, and we do not engage in the trading of any commodities. We have multiple commercial agreements with Phillips 66 that currently are the source of substantially all of our revenue. These agreements are long-term, fee-based agreements with minimum volume commitments and inflation escalators. Phillips 66 accounted for 95%, 94% and 95% of our total revenues for the years ended December 31, 2014, 2013 and 2012, respectively.

Our general partner is a Delaware limited liability company. We are managed and controlled by our general partner.

Business Strategies

Our primary business objectives are to generate stable and predictable cash flows and increase our quarterly cash distribution per unit over time. We intend to accomplish these objectives by executing the following strategies:

Maintain safe and reliable operations. We are committed to maintaining and improving the safety, reliability and efficiency of our operations, which we believe to be key components in generating stable cash flows. We strive for operational excellence by utilizing Phillips 66's existing programs to integrate health, occupational safety, process safety and environmental principles throughout our business with a commitment to continuous improvement. We continue to employ Phillips 66's rigorous training, integrity and audit programs to drive ongoing improvements in both personal and process safety as we strive for zero incidents. Controlling operating expenses and overhead costs, within the context of our commitment to safety and environmental stewardship, is a high priority. We actively monitor these costs using various methodologies that are reported to senior management. We are committed to protecting the environment and strive to reduce our environmental footprint throughout our operations.

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Focus on fee-based businesses supported by contracts with minimum volume commitments and inflation escalators. We are focused on generating stable and predictable cash flows by providing fee-based transportation and midstream services to Phillips 66 and third parties. We have multiple long-term, fee-based commercial agreements with Phillips 66 that include minimum volume commitments and inflation escalators. We believe these agreements substantially mitigate volatility in our cash flows by reducing our direct exposure to commodity price fluctuations.

Grow through strategic acquisitions. We plan to pursue strategic acquisitions of assets from Phillips 66 and third parties. We believe Phillips 66 will offer us opportunities to purchase additional transportation and midstream assets that it may acquire or develop in the future or that it currently owns. For example, during 2014, we acquired the Gold Line products system, Medford spheres and the Bayway and Ferndale rail racks from Phillips 66. In addition, on February 13, 2015, we agreed to acquire from Phillips 66 equity interests in three pipeline joint ventures, and we expect to close this acquisition in early March 2015. Please read "Recent Developments Pipeline Transaction." We also may have opportunities to pursue the acquisition or development of additional assets jointly with Phillips 66.

Optimize existing assets and pursue organic growth opportunities. We seek to enhance the profitability of our existing assets by pursuing opportunities to increase throughput and storage volumes, as well as by managing costs and improving operating efficiencies. We also consider opportunities to increase revenue on our pipeline, terminal and storage systems by evaluating and capitalizing on organic expansion projects that may arise in the markets we serve.

Competitive Strengths

We believe we are well positioned to execute our business strategies based on the following competitive strengths:

Strategic relationship with Phillips 66. We have a strategic relationship with Phillips 66, a diversified energy manufacturing and logistics company with an investment grade credit rating. Following this offering, Phillips 66 will own our general partner, a 68.6% limited partner interest in us (or 68.0% if the underwriters' option to purchase additional common units is exercised in full) and all of our incentive distribution rights. We believe that our relationship with Phillips 66 is likely to provide us with attractive growth opportunities, as well as an investment grade commercial counterparty supporting a significant portion of our revenue.

Stable and predictable cash flows. Our assets consist of both common carrier and proprietary pipelines and terminal, storage and rail rack facilities that generate stable revenue from tariffs and fees. We currently generate a significant portion of our revenue under tariffs and fees that are supported by long-term commercial agreements that include minimum volume commitments and inflation escalators. We believe these agreements promote our cash flow stability and predictability.

Highly integrated assets. Our assets are integral to the operations of Phillips 66's wholly owned Lake Charles, Sweeny, Bayway, Ferndale and Ponca City refineries and its jointly owned Wood River and Borger refineries (which are owned by a joint venture between Phillips 66 and Cenovus Energy Inc.). We believe these are well-positioned refineries with access to attractively priced crude oil and high demand markets for refined petroleum products. Our crude oil and refined petroleum product pipelines, terminals, rail racks and storage facilities are directly connected to these refineries and provide Phillips 66 with a cost-effective way to access crude oil supply and distribute refined petroleum products.

High-quality, well-maintained asset base. We continually invest in the maintenance and integrity of our assets and utilize various programs to help us efficiently monitor and maintain our asset

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base. We employ Phillips 66's pipeline and facility integrity program, which focuses on risk analysis, assessment, inspection, preventive measures, repair and data integration to prevent, control and mitigate unintentional releases of hazardous materials. We also use Phillips 66's technologically advanced pipeline control center to monitor our operations.

Financial flexibility. We have a \$500 million revolving credit facility, with the option to increase the capacity to \$750 million. When combined with our cash generated from operations, borrowings from our notes payable to Phillips 66 subsidiaries (our "sponsor loans") and our ability to access the debt and equity capital markets, we believe that, following the closing of each of this offering and the Pipeline Transaction (as defined below), we will have the available liquidity and financial flexibility to continue to execute our growth strategy.

Experienced leadership team. Our management team, which includes many senior employees of Phillips 66, has substantial experience in the management and operation of pipelines, terminals and other transportation and midstream assets. Our management team also has expertise in acquiring and integrating assets as well as executing growth strategies in the transportation and midstream sector.

Our Assets and Operations

Our assets consist of the following:

Clifton Ridge crude system. A crude oil pipeline, terminal and storage system located in Sulphur, Louisiana, that is the primary source for delivery of crude oil to Phillips 66's Lake Charles Refinery.

Sweeny to Pasadena products system. A refined petroleum product pipeline, terminal and storage system extending from Phillips 66's Sweeny Refinery in Old Ocean, Texas, to our refined petroleum product terminal in Pasadena, Texas, and ultimately connecting to the Explorer and Colonial refined petroleum product pipeline systems and other third-party pipeline and terminal systems. This system is the primary distribution outlet for diesel and gasoline produced at Phillips 66's Sweeny Refinery.

Hartford Connector products system. A refined petroleum product pipeline, terminal and storage system located in Hartford, Illinois, that distributes diesel and gasoline produced at Phillips 66's jointly owned Wood River Refinery to third-party pipeline and terminal systems, including the Explorer refined petroleum product pipeline system.

Gold Line products system. A refined petroleum product pipeline system that runs from Phillips 66's jointly owned Borger Refinery to Cahokia, Illinois, with access to Phillips 66's Ponca City Refinery, as well as two parallel lateral pipelines that run from Paola, Kansas, to Kansas City, Kansas. The system includes four refined petroleum product terminals located at Wichita, Kansas; Kansas City, Kansas; Jefferson City, Missouri; and Cahokia, Illinois.

Medford spheres. Two recently constructed refinery-grade propylene storage spheres located in Medford, Oklahoma, that commenced operations in March 2014. The Medford spheres provide an outlet for delivery of refinery-grade propylene from Phillips 66's Ponca City Refinery, through interconnections with third-party pipelines, to Mont Belvieu, Texas.

Bayway rail rack. A four-track, 120-rail-car crude oil receiving facility located in Linden, New Jersey, within Phillips 66's Bayway Refinery.

Ferndale rail rack. A two-track, 54-rail-car crude oil receiving facility located in Ferndale, Washington, adjacent to Phillips 66's Ferndale Refinery.

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Cross Channel Connector pipeline. A 20-inch refined petroleum product pipeline originating at our Pasadena Terminal in Pasadena, Texas, running to third-party terminal facilities located at Kinder Morgan's Pasadena Terminal and its Galena Park Station in Galena Park, Texas, and terminating at the Holland Avenue Junction in Galena Park, Texas. We anticipate that the entire products system will be completed and commence operations in the second quarter of 2015.

Our Commercial Agreements with Phillips 66

Our assets are physically connected to, and integral to the operation of, Phillips 66's wholly owned Lake Charles, Sweeny, Bayway, Ferndale and Ponca City refineries and its jointly owned Wood River and Borger refineries. We have entered into multiple commercial agreements with Phillips 66 that include minimum volume commitments and inflation escalators and that are currently the source of a significant portion of our revenue. Under these long-term, fee-based agreements, we provide transportation, terminaling, storage and rail car unloading services to Phillips 66, and Phillips 66 commits to provide us with minimum quarterly throughput volumes of crude oil and refined petroleum products.

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The following table sets forth certain information regarding our commercial agreements with Phillips 66:

Agreement	Phillips 66 minimum volume commitment ⁽¹⁾⁽²⁾	Phillips 66 capacity reservation ⁽¹⁾
Transportation Services Agreements		
<i>Clifton Ridge Transportation Services Agreement</i>		
Clifton Ridge to Lake Charles refinery pipeline	190	
<i>Sweeny to Pasadena Transportation Services Agreement</i>		
Sweeny to Pasadena pipelines	200	
<i>Hartford Connector Throughput and Deficiency Agreement</i>		
Wood River refinery to Hartford pipeline ⁽³⁾	43	12.2
Hartford to Explorer pipeline ⁽³⁾	16	39.2
<i>Gold Line Transportation Services Agreement</i>		
Borger refinery to Wichita pipeline	54	
Wichita to Kansas City pipeline	45	
Wichita to Jeff City pipeline	7	
Wichita to East St. Louis pipeline	10	
Terminal and Storage Services Agreements		
<i>Clifton Ridge Terminal Services Agreement</i>		
Clifton Ridge terminal storage	190	
Clifton Ridge ship dock / Pecan Grove barge dock	150	
<i>Hartford and Pasadena Terminal Services Agreement</i>		
Pasadena terminal	135	
Pasadena and Hartford terminal truck racks	55	
<i>Gold Line Terminal Services Agreement</i>		
Wichita North, Kansas City, Jefferson City and East St. Louis terminals	80	
<i>Gold Line Storage Services Agreement</i>		
Wichita North, Kansas City and East St. Louis terminals ⁽⁴⁾	1,010	
<i>Medford Spheres Storage Services Agreement</i>		
Medford storage spheres ⁽⁴⁾	70	
<i>Bayway Terminal Services Agreement</i>		
Bayway terminal rail rack ⁽⁴⁾	75	
<i>Ferndale Terminal Services Agreement</i>		
Ferndale terminal rail rack ⁽⁴⁾	30	

(1) In thousands of barrels per day.

(2) Includes capacity-based monthly fee.

(3) Total volume commitment includes both Phillips 66 minimum volume commitment and Phillips 66 capacity reservation.

(4) Represents the capacity upon which Phillips 66's minimum monthly fee is calculated.

Our Relationship with Phillips 66

One of our principal strengths is our relationship with Phillips 66. Phillips 66 is a diversified energy manufacturing and logistics company with an investment grade credit rating and midstream, chemicals, refining, and marketing and specialties businesses with a key focus on safe and reliable operations. Phillips 66 is one of the largest independent petroleum refiners in the United States and globally, with a net crude oil processing capacity of 2.2 million barrels per day as of January 1, 2015. Phillips 66 has

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stated that it intends to grow its transportation and other midstream businesses and will use us as a primary vehicle for achieving that growth.

Following the closing of this offering, Phillips 66 will retain a significant interest in us through its ownership of our general partner, a 68.6% limited partner interest in us (or 68.0% if the underwriters' option to purchase additional common units is exercised in full) and all of our incentive distribution rights. We believe Phillips 66 will promote and support the successful execution of our business strategies given its significant ownership in us following this offering, the importance of our assets to Phillips 66's refining and marketing operations and its stated intention to use us as a primary vehicle to grow its transportation and midstream businesses.

Recent Developments

Pipeline Transaction. On February 13, 2015, we entered into a Contribution, Conveyance and Assumption Agreement (the "Contribution Agreement") with our general partner, Phillips 66 Company and Phillips 66 Pipeline LLC ("Phillips 66 Pipeline"), each a wholly owned subsidiary of Phillips 66, pursuant to which we agreed to acquire from Phillips 66 Company and Phillips 66 Pipeline certain joint venture interests, each as described in more detail below (the "Pipeline Transaction"):

A 19.46% equity interest in Explorer Pipeline Company ("Explorer"), which owns and operates the Explorer pipeline, an approximately 1,830-mile refined petroleum product pipeline extending from the Texas Gulf Coast to Indiana with a current throughput capacity of approximately 660,000 barrels per day that transports gasoline, diesel, fuel oil and jet fuel to more than 70 major cities in 16 U.S. states.

A 100% equity interest in Phillips 66 Sand Hills LLC, the owner of a one-third equity interest in DCP Sand Hills Pipeline, LLC, which owns the 720-mile, fee-based Sand Hills NGL pipeline that transports NGL from plants in the Permian Basin and Eagle Ford Shale to facilities along the Texas Gulf Coast and the Mont Belvieu market hub. The Sand Hills NGL pipeline has a current capacity of 200,000 barrels per day.

A 100% equity interest in Phillips 66 Southern Hills LLC, the owner of a one-third equity interest in DCP Southern Hills Pipeline, LLC, which owns the 800-mile, fee-based Southern Hills NGL pipeline that transports NGL from the Midcontinent region to the Mont Belvieu market hub. The Southern Hills NGL pipeline has a current capacity of 175,000 barrels per day.

The Sand Hills and Southern Hills NGL pipelines are operated by DCP Midstream Partners, LP, a publicly traded Delaware limited partnership formed by DCP Midstream, LLC, which is a joint venture between Phillips 66 and Spectra Energy Corp.

In exchange for the joint venture interests acquired by us in the Pipeline Transaction, Phillips 66 will receive total consideration of approximately \$1.01 billion, consisting of approximately \$880 million in cash and the issuance of 1,726,914 newly issued units, to be allocated between common units to Phillips 66 Company and general partner units to our general partner in a proportion necessary for our general partner to maintain its 2% general partner interest in us. We intend to use a portion of the net proceeds from this offering to fund a portion of the cash consideration payable by us in the Pipeline Transaction. We plan to fund the remaining portion of the cash consideration using debt financing. The closing of the Pipeline Transaction is subject to standard closing conditions and is expected to occur in early March 2015. The closing of this offering of common units is not conditioned on the closing of the Pipeline Transaction.

Debt Financing. Subject to market conditions, we intend to commence an offering of up to an aggregate of \$1.1 billion of senior notes (the "proposed senior notes offering"), a portion of the proceeds of which will be used to fund a portion of the cash consideration payable by us in the Pipeline Transaction. The timing and size of the proposed senior notes offering is dependent on market

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conditions and our ability to access the debt capital markets on terms acceptable to us. If we do not complete the proposed senior notes offering, we may use revolver borrowings or proceeds from other debt financing transactions to fund the remaining portion of the cash consideration. We intend to use the remaining proceeds after funding a portion of the cash consideration for the Pipeline Transaction to repay existing indebtedness, including our outstanding sponsor loans. We cannot give any assurance that the proposed senior notes offering will be commenced or completed. The closing of this offering of common units is not conditioned on the closing of the proposed senior notes offering or obtaining alternative debt financing. If commenced, the proposed senior notes offering will be offered by means of a separate prospectus supplement and not by means of this prospectus supplement. This prospectus supplement does not constitute an offer to sell, or the solicitation of an offer to purchase, any senior notes in the proposed senior notes offering.

Fourth Quarter 2014 Distributions. On January 21, 2015, the board of directors of our general partner declared a cash distribution of \$0.34 per common and subordinated unit for the fourth quarter of 2014. This distribution, which was paid on February 13, 2015, to all unitholders of record at the close of business on February 4, 2015, represents an increase of 7% over the 2014 third quarter distribution.

Palermo Rail Terminal Project Acquisition. In December 2014, we acquired from Phillips 66 certain real property, assets under construction, lease agreements and permits associated with a project to construct a crude oil rail-loading facility in Palermo, North Dakota. The facility is designed to have an initial capacity of 100,000 barrels per day, with the flexibility to be expanded to 200,000 barrels per day. The terminal will have direct access to the Sacagawea Pipeline and provide east and west coast railway access for third-party shippers. The terminal is anticipated to be completed and in service in the fourth quarter of 2015.

Eagle Ford Gathering System Project Acquisition. In December 2014, we acquired from Phillips 66 certain real property and assets under construction associated with a project to construct a crude oil gathering system that will consist of two pipelines and a storage facility near Helena and Tilden, Texas. The gathering system is designed to connect Eagle Ford production to third party pipelines. The entire gathering system is anticipated to be completed and operational in the third quarter of 2015. In January 2015, we entered into a throughput and deficiency agreement with Phillips 66 that provides for minimum volume commitments on the gathering system when each portion of the system is completed and in service.

North Dakota Midstream Joint Ventures. On January 16, 2015, we and Paradigm Energy Partners, LLC, formed two joint ventures to develop and enhance logistical operations for crude oil transportation in the Bakken region of North Dakota. The two joint ventures are the Paradigm Pipeline LLC (the "Pipeline JV"), in which we have a 50% interest and which is developing the Sacagawea pipeline, and Phillips 66 Partners Terminal LLC (the "Rail JV"), in which we have a 70% interest and which is developing the Palermo rail terminal project. We are the operator of each of the Pipeline JV and the Rail JV. The pipeline and rail terminals that will be constructed by the Pipeline JV and the Rail JV, respectively, are each expected to commence commercial operations in the fourth quarter of 2015.

Principal Executive Offices and Internet Address

Our executive offices are located at 3010 Briarpark Drive, Houston, Texas 77042, and our telephone number is (855) 283-9237. Our website is located at <http://www.phillips66partners.com>. We make available our periodic reports and other information filed with or furnished to the SEC, 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 herein and does not constitute a part of this prospectus.

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Partnership Structure

The table and simplified diagram below illustrate our organization and ownership after giving effect to this offering and the closing of the Pipeline Transaction, assuming that the underwriters do not exercise their option to purchase additional common units:

Public common units	28.9%
Phillips 66 common units	27.0%
Phillips 66 subordinated units	42.1%
General partner units	2.0%
Total	100.0%

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The Offering

Common units offered by us	5,250,000 common units. 6,037,500 common units if the underwriters exercise in full their option to purchase an additional 787,500 common units from us.
Units outstanding before this offering	39,827,248 common units and 35,217,112 subordinated units.
Units outstanding after this offering	45,077,248 common units, or 45,864,748 common units if the underwriters exercise in full their option to purchase an additional 787,500 common units from us, and 35,217,112 subordinated units.
Use of proceeds	We expect to receive net proceeds of approximately \$ million from this offering, or approximately \$ million if the underwriters exercise in full their option to purchase additional common units from us, in each case after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use a portion of the net proceeds from this offering to fund a portion of the cash consideration payable by us in the Pipeline Transaction. We intend to use the remaining portion of the net proceeds from this offering for general partnership purposes, including repayment of outstanding indebtedness and to fund capital expenditures. We intend to fund the remaining portion of the cash consideration payable by us in the Pipeline Transaction using proceeds from debt financing transactions, which may consist of the proposed senior notes offering. If the proposed senior notes offering is not completed, we may use revolver borrowings or proceeds from other debt financing transactions to fund the remaining portion of the cash consideration. If the Pipeline Transaction does not close, we intend to use the net proceeds from this offering for general partnership purposes, including repayment of outstanding indebtedness and to fund capital expenditures. The closing of this offering is not conditioned on the closing of the Pipeline Transaction. If the underwriters exercise their option to purchase additional common units, we expect to use those net proceeds for general partnership purposes, including the repayment of outstanding indebtedness and to fund capital expenditures. Please read "Use of Proceeds." Affiliates of Barclays Capital Inc., J.P. Morgan Securities LLC, Citigroup Global Markets Inc., Goldman, Sachs & Co., Merrill Lynch, Pierce, Fenner & Smith Incorporated, Morgan Stanley & Co. LLC, RBC Capital Markets, LLC and Wells Fargo Securities, LLC are lenders under our revolving credit facility and, accordingly, may receive a portion of the net proceeds of this offering. Please read "Underwriting."

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Cash distributions

Our general partner has adopted a cash distribution policy that requires us to distribute all of our cash on hand at the end of each quarter, less reserves established by our general partner. We refer to this cash as "available cash," and it is defined in our partnership agreement. Please read "Provisions of our Partnership Agreement Relating to Cash Distributions" in the accompanying base prospectus.

On January 21, 2015, the board of directors of our general partner declared a quarterly cash distribution to our limited partners for the fourth quarter of 2014 of \$0.34 per common and subordinated unit, payable on February 13, 2015, to holders of record as of February 4, 2015. This distribution represents an increase of 7% over the 2014 third quarter distribution and 51% over the 2013 fourth quarter distribution.

If cash distributions to our unitholders exceed \$0.244375 per unit in any quarter, our general partner will receive, in addition to distributions on its 2% general partner interest, increasing percentages, up to 48%, of the cash we distribute in excess of that amount. We refer to these distributions as "incentive distributions."

Issuance of additional units

Our partnership agreement authorizes us to issue an unlimited number of additional units without the approval of our unitholders. Please read "Our Partnership Agreement Issuance of Additional Securities" in the accompanying base prospectus.

Limited voting rights

Our general partner manages and operates us. Common unitholders have only limited voting rights on matters affecting our business. Common unitholders have no right to elect our general partner or its directors on an annual or continuing basis. Our general partner may not be removed except by a vote of the holders of at least 66²/₃% of the outstanding units voting together as a single class, including any units owned by our general partner and its affiliates. After giving effect to this offering and assuming that the underwriters exercise in full their option to purchase additional common units, Phillips 66 will own an aggregate of 68.0% of our common and subordinated units, which gives Phillips 66 the ability to prevent the removal of our general partner.

Estimated ratio of taxable income to distributions

We estimate that if you own the common units you purchase in this offering through the record date for distributions for the period ending December 31, 2017, you will be allocated, on a cumulative basis, an amount of federal taxable income for that period that will be 20% or less of the cash distributed to you with respect to that period. Please read "Material Tax Considerations" in this prospectus supplement.

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Material tax consequences

For a discussion of the material federal income tax consequences that may be relevant to prospective unitholders who are individual citizens or residents of the United States, please read "Material Tax Considerations" in this prospectus supplement and "Material Federal Income Tax Consequences" in the accompanying base prospectus.

Exchange listing

Our common units are listed on the New York Stock Exchange ("NYSE") under the symbol "PSXP."

Risk factors

You should carefully read and consider the information beginning on page S-15 of this prospectus supplement set forth under the heading "Risk Factors," on page 2 of the accompanying base prospectus and all other information set forth in this prospectus, including the information incorporated by reference, before deciding to invest in our common units.

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Summary Historical and Pro Forma Financial Data

The following table sets forth a summary of our historical financial data as of December 31, 2014 and 2013, and for each of the three years ended December 31, 2014, 2013 and 2012, as applicable. This summary historical financial data is derived from, and should be read together with, our audited consolidated financial statements appearing in our Annual Report on Form 10-K for the year ended December 31, 2014 ("2014 Form 10-K"), which is incorporated by reference into this prospectus supplement.

As discussed more fully in our 2014 Form 10-K, the comparability of our historical financial data is affected by the activities of our predecessor businesses (our "Predecessors") prior to their contribution to us. U.S. generally accepted accounting principles require that transfers of businesses between entities under common control be accounted for as if the transfer had occurred at the beginning of the period of transfer, rather than the acquisition date, with prior periods retrospectively adjusted to furnish comparative information. Our 2014 acquisitions of the Gold Line products system, the Medford spheres and the Bayway and Ferndale rail racks were considered transfers of businesses under common control, and their financial position, results of operations and cash flows prior to their acquisition by us are included in the results of our Predecessors. Similarly, the results of operations and cash flows of our initial assets prior to their contribution to us by Phillips 66 on July 26, 2013, in connection with our initial public offering ("IPO") are included in the results of our Predecessors. Accordingly:

Our consolidated statements of income and cash flows for the year ended December 31, 2014, consist of the combined results of the Gold Line, Medford, Bayway and Ferndale assets prior to the effective date of each acquisition; and the consolidated results of the Partnership. Our consolidated statements of income and cash flows for the year ended December 31, 2013, consist of the consolidated results of the Partnership for the period from July 26, 2013, through December 31, 2013; the combined results of our pre-IPO predecessor for the period from January 1, 2013, through July 25, 2013; and the combined results of the Gold Line, Medford, Bayway and Ferndale assets for the entire year of 2013. Our consolidated statements of income and cash flows for the year ended December 31, 2012, consist entirely of the combined results of our Predecessors.

Our consolidated balance sheet at December 31, 2014, consists of the consolidated balances of the Partnership. Our consolidated balance sheet at December 31, 2013, consists of the consolidated balances of the Partnership and the combined balances of the Gold Line, Medford, Bayway and Ferndale assets.

You are encouraged to read the complete description of the basis of presentation of our historical financial statements included in Note 1 Business and Basis of Presentation, in the Notes to Consolidated Financial Statements section of our 2014 Form 10-K, as well as important information on the accounting for, and cash flow impacts of, our acquisitions, included in Note 4 Acquisitions, and Note 16 Cash Flow Information section of our 2014 Form 10-K.

The summary unaudited pro forma financial data below are derived from (a) our unaudited pro forma consolidated statement of income for the year ended December 31, 2014, which reflects the Pipeline Transaction as if it had occurred on January 1, 2014, and (b) our unaudited pro forma consolidated balance sheet as of December 31, 2014, which reflects the Pipeline Transaction as if it had occurred on December 31, 2014 (together with the notes to unaudited pro forma consolidated financial statements, the "unaudited pro forma financial statements").

The unaudited pro forma financial statements were prepared based on certain pro forma adjustments to the consolidated financial statements included in our 2014 Form 10-K, and should be read in conjunction with such historical consolidated financial statements, including the related financial

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statement notes. The unaudited pro forma financial statements were filed with the SEC on Form 8-K on February 17, 2015, and are incorporated herein by reference.

The Pipeline Transaction will be recorded by the Partnership at Phillips 66's historical cost, as the Pipeline Transaction is between entities under common control. The pro forma adjustments are based on currently available information and certain estimates and assumptions; actual adjustments may differ from the pro forma adjustments. However, our management believes the assumptions are reasonable for presenting the significant effects of the transactions, and that the pro forma adjustments give appropriate effect to those assumptions, are factually supportable, and are properly applied in the pro forma financial statements. The unaudited pro forma financial statements use an assumed mix of equity and debt issuances to finance the cash portion of the Pipeline Transaction acquisition price and, as a result, do not reflect the approximately \$170 million increase in the Partnership's total debt, above the amount reflected in the unaudited pro forma financial statements, contemplated by the \$1.1 billion proposed senior notes offering. See "Recent Developments Debt Financing" and "Capitalization." Actual debt and equity that will be used to finance the cash portion of the acquisition price may be different than the assumed ratio. The unaudited pro forma financial statements may not be indicative of the results that actually would have occurred if the Partnership had acquired the investments on the dates indicated, or the results that will be obtained in the future.

You should read the summary unaudited pro forma financial data below in conjunction with the information under the captions "Capitalization," and "Summary Recent Developments Debt Financing" in this prospectus supplement and the unaudited pro forma financial statements incorporated by reference herein.

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	Millions of Dollars			
	2014	Historical 2013	2012	Pro Forma 2014
Statement of Income Data				
Revenues:				
Transportation and terminaling services related parties	\$ 222.9	\$ 181.9	\$ 141.8	\$ 222.9
Transportation and terminaling services third parties	6.1	5.1	3.5	6.1
Equity in earnings of affiliates				56.5
Other income	0.1	0.2		0.1
Total revenues and other income	229.1	187.2	145.3	285.6
Costs and expenses:				
Operating and maintenance expenses	52.5	52.2	54.1	52.5
Depreciation	16.2	14.3	13.6	16.2
General and administrative expenses	25.6	18.4	13.7	26.6
Taxes other than income taxes	4.2	4.8	4.4	4.2
Interest and debt expense	5.3	0.3		25.6
Other expenses	0.1		0.1	0.1
Total costs and expenses	103.9	90.0	85.9	125.2
Income before income taxes	125.2	97.2	59.4	160.4
Provision for income taxes	0.8	0.5	0.3	0.9
Net income	124.4	96.7	59.1	159.5
Less: net income attributable to Predecessors	8.4	67.8	59.1	8.4
Net income attributable to the Partnership	116.0	28.9		151.1
Less: General partner's interest in net income attributable to the Partnership	8.3	0.6		9.0
Limited partners' interest in net income attributable to the Partnership	\$ 107.7	\$ 28.3	\$	\$ 142.1
Net income per limited partner unit-basic and diluted (dollars):				
Common units	\$ 1.48	\$ 0.40	*	\$ 1.70
Subordinated units	1.45	0.40	*	1.86
Cash distributions paid per limited partner unit	\$ 1.1176	\$ 0.1548	*	
Balance Sheet Data				
Net properties, plants and equipment	\$ 485.1	\$ 325.1		\$ 485.1
Equity-method investments				738.4
Total assets	539.5	775.3		1,283.4
Notes payable related parties	411.6			411.6
Long-term debt	18.0			517.2
Total liabilities	467.3	31.3		967.2
Total equity	72.2	744.0		316.2
Statement of Cash Flows Data				
Net cash provided by (used in):				
Operating activities	\$ 142.4	\$ 97.6	\$ 75.1	
Investing activities	(315.3)	(77.2)	(33.5)	
Financing activities	(243.9)	404.7	(41.6)	

*
Information not applicable to the period prior to the closing of our IPO on July 26, 2013.

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RISK FACTORS

An investment in our common units involves risks. Before you invest in our common units, you should carefully consider the following risk factors and the risk factors included in our 2014 Form 10-K, as well as risks described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and cautionary notes regarding forward-looking statements included or incorporated by reference in this prospectus supplement and the accompanying base prospectus, together with all of the other information included or incorporated by reference herein.

If any of these risks were to materialize, our business, results of operations, cash flows and financial condition could be materially and adversely affected. In that case, our ability to make distributions to our unitholders may be reduced, the trading price of our securities could decline and you could lose all or part of your investment.

Risks Related to the Pipeline Transaction

Even if this offering is completed, the Pipeline Transaction may not be consummated as anticipated, or at all, which could have an adverse impact on our cash available for distribution.

The Pipeline Transaction is expected to close in early March 2015 and is subject to customary closing conditions. Satisfaction of many of these conditions is beyond our control. If these conditions are not satisfied or waived, the Pipeline Transaction will not be completed. Certain of the conditions that remain to be satisfied include, but are not limited to:

the continued accuracy of the representations and warranties contained in the Contribution Agreement;

the performance by each party of its respective obligations under the Contribution Agreement;

the absence of any legal proceeding or order by a governmental authority restraining, enjoining or otherwise prohibiting the Pipeline Transaction;

the absence of a material adverse effect on the results of operations or financial condition of the interests to be acquired in the Pipeline Transaction;

the execution of certain agreements and delivery of certain documents related to the consummation of the Pipeline Transaction; and

the receipt by us of sufficient proceeds from debt or equity capital markets offerings, bank debt or other arrangements to pay the cash consideration payable by us in the Pipeline Transaction.

If these conditions are not satisfied or waived, the Pipeline Transaction will not be consummated. There is no guarantee that the Pipeline Transaction will close in early March 2015, or at all. The closing of this offering is not conditioned on, and is expected to be consummated before, the closing of the Pipeline Transaction. Accordingly, if you decide to purchase our common units, you should be willing to do so whether or not we complete the Pipeline Transaction. Failure to complete the Pipeline Transaction or any delays in completing the Pipeline Transaction could have an adverse impact on our future business and operations and our cash available for distribution and could negatively impact the price of our common units.

Failure to successfully combine our business with the assets to be acquired from Phillips 66 in the Pipeline Transaction, or an inaccurate estimate by us of the benefits to be realized from the Pipeline Transaction, may adversely affect our future results.

The Pipeline Transaction involves potential risks, including:

the failure to realize expected profitability, growth or accretion;

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the operation of the Explorer pipeline, the Sand Hills NGL pipeline or the Southern Hills NGL pipeline by parties other than us;

environmental or regulatory compliance matters or liabilities;

title or permit issues;

the diversion of management's attention from our existing businesses;

the incurrence of significant charges, such as impairment of goodwill or other intangible assets, asset devaluation or restructuring charges; and

the incurrence of unanticipated liabilities and costs for which indemnification is unavailable or inadequate.

The expected benefits from the pending Pipeline Transaction may not be realized if our estimates of the potential net cash flows associated with the joint venture interests to be acquired by us in the Pipeline Transaction are materially inaccurate or if we fail to identify operating problems or liabilities associated with the underlying pipeline systems prior to closing. The accuracy of our estimates of the potential net cash flows attributable to such joint venture interests is inherently uncertain. If problems are identified after closing of the Pipeline Transaction, the Contribution Agreement provides for limited recourse against Phillips 66.

If we consummate the Pipeline Transaction and if any of these risks or unanticipated liabilities or costs were to materialize, any desired benefits of the Pipeline Transaction may not be fully realized, if at all, and our future financial performance, results of operations and cash available for distribution could be negatively impacted.

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USE OF PROCEEDS

We expect to receive net proceeds of approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expenses, from the sale of 5,250,000 common units offered by this prospectus supplement. If the underwriters exercise in full their option to purchase 787,500 additional common units, the net proceeds to us, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$ million.

We intend to use a portion of the net proceeds from this offering to fund a portion of the cash consideration payable by us in the Pipeline Transaction. We intend to use the remaining portion of the net proceeds from this offering for general partnership purposes, including repayment of outstanding indebtedness and to fund capital expenditures. We intend to fund the remaining portion of the cash consideration payable by us in the Pipeline Transaction using proceeds from debt financing transactions, which may consist of the proposed senior notes offering. If the proposed senior notes offering is not completed, we may use revolver borrowings or proceeds from other debt financing transactions to fund the remaining portion of the cash consideration. If the Pipeline Transaction does not close, we intend to use the net proceeds from this offering for general partnership purposes, including repayment of outstanding indebtedness and to fund capital expenditures. The closing of this offering is not conditioned on the closing of the Pipeline Transaction. The Pipeline Transaction, which is subject to standard closing conditions, is expected to close in early March 2015. Please read "Summary Recent Developments Pipeline Transaction" and "Risk Factors."

If the underwriters exercise their option to purchase additional common units, we expect to use those net proceeds for general partnership purposes, including repayment of outstanding indebtedness and to fund capital expenditures.

As of December 31, 2014, borrowings outstanding under our revolving credit facility totaled \$18 million. Borrowings under the revolving credit facility bear interest, at our option, at either: (a) the Eurodollar rate in effect from time to time plus the applicable margin; or (b) the base rate (as described in the credit agreement) plus the applicable margin. Existing borrowings under the revolving credit facility were incurred to fund our ongoing capital expenditure program and to provide working capital for general partnership purposes.

Affiliates of Barclays Capital, Inc., J.P. Morgan Securities LLC, Citigroup Global Markets Inc., Goldman, Sachs & Co., Merrill Lynch, Pierce, Fenner & Smith Incorporated, Morgan Stanley & Co. LLC, RBC Capital Markets, LLC and Wells Fargo Securities, LLC are lenders under our revolving credit facility and, accordingly, may receive a portion of the net proceeds of this offering. See "Underwriting."

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The following table sets forth our cash and cash equivalents and capitalization as of December 31, 2014, on:

a historical basis;

a "pro forma" basis to give pro forma effect to the Pipeline Transaction, including financing assumptions to fund the cash portion of the Pipeline Transaction that (i) do not give specific effect to sale of units in this offering, and (ii) do not assume the repayment of outstanding indebtedness; as more fully described in our Current Report on Form 8-K filed on February 17, 2015; and

a "pro forma, as adjusted" basis to reflect:

the sale of 5,250,000 common units in this offering, which results in a \$ million adjustment in net offering proceeds from those assumed on a pro forma basis;

the Partnership's plans to raise up to \$1.1 billion in a proposed senior notes offering, which results in a \$600.8 million increase in debt financing from that assumed on a pro forma basis. See "Summary Recent Developments Debt Financing"; and

the application of the net proceeds of this offering and the planned use of proceeds from the proposed senior notes offering, which includes the repayment of \$429.6 million of existing indebtedness that was not reflected on a pro forma basis. See "Use of Proceeds" and "Summary Recent Developments Debt Financing."

The closing of this offering of common units is not conditioned on the closing of the Pipeline Transaction. You should read this information in conjunction with the "Use of Proceeds" portion of this prospectus supplement and our financial statements and notes thereto that are incorporated by reference into this prospectus supplement and the accompanying base prospectus for additional information about our capital structure. The following table does not reflect any common units that may be sold to the underwriters upon exercise of their option to purchase additional common units.

At December 31, 2014	Millions of Dollars		
	Historical	Pro Forma	Pro Forma, As Adjusted
Cash and cash equivalents	\$ 8.3	\$ 8.3	\$
Total debt			
Revolving credit facility	\$ 18.0	\$ 18.0	\$
Sponsor loans	411.6	411.6	
Pipeline Transaction indebtedness ⁽¹⁾		499.2	
New senior notes			1,100.0
Total debt			