UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

KIRBY 401(k) PLAN

Kirby Corporation 55 Waugh Drive, Suite 1000 Houston, Texas 77007

Index to Financial Statements and Supplemental Schedules

	Page
Report of Independent Registered Public Accounting Firm	1
Statements of Net Assets Available for Benefits (Modified Cash Basis) – December 31, 2014 and 2013	3
Statements of Changes in Net Assets Available for Benefits (Modified Cash Basis) — Years ended December 31, 2014 and 2013	4
Notes to Financial Statements (Modified Cash Basis)	5
Supplemental Schedules	
Schedule I - Schedule H, Part IV, Line 4i – Schedule of Assets (Held at End of Year) (Modified Cash Basis) – as of December 31, 2014	17
Supplemental schedules, other than listed above, are omitted because of the absence of the conditions under which they are required.	

Report of Independent Registered Public Accounting Firm

The Plan Administrator Kirby 401(k) Plan:

We have audited the accompanying statements of net assets available for benefits (modified cash basis) of the Kirby 401(k) Plan (the Plan) as of December 31, 2014 and 2013, and the related statement of changes in net assets available for benefits (modified cash basis) for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in note 2, these financial statements and supplemental schedule were prepared on a modified cash basis of accounting, which is a comprehensive basis of accounting other than U.S. generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits (modified cash basis) of the Plan as of December 31, 2014 and 2013, and the changes in net assets available for benefits (modified cash basis) for the years then ended, on the basis of accounting described in note 2.

<u>Index</u>

The supplemental information in the accompanying schedule of schedule H, line 4i – schedule of assets (held at end of year) (modified cash basis) as of December 31, 2014, has been subjected to audit procedures performed in conjunction with the audit of the Plan's 2014 financial statements. The supplemental information is presented for the purpose of additional analysis and is not a required part of the financial statements but includes supplemental information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental information is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information, we have evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information in the accompanying schedule of schedule H, line 4i – schedule of assets (held at end of year) (modified cash basis) as of December 31, 2014, is fairly stated in all material respects in relation to the 2014 financial statements as a whole.

/s/ KPMG LLP

Houston, Texas June 29, 2015

KIRBY 401(k) PLAN
Statements of Net Assets Available for Benefits (Modified Cash Basis) December 31, 2014 and 2013

	2014	2013
Assets:		
Investments, at fair value	\$ 370,211,497	\$ 370,583,134
Notes receivable from participants	20,259,338	19,172,824
Other receivables	9,549	72,190
Total assets	390,480,384	389,828,148
Liabilities:		
Other liabilities	447,753	477,075
Total liabilities	447,753	477,075
Net assets available for benefits before adjustment	390,032,631	389,351,073
	(E 40 E 4E)	(645 505)
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(742,547)	(615,785)
Net assets available for benefits	\$ 389,290,084	\$ 388,735,288

See accompanying notes to financial statements.

Statements of Changes in Net Assets Available for Benefits (Modified Cash Basis) Years Ended December 31, 2014 and 2013

	2014	2013
Additions to net assets attributed to:		
Contributions from participants	\$ 21,467,420	\$ 19,575,121
Contributions from employer, net of forfeitures	12,736,940	11,463,346
Rollover contributions	2,745,847	5,270,913
Dividend and other income	12,553,608	7,040,511
Interest income from participants' notes receivable	832,272	758,146
Net appreciation (depreciation) in fair value of investments	(10,780,642)	64,175,105
Total additions, net	39,555,445	108,283,142
Deductions from net assets attributed to:		
Benefits paid to participants	38,820,286	42,700,993
Investment counselor fees and other	180,363	202,963
Total deductions	39,000,649	42,903,956
Transfer of investments to the plan from Penn Maritime Inc.'s 401(k) plans (note 1)	_	44,132,395
Transfer of notes receivables from participants to the plan from Penn Maritime Inc.'s 401(k) plans (note 1)		978,338
Net increase	554,796	110,489,919
Net assets available for benefits, beginning of year	388,735,288	278,245,369

See accompanying notes to financial statements.

Net assets available for benefits, end of year

389,290,084

388,735,288

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

(1) Description of Plan

(a) General

The Kirby 401(k) Plan (the Plan) is a defined contribution 401(k) plan for the benefit of employees of Kirby Corporation (the Company) and certain subsidiaries. Employees covered by collective bargaining agreements, the terms of which do not provide for participation in the Plan, are not eligible. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). Further information relating to the Plan's provisions is available in the Plan Document.

Three Penn Maritime Inc. (Penn) 401(k) plans including the Penn Maritime Inc. Profit Sharing Plan, Penn Maritime Inc. Local 333 Union Employees Profit Sharing Plan, and Penn Maritime Inc. SIU Union Employees Profit Sharing Plan (collectively referred to as the Penn Plan) were merged into the Plan, and all balances were transferred to the Plan effective June 30, 2013. Commencing July 1, 2013, former Penn Plan participants are subject to the same plan provisions as the Plan participants, unless specified otherwise by a collective bargaining agreement. Penn became a subsidiary of Kirby Offshore Marine, LLC ("KOM") upon its acquisition by the Company on December 12, 2012.

(b) Administration of the Plan

The general administration of the Plan is the responsibility of the Company (the plan administrator). The plan administrator has broad powers regarding the operation and administration of the Plan and receives no compensation for service to the Plan. Bank of America, N.A. (Bank of America) is the trustee of the Plan.

(c) Contributions

Each employee is eligible to join the Plan as of the first pay period following completion of three months of service and the attainment of age 18 unless specified otherwise by a collective bargaining agreement. The Plan provides for basic employee pretax contributions to the Plan of up to 3% of covered compensation as defined, and for additional employee pretax contributions to the Plan of up to 14% of covered compensation subject to the provisions of the Internal Revenue Code of 1986, as amended (the Code). Additional employee pretax contributions to the Plan are allowed under certain collective bargaining agreements. Participants age 50 or older during the Plan year may also elect to make a "catch-up" contribution, subject to certain Internal Revenue Service (IRS) limits (\$5,500 in 2014 and 2013). The Company contributes matching employer contributions equal to 100% of basic employee pretax contributions. The Company does not match the additional employee pretax or catch-up contributions. Each participant directs his or her contributions and the Company's matching contributions between the investment funds offered by the Plan, including Company common stock.

Vessel based employees of KOM whose employment is covered by collective bargaining agreements receive a non-discretionary employer match and may receive a discretionary employer contribution based on the terms of the applicable collective bargaining agreement.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

The Plan allows the employer, at its discretion, to make an additional discretionary employer contribution for eligible employees equal to 5% of the employees covered compensation, as defined by the Plan. Eligible employees are employees of United Holdings, LLC ("United") and employees of KOM assigned the classification of Vessel Employee as determined by the Company. On March 24, 2015, the Company made a discretionary contribution of \$5,041,381 to the Plan for eligible United and KOM employees for the 2014 Plan year. On March 26, 2014, the Company made a discretionary contribution of \$4,560,822 to the Plan for eligible United and KOM employees for the 2013 Plan year.

On May 8, 2014, the Company made a discretionary contribution of \$29,166 to the Plan for eligible former employees of Penn under the provisions of the prior Penn Plan.

The Plan allows the use of forfeited amounts to offset future employer matching contributions. Forfeitures from non-vested accounts of \$893,212 and \$1,069,467 were used to reduce the Plan's matching contributions in 2014 and 2013, respectively.

All employees hired or rehired are automatically enrolled at a 3% pretax contribution rate, unless otherwise elected by the participant. In addition, participants may contribute amounts representing rollovers from other qualified plans or from an individual retirement account.

(d) Benefits

Benefits payments are made to participants upon retirement or termination of employment (or to the beneficiary in the event of death) and are in the form of lump sum or installment distribution payments. A participant may request a loan for up to the lesser of 50% of the participant's vested interest or \$50,000, less the participant's highest outstanding loan balance during the preceding 12 months. Loans typically bear interest at prime rate plus 1%. Interest rates ranged from 4.25% to 10.25% at December 31, 2014. Loans outstanding at December 31, 2014 mature from January 7, 2015 through July 18, 2028. Loans outstanding upon a participant's termination of employment are considered deemed distributions if not repaid and are deducted from the participant's account balance prior to distribution. These amounts are taxed to the participant in the year of the participant's termination. Active participants who qualify for an in-service withdrawal after attaining 59 ½ years of age may be paid their benefits in a single sum cash payment or rollover as soon as administratively possible.

The Plan requires automatic distribution of participant accounts upon termination without the participant's consent of amounts less than \$5,000 and greater than \$1,000. If the participant does not elect to have the amount paid directly to an eligible retirement plan or receive a distribution directly, then the Plan will pay the distribution to an individual retirement plan designated by the Plan administrator. Amounts less than \$1,000 are paid directly to participants upon termination.

(e) Vesting

Participants are 100% vested in their participant contributions and rollovers, if any. Employer contributions are subject to a six-year vesting schedule. The vesting schedule of employer contributions for employees covered by collective bargaining agreements are specified by that particular agreement. Forfeitures in the amount of \$104,076 and \$68,778 as of December 31, 2014 and 2013, respectively, were available to offset future employer contributions or plan administrative expenses at the discretion of the Company.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

(f) Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to terminate the Plan subject to the provisions of ERISA. In the event of termination, the amounts credited to the accounts of participants will be distributed to the participants after payment of expenses for distribution and liquidation.

(g) Participant Accounts

Under the Plan, each participant's account is credited with the participant's contribution, the Company's matching contribution, and an allocation of investment income (loss), net of administrative expenses. Investment income (loss) is allocated daily to participants. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

(h) Administrative Expenses

All administrative expenses, unless paid by the Company at its discretion, are paid by the Plan.

(i) Revenue Sharing

The agreement between Bank of America and the Plan includes a revenue sharing arrangement whereby Bank of America receives investment related revenue generated by Plan assets invested in mutual fund holdings sponsored by an affiliate of Bank of America. These deposits are included in dividend and other income in the statement of changes in net assets available for benefits. The funds can be used to pay plan expenses or be allocated to participants. Income from revenue sharing during 2014 was \$194,739.

(2) Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying financial statements have been prepared on the modified cash basis, which is a comprehensive basis of accounting other than U.S. generally accepted accounting principles, and is an acceptable method of reporting under Department of Labor regulations. The modified cash basis of accounting utilizes the cash basis of accounting while carrying investments at fair value and recording investment income (loss) on the accrual basis. Consequently, contributions are recognized when received rather than when earned, and expenses are recognized when paid rather than when the obligation is incurred. As of December 31, 2014, \$282,480 of employee contributions had not been remitted to the trust and \$138,923 of the employer contributions had not been remitted to the trust for the 2014 Plan year. As of December 31, 2013, \$259,295 of employee contributions had not been remitted to the trust and \$124,529 of the employer contributions had not been remitted to the trust for the 2013 Plan year. As of December 31, 2014 and 2013, excess deferrals of \$3,513 and \$1,165, respectively, were held by the trust and distributed to participants subsequent to year end. Under U.S. generally accepted accounting principles, these amounts would have been reflected as accounts receivable and accounts payable, respectively.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

Certain other receivables and liabilities are recorded in the statements of net assets available for benefits to reflect the accrued income, pending settlements and other transactions.

Certain reclassifications have been made to prior year presentation to conform to current year presentation.

(b) Use of Estimates

The preparation of financial statements requires Plan management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and disclosure of contingent assets and liabilities, and changes therein. Actual results could differ from those estimates.

(c) Investment Valuation and Income Recognition

Investments in mutual funds and Company common stock are stated at fair value based on quoted market prices. Investments in common trust funds are stated at fair market value based upon quoted market prices of the underlying assets. Purchases and sales of investments are recorded on a trade date basis. Net appreciation (depreciation) in fair value of investments includes realized gains and losses on investments sold during the year as well as net appreciation (depreciation) of the investments held at the end of the year. Interest and dividend income is accrued in the period earned.

The accounting literature requires investment contracts held by a defined contribution plan to be reported at fair value. However, contract value (cost plus accrued interest) is the relevant measurement attribute for that portion of the net assets available for benefits of a defined contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount that participants would receive if they were to initiate permitted transactions under the terms of the Plan. Therefore, the statement of net assets available for benefits presents the fair value of the investment contracts as well as the adjustment of the fully benefit-responsive investment contracts from fair value to contract value. The statement of changes in net assets available for benefits is prepared on a contract value basis.

The Plan invests in investment contracts through The Invesco Stable Value Retirement Fund which is a common trust fund that primarily invests in guaranteed investment contracts ("GICs") and synthetic GICs and is presented at fair value as of December 31, 2014 and 2013.

(d) Notes Receivable from Participants

Notes receivable from participants represent loans that are recorded at their unpaid principal balance plus any accrued but unpaid interest.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

(e) Benefit Payments

Payments to participants are recorded as the benefits are paid.

(f) Issued Accounting Standards Not Yet Adopted

In May 2015, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) 2015-07, Fair Value Measurement: Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or its equivalent). The ASU removes the requirement to categorize these investments within the fair value hierarchy and also removes the requirement to make certain disclosures. The ASU is effective for fiscal years beginning after December 15, 2015. The Company is evaluating the impact of the adoption of this ASU on the Plan financial statements.

(3) Investments and Investment Options

Each participant has the right to direct his or her contributions and the Company's matching contributions, once remitted, among the investment funds offered by the Plan. Descriptions of the Plan's investment fund options are included in the summary plan description provided to all eligible employees.

Participants may direct their investment contributions to the following investment funds: Invesco Stable Value Retirement Fund, Northern Trust Collective S&P 500 Index Fund, Northern Trust Collective All Country World ex-US Index Fund, Northern Trust Aggregate Bond Index Fund, American Beacon Small Cap Value Fund, American Funds Bond Fund of America, Blackrock FFI Treasury Fund, Blackrock Global Allocation Fund, ClearBridge Small Cap Growth Fund, Voya Global Real Estate Fund, Northern Multi-Manager Emerging Markets Equity Fund, Prudential Jennison Large Cap Growth Fund, Thornburg International Value Fund, T. Rowe Price Equity Income Fund, T. Rowe Price Retirement 2010 Fund, T. Rowe Price Retirement 2015 Fund, T. Rowe Price Retirement 2020 Fund, T. Rowe Price Retirement 2035 Fund, T. Rowe Price Retirement 2040 Fund, T. Rowe Price Retirement 2045 Fund, T. Rowe Price Retirement 2050 Fund, T. Rowe Price Retirement 2055 Fund and Company common stock.

ING Global Real Estate Fund changed its name to Voya Global Real Estate Fund. No funds were added or removed in 2014.

Allocation to Company common stock is limited to fifty percent of each participant's portfolio. The limit is applied when participants direct the investment of future contributions and rebalance their entire portfolio.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

The following presents investments that represent 5% or more of the Plan's net assets as of December 31:

2014: Invesco Stable Value Retirement Fund (contract value of \$43,679,250) \$ 44,421,797 Prudential Jennison Large Cap Growth Fund 42,756,990 Northern Trust Collective S&P 500 Index Fund 42,128,603 T. Rowe Price Equity Income Fund 33,590,376 American Funds Bond Fund of America 23,662,367 American Beacon Small Cap Value Fund 21,138,044 Thornburg International Value Fund 19,623,618 Company common stock 56,594,699 2013: Invesco Stable Value Retirement Fund (contract value of \$50,269,706) 50,885,491 Prudential Jennison Large Cap Growth Fund 40,105,223 34,269,431 T. Rowe Price Equity Income Fund Northern Trust Collective S&P 500 Index Fund 31,214,753 Thornburg International Value Fund 22,272,493 American Funds Bond Fund of America 21,969,809

The Plan's investments (including realized gains and losses on investments bought and sold, as well as unrealized gains and losses on investments held during the year) appreciated (depreciated) in value as follows for the years ended December 31:

	2014	2013
Common trust funds	\$ 4,278,309	\$ 8,435,332
Mutual funds	(2,075,547)	27,525,905
Company common stock	(12,983,404)	28,213,868
	\$ (10,780,642)	\$ 64,175,105

(4) Concentration of Investments

Company common stock

The Plan's investment in shares of Company common stock represents 15% and 19% of total assets as of December 31, 2014 and 2013, respectively. The Company is engaged in marine transportation and diesel engine services.

(Continued)

72,344,900

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

(5) Voting Rights

Each shareholder is entitled to exercise voting rights attributable to the shares of Company common stock allocated to his or her account and is notified by the trustee prior to the time that such rights are to be exercised. The trustee is not permitted to vote any shares for which instructions have not been given by the participant. During 2014 and 2013, the Plan purchased all shares of Company common stock in the open market.

(6) Risk and Uncertainties

The Plan may invest in common trust funds, mutual funds and Company common stock. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is probable that changes in the value of investment securities will occur in the near term.

The Plan may invest in securities with contractual cash flows, such as asset backed securities, collateralized mortgage obligations and commercial mortgage backed securities, including securities backed by subprime mortgage loans. The value, liquidity and related income of those securities are sensitive to changes in economic conditions, including real estate value, delinquencies or defaults, or both, and may be adversely affected by shifts in the market's perception of the issuers and changes in interest rates.

(7) Related Party Transactions

One of the Plan investment options includes shares of Company common stock managed by Bank of America. The Company is the plan sponsor and Bank of America is the trustee as defined by the Plan. Therefore, these transactions qualify as party-in-interest transactions. These transactions are covered by an exemption from the "prohibited transaction" provisions of ERISA and the Code.

The Plan has participant loans outstanding, which are secured solely by a portion of the participant's vested account balance, in accordance with the Plan Document.

(8) Federal Income Tax Status

The IRS has determined and informed the Company by a letter dated March 31, 2008, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code (IRC). Although the Plan has been amended and restated since receiving the determination letter, the Plan administrator believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC and therefore believes that the Plan is qualified and the related trust is tax-exempt.

The Plan is currently open to audit under the statute of limitations by the IRS for the 2011 through 2013 tax years. The Plan has not recognized any assets or liabilities related to uncertain tax positions as of December 31, 2014 and 2013.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

(9) Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

	December 31			· 31
		2014		2013
Net assets available for benefits per the financial statements	\$	389,290,084	\$	388,735,288
Adjustment from contract value to fair value for fully benefit-responsive investment contracts		742,547		615,785
Net assets available for benefits per the Form 5500	\$	390,032,631	\$	389,351,073

The following is a reconciliation of net investment income in fair value of investments per the financial statements to the Form 5500:

	Years ended December 31				
		2014		2013	
Net investment income in fair value of investments per the financial statements	\$	1,772,966	\$	71,215,616	
Interest income from participants' notes receivable		832,272		758,146	
Adjustment from contract value to fair value for fully benefit- responsive investment contracts as of					
end of year		126,762		(674,948)	
Net investment income in fair value of investments per the Form 5500	\$	2,732,000	\$	71,298,814	

Fully benefit-responsive investment contracts are recorded on the Form 5500 at fair value but are adjusted to contract value for financial statement presentation.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

(10) Fair Value Measurements

The accounting guidance for using fair value to measure certain assets and liabilities establishes a three tier value hierarchy, which prioritizes the inputs to valuation techniques used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted in active markets for identical assets or liabilities; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little, if any, market data exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing the asset or liability.

The following is a description of the valuation methodologies used for Plan's financial instruments and the classification of such instruments within the valuation hierarchy.

Mutual Funds

These instruments are public investment vehicles valued using the net asset value provided by the administrator of the fund. The net asset value price is quoted on an active market and is classified within level 1 of the valuation hierarchy.

Company Common Stock

Company common stock is valued at the closing price listed by the New York Stock Exchange and is classified within level 1 of the valuation hierarchy.

Common Trust Funds

These instruments are investment vehicles valued using the net asset value provided by the administrator of the fund. The net asset value is classified within level 2 of the valuation hierarchy because the net asset value price is quoted on an inactive private market although the underlying investments are traded on an active market. The net asset value is used as a practical expedient to determine fair value. Each collective trust provides for redemptions by the Plan at reported net asset values per share, with little to no advance notice requirement.

The methods described above may produce a fair value calculation that may not be indicative of net asset value or reflective of future fair values. Furthermore, while the Plan's valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

The following table summarizes the Plan's investment assets measured at fair value on a recurring basis at December 31, 2014:

	Acti	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Observable Inputs (Level 2)		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		Observable Inputs		nificant oservable nputs evel 3)	Total Fair Value
Mutual funds:																															
Fixed income	\$	23,662,364	\$	-	\$	-	\$ 23,662,364																								
Balanced		41,412,948		-		-	41,412,948																								
U.S. equity		121,614,502		-		-	121,614,502																								
Real estate		4,000,683		-		-	4,000,683																								
International equity		23,721,607		-		-	23,721,607																								
Total mutual funds		214,412,104		-		-	214,412,104																								
Company common stock		56,594,699		-		-	56,594,699																								
			_																												
Common trust funds:																															
Fixed income		-		46,090,424		-	46,090,424																								
U.S. equity index		-		42,128,603		-	42,128,603																								
International equity		-		10,985,667		-	10,985,667																								
Total common trust funds		-		99,204,694		-	99,204,694																								
	\$	271,006,803	\$	99,204,694	\$		\$ 370,211,497																								

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

The following table summarizes the Plan's investment assets measured at fair value on a recurring basis at December 31, 2013:

	Act	oted Prices in tive Markets	Significant Observable		ole Unobservable		Total
		for Identical Assets (Level 1)		Inputs (Level 2)		(Level 3)	Fair Value
Mutual funds:		,		,		,	
Fixed income	\$	21,969,809	\$	-	\$	-	\$ 21,969,809
Balanced		34,708,042		-		-	34,708,042
U.S. equity		120,066,465		-		-	120,066,465
Real estate		2,665,474		-		-	2,665,474
International equity		25,530,213				<u>-</u>	25,530,213
Total mutual funds		204,940,003		-		-	204,940,003
Company common stock		72,344,900		-		-	72,344,900
Common trust funds:							
Fixed income		-		52,385,537		-	52,385,537
U.S. equity index		-		31,214,753		-	31,214,753
International equity		-		9,697,941		-	9,697,941
Total common trust funds		-		93,298,231		-	93,298,231
	\$	277,284,903	\$	93,298,231	\$	_	\$ 370,583,134

Notes to Financial Statements (Modified Cash Basis) December 31, 2014 and 2013

(11) Investment Contracts

The Plan invests in the Invesco Stable Value Trust ("Stable Value Trust") which is a collective trust that has entered into benefit-responsive guaranteed investment contracts and wrapper contracts with various financial institutions. The financial institutions maintain the contributions in investment contracts. The contracts are credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses.

As described in Note 2, because the guaranteed investment contracts held by the Stable Value Trust are fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the guaranteed investment contracts. Contract value, as reported to the Plan by the manager of the Stable Value Trust, represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value

There are no reserves against contract value for credit risk of the contract issuers or otherwise. The crediting interest rate is based on a formula agreed upon with the issuers.

The Stable Value Trust has purchased wrapper contracts from the insurance companies. The wrapper contracts amortize the realized and unrealized gains and losses on the underlying fixed income investments, typically over the duration of the investments; through adjustments to the future interest crediting rate (which is the rate earned by participants in the fund for underlying investments). The issuers of the wrapper contracts provide assurance that the adjustments to the interest crediting rate do not result in a future interest crediting rate that is less than zero.

Certain events limit the ability of the Stable Value Trust to transact at contract value with the issuer. These events include termination of the Plan, a material adverse change to the provisions of the Plan, if the Plan elects to withdraw from a wrapper contract in order to switch to a different investment provider, or if the terms of a successor plan (in the event of the spin-off or sale of a division) do not meet the wrapper contract issuer's underwriting criteria for issuance of a clone wrapper contract. The events, described above that could result in the payment of benefits at market value rather than contract value, are not probable of occurring in the foreseeable future.

The wrapper contracts do not permit the issuers to terminate the contracts unless the Plan loses its qualified status, has incurred material breaches of responsibilities, or material and adverse changes occur to the provisions of the Plan.

The average yield earned by the Stable Value Trust was approximately 1.5% and 1.3% at December 31, 2014 and 2013, respectively, and the average yield based on actual interest rates credit to participants was approximately 1.6% and 1.4% at December 31, 2014 and 2013, respectively.

EIN 74-1884980, Plan # 004 Schedule H, Part IV, Line 4i – Schedule of Assets (Held at End of Year) (Modified Cash Basis) December 31, 2014

Identity of issue, borrower, lessor, or similar party	Description of asset		Current value
Common trust funds:			
Invesco	Invesco Stable Value Retirement Fund	\$	44,421,797
Northern Trust	Northern Trust Collective S&P 500 Index Fund		42,128,603
Northern Trust	Northern Trust Collective All Country World ex-US Index Fund		10,985,667
Northern Trust	Northern Trust Aggregate Bond Index Fund		1,668,627
Total common trust funds			99,204,694
Mutual Funds:			
American Beacon	American Beacon Small Cap Value Fund		21,138,044
American Funds	American Funds Bond Fund of America		23,662,364
Blackrock	Blackrock FFI Treasury Fund		15,869,178
Blackrock	Blackrock Global Allocation Fund		5,366,176
Clearbridge	ClearBridge Small Cap Growth Fund		8,259,914
ING Funds	Voya Global Real Estate Fund		4,000,683
Northern Trust	Northern Multi-Manager Emerging Markets Equity Fund		4,097,989
Prudential Jennison	Prudential Jennison Large Cap Growth Fund		42,756,990
Thornburg	Thornburg International Value Fund		19,623,618
T. Rowe Price	T. Rowe Price Equity Income Fund		33,590,376
T. Rowe Price	T. Rowe Price Retirement 2010 Fund		2,777,171
T. Rowe Price	T. Rowe Price Retirement 2015 Fund		3,951,350
T. Rowe Price	T. Rowe Price Retirement 2020 Fund		15,212,188
T. Rowe Price	T. Rowe Price Retirement 2025 Fund		2,003,621
T. Rowe Price	T. Rowe Price Retirement 2030 Fund		4,784,949
T. Rowe Price	T. Rowe Price Retirement 2035 Fund		886,867
T. Rowe Price	T. Rowe Price Retirement 2040 Fund		5,583,633
T. Rowe Price	T. Rowe Price Retirement 2045 Fund		207,187
T. Rowe Price	T. Rowe Price Retirement 2050 Fund		226,436
T. Rowe Price	T. Rowe Price Retirement 2055 Fund		413,370
Total mutual funds		_	214,412,104
Common stock:			
*Kirby Corporation	Common stock		56,594,699
*Participant loans	Interest rates ranging from 4.25% to 10.25% and maturity dates from January 7, 2015 to July 18, 2028		20,259,338
Total assets (held at end of year)		\$	390,470,835

^{*}Parties in interest to the Plan.

See accompanying report of independent registered public accounting firm.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan administrator, which administers the Plan, has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Kirby 401(k) Plan

June 29, 2015

BY: /s/ Mark K. Forbes

MARK K. FORBES

Chairman of Kirby Corporation Benefit Plan

Administrative Committee

EXHIBIT INDEX

The following documents are filed as part of this report.

Exhibit number	Description
number	Description
<u>23</u>	Consent of Independent Registered Public Accounting Firm

Consent of Independent Registered Public Accounting Firm

The Plan Administrator Kirby 401(k) Plan:

We consent to the incorporation by reference in the registration statement (No. 333-129333 and 33-57625) on Form S-8 of Kirby Corporation of our report dated June 29, 2015, with respect to the statements of net assets available for benefits (modified cash basis) of the Kirby 401(k) Plan as of December 31, 2014 and 2013, the related statements of changes in net assets available for benefits (modified cash basis) for the years then ended, and the supplemental schedule of Schedule H, line 4i - schedule of assets (held at end of year) (modified cash basis) as of December 31, 2014, which report appears in the December 31, 2014 annual report on Form 11-K of the Kirby 401(k) Plan.

/s/ KPMG LLP

Houston, Texas June 29, 2015