



April 23, 2018

## Union Pacific Corporation. (NYSE: UNP)

Analyst: Christian Hanke

We recommend an **equal weight** position on UNP's 3.000% 2027 senior unsecured notes and a **hold** rating on their equity with a \$142 price target. UNP's competitive advantage as a leading Class I freight railroad and diversified revenue mix attractively places it for modest expansion in the next 2 years. Growth in the intermodal segment attributed to tightening trucking capacity from the implementation of ELD's coupled with pricing control over shippers supports revenue expansion. Increased global demand for polyethylene will boost revenues from UNP's chemical segment as they are competitively positioned in the Gulf region and have expanded packaging and storage yards through capital expenditures to handle the additional demand. The carload heavy industrial segment stands to hold pricing control over shippers on increased commodity demand. Their PTC systems are set to be utilized in 2018, contributing to goals of a lower operating ratio and increased efficiency. UNP's utilization of 2-man improves their brand reliability for safety and supports longer trains at little marginal costs. Overall, we expect UNP's 27s to tighten ~20 bps, representing a return of 6.54% FYE'19 and their equity to rise to a base target price of \$142, yielding 5% upside.

Figure 1: Capitalization Table

Union Pacific Corporation, Capitalization Table									
Face Value of Outstanding Debt									
		Current Price	\$135.71						
		Shares Outstanding	775.58						
		Market Capitalization	\$	105,253.87	87.04%				
		Add: Debt	\$	16,944.00	14.01%				
		Less: Cash	\$	1,275.00	1.05%				
		Enterprise Value	\$	120,922.87	100.00%				
		LTM Adj. EBITDA	\$	10,334.00	11.70x				
Outstanding Debt Metrics & Leverage									
Type of Debt	Rate (%)	Maturity	Debt Outstanding (\$MM)	% of Gross Debt	xLTM Adj. EBITDA	Market Value	Price	Yield	xLTM Adj. EBITDA
Revolver (Unsecured)	2.250%	5/21/2019	0.0	0.0%	0.0	0.0	\$ 100.00	2.25%	
<b>Total Term Loans</b>			<b>0.0</b>	<b>0.0%</b>	<b>0.00x</b>	<b>0.0</b>			<b>0.00x</b>
WSSTRN (MO)	7.216%	10/1/2022	9.8			10.4	\$ 106.57	4.44%	
WYAFAC (KS)	7.216%	10/1/2022	29.2			31.2	\$ 106.57	4.44%	
<b>Total Municipal Issues</b>			<b>39.0</b>	<b>0.2%</b>	<b>0.00x</b>	<b>41.6</b>			<b>0.00x</b>
Senior Note	5.700%	8/15/2018	369.3	2.2%		373.0	\$ 101.02	2.16%	
Senior Note	4.000%	2/1/2021	500.0	3.0%		512.4	\$ 102.47	2.93%	
Senior Note	4.163%	7/15/2022	750.0	4.4%		776.0	\$ 103.46	3.20%	
Senior Note	3.646%	2/15/2024	439.2	2.6%		443.5	\$ 100.98	3.43%	
Senior Note	3.750%	3/15/2024	400.0	2.4%		405.6	\$ 101.41	3.44%	
Senior Note	3.250%	1/15/2025	350.0	2.1%		344.0	\$ 98.28	3.49%	
Senior Note	3.250%	8/15/2025	500.0	3.0%		489.8	\$ 97.96	3.54%	
Senior Note	2.750%	3/1/2026	650.0	3.8%		611.2	\$ 94.03	3.61%	
Senior Note	3.227%	5/14/2026	448.7	2.6%		438.7	\$ 97.78	3.57%	
Senior Note	3.000%	4/15/2027	500.0	3.0%		474.8	\$ 94.97	3.64%	
Senior Note	3.375%	2/1/2035	450.0	2.7%		417.5	\$ 92.79	3.95%	
Senior Note	3.600%	9/15/2037	500.0	3.0%		471.6	\$ 94.32	4.01%	
Senior Note	4.050%	3/1/2046	600.0	3.5%		594.0	\$ 99.01	4.09%	
Senior Note	4.000%	4/15/2047	500.0	3.0%		489.5	\$ 97.90	4.11%	
Senior Note	3.799%	10/1/2051	1044.3	6.2%		964.9	\$ 92.40	4.21%	
Senior Note	4.375%	11/15/2065	600.0	3.5%		583.0	\$ 97.17	4.50%	
Senior Note	4.100%	9/15/2067	500.0	3.0%		462.4	\$ 92.49	4.39%	
<b>Total Senior Notes</b>			<b>16,523.2</b>	<b>97.7%</b>	<b>1.60x</b>	<b>16,516.9</b>			<b>1.60x</b>
Other Debt			420.78	2.5%		420.8			
<b>Total Debt</b>			<b>16,944.0</b>	<b>100.0%</b>	<b>1.64x</b>	<b>16,937.6</b>			<b>1.64x</b>

\*Source: Company Filings, Bloomberg Terminals (4/23/18), MFIF Analysis

### Security Information

Bond Maturity: 4/15/2027

Rating: A3/A

Coupon: 3.000%

Price: \$95.175

YTW: 3.635%

Spread: 66.54 bps

Rank: Sr. Unsecured

Call Date: 1/15/2027

Call Price: \$100

LTM EBITDA: \$10,334 million

Debt/EBITDA: 1.64x

EBITDA/Interest: 14.37x

Source: Bloomberg Terminal (4/23/18), MFIF Analysis

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**Intermodal segment revenue boost on tighter trucking regulations**

UNP’s revenue growth is expected to be supported by mid-single digit growth in its intermodal service. This is primarily due to increased economic activity as well as tighter trucking regulations with the implementation of Electronic Logging Devices (ELD’s). ELD’s more accurately track truck drivers hours and limit them to a certain number of hours they can drive per week, putting a cap on the total capacity of the industry, which is expected to decrease around 4%-7% in 2018. These devices have a system-wide effective date in late 2019 and trucking companies have begun installation in preparation. As a result of this decrease in capacity by trucking companies, volume should spillover to rail companies as shippers will turn to them to satisfy their intermodal needs. UNP is competitively placed to take a share of this increased demand as they already hold more than 32% of the intermodal rail market and have the capital required to capture this additional demand.

**Booming polyethylene demand driving plastics revenue expansion**

In the past 2 years, demand for polyethylene has significantly grown and by the end of 2018, is expected to grow by 1.1 million tons. Capacity is poised to hit upwards of 5.4 million tons, representing a 26% increase from 2016. Polyethylene is ¼ of chemical rail traffic in North America and chemical traffic is 18% of UNP’s 2017 revenue. According to the American Chemistry Council, in March of 2018, \$179 billion was used to support over 294 projects aimed to fulfill the increasing international and domestic demand for polyethylene. The majority of these processing plants are located in the Gulf region, which benefits UNP as they are attractively situated where the majority of this supply originates. Furthermore, they hold 6 key gateways into Mexico, more than any other Class I railroad, and have extensive rail networks through to California where the polyethylene is then shipped to China and South East Asia. UNP has also increased capital expenditures in recent years to build transit facilities in Dallas and Los Angeles, 2 key cities that will prove incredibly helpful when delivering polyethylene to the west coast to ship to China. The Dallas yard serves as UNP’s intermodal depot and will open in 3Q18. UNP has partnered with Katoen Natie, a logistics company, to build a warehouse in Dallas to package and load polyethylene increasing operational efficiency. UNP has a competitive advantage over its competitors as it holds the largest share of all chemical carloads, at 32%. The next highest share is BNSF at 15%.

**Increased commodities demand supports industrial revenue growth**

Contributing approximately 20% to UNP’s overall revenue, the industrial segment accounts for 48% of total carloads. Since this segment contributes nearly half of total carloads, changes in pricing have a relatively large impact on segment revenue. With anticipated increased demand for oil and steel, rail and trucking companies will hold pricing control over shippers. Oil prices and production have rallied healthily so far in 2018 and transports are struggling to fulfill the demand. UNP’s scale places them in an attractive position to capture this additional demand, increasing volume with added revenue per carload. Western rail companies are not as competitive from a pricing and scale standpoint, and UNP holds a competitive advantage over trucking companies with their value proposition to customers, as their more efficient rail networks and customer relationships give them leeway to charge higher rates.

**Risks to thesis**

- Managements dedication of returning value to shareholders, with guidance of an additional \$1.1 billion buybacks and dividends in 2018
- Lower than expected volume growth and lack of pricing control leading to missed revenue expectations
- Stricter safety regulations and complications with PTC limiting capacity
- Repeal of NAFTA under the Trump Administration hurts exports business
- Unpredictability of natural disasters

**Figure 2: UNP Rail Network**



\*Source: Company Filings

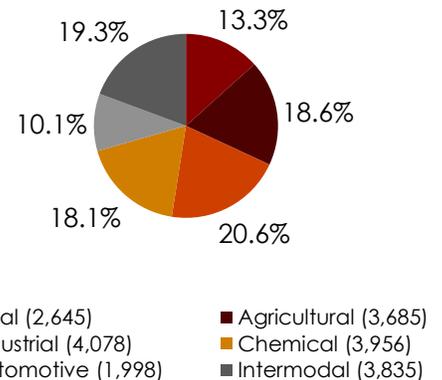
**Figure 3: UNP Export Track**



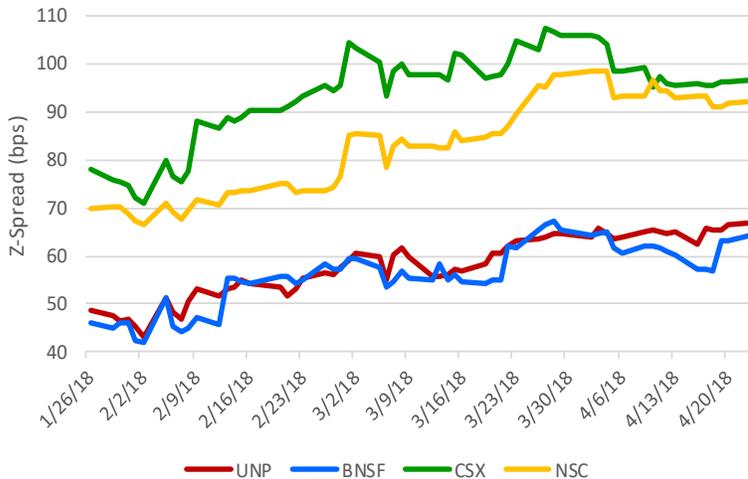
Source: Union Pacific Presentation

\*Source: Company Presentation

**Figure 4: FYE’17 Freight Revenue (\$MM)**



\*Source: Company Filings

**Figure 5: Relative Valuation**


\*Source: Bloomberg (4/23/18)

### Relative Valuation

Currently, UNP is trading 4 bps wider than BNSF, the most comparable competitor with respect to market share and credit profile. UNP is trading 30 bps tighter than CSX and 26 bps tighter than NSC, who have significantly riskier credit profiles. Class I rails as a whole have widened ~25bps in the past 3 months in large part due to the volatile market and expenses to implement PTC. Specific to Union Pacific, spreads have widened since management announced plans to return an additional \$1.1 billion to shareholders in 2018. Looking forward, we see CSX and NSC widening due to poor performance in their automotive segments, as auto sales are expected to decrease 3% in 2018. CSX and NSC hold a 22% and 24% market share, whereas UNP only holds 12% market share in autos. Furthermore, UNP's chemical and premium segments should increase earnings, appreciating their credit profile and tightening spreads ~21 bps to ~45 bps by 2Q19.

### PTC implementation and deployment

Positive Train Control (PTC) is collision avoidance technology intended to override engineer controlled locomotives and stop train-to-train and over speed accidents. UNP spent \$2.6 billion in CapEx through 2017 planning for a system wide implementation date of December 2018 and plans to spend an additional \$300 million in the rest of 2018. Not only will PTC improve safety, it will also improve efficiency and allow UNP to add more cars to their trains. More cars lead to increased marginal revenue as the cost to add an additional car is minimal relative to the revenue output. This will help lower UNP's operating ratio.

### 2-man operating crews vs. single operators

UNP has stuck to traditional 2-man crew operating strategy instead of cutting crews to single operators like CSX. With the implementation of PTC, it is possible to operate trains with less crew members, and therefore reduce costs. However, this is flirting with safety hazards as cutting the workforce means companies must deploy more assets along lines to ensure safety, essentially mitigating the savings from cutting crews. Operating a 120 car train with a 1 man costs \$650/day and returns \$250,000 of revenue, so the relative cost to add another crew member is minimal, especially with more cars per train increasing revenue.

**Figure 6: Investment Horizon and ROI**

Horizon	Adj. EBITDA	Debt/EBITDA	Spread	Return on Investment
2018e	\$11,018	1.66x	53 bps	5.34%
2019e	\$11,422	1.54x	45 bps	6.54%

\*Source: MFIF Analysis

**Figure 7: Competitor Comparison**

FYE'17 (\$MM)	UNP	BNSF <sup>(1)</sup>	CSX	NSC	KSU
Route Miles	32,122	-	21,000	19,467	6,700
Revenue/Carload	\$2,310	-	\$1,783	\$1,386	\$1,094
Revenue	\$21,240	-	\$11,408	\$10,551	\$2,583
EV	\$120,923	-	\$60,570	\$50,609	\$13,703
Adj. EBITDA	\$9,952	-	\$5,289	\$4,553	\$1,243
Adj. EBITDA Margin	48.65%	-	46.36%	43.15%	48.10%
FCF	\$4,808	-	\$1,432	\$1,530	\$400
Debt/EBITDA	1.64x	-	2.37x	2.12x	2.11x
EBITDA/Interest	14.37x	-	9.12x	8.45x	12.40x
P/E	23.50x	-	24.50x	22.71x	20.13x
Dividend Yield	2.05%	-	1.45%	1.68%	1.37%
Credit Rating	A3/A	A3/A+	Baa1/BBB+	Baa1/BBB+	-
YTW	3.635%	3.607%	3.944%	3.879%	-
Spread	66.54 bps	63.18 bps	96.85 bps	90.38 bps	-

(1) BNSF is privately owned by Berkshire Hathaway

\*Source: MFIF Analysis, Bloomberg Terminals (4/23/18)

### Downside Risk

If management decides to increase the return of FCF to shareholders through dividend growth or share buybacks, the 27 notes will widen as this FCF could be used more effectively from a debtholders perspective through delevering or increased CapEx. Furthermore, if UNP is unable to capture the spillover intermodal demand from the trucking industry or the increased international demand for polyethylene, they will struggle to reach EBITDA growth expectations. While there is minimal chance of default given low leverage, strong FCF generation and solid interest coverage, there is also minimal upside considering the current tightness of the spread. In a rising interest rate environment, it is going to be difficult to reap the benefits from these notes yielding 3.635% to maturity when rate hikes on risk-free treasuries yield slightly less while effectively shedding default and duration risk.

### Equity Valuation

UNP's equity is trading at \$136.03, which we believe is fairly priced. It is trading at a P/E similar to its competitors and pays a larger dividend. Given their low leverage (1.64x), management is more focused on returning value to shareholders and isn't concerned with paying down debt. With strong FCF generation, we anticipate management increasing share buybacks and dividends to reward shareholders. We even see scenarios where management raises debt in order to reward shareholders, increasing leverage to below the 2.00x range while maintaining interest coverage and increases to capital expenditures.

### Management

Lance Fritz – Chairman, President, and CEO

- Age 55, 3 years with company

Robert Knight Jr. – Exec. VP and CFO

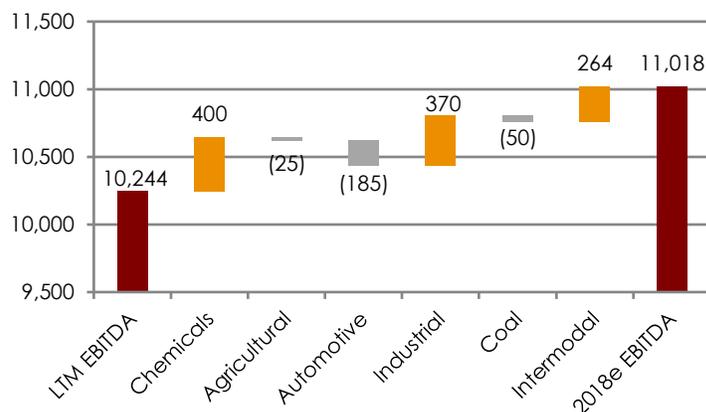
- Age 60, 14 years as CFO

Cameron Scott – Exec. VP and COO

- Age 55, 4 years as COO

Management has historically been focused on keeping leverage below 2.00x in order to avoid ratings triggers. They announced a large share buyback program in 1Q18, where \$1.1 billion of additional FCF will be returned to shareholders throughout 2018.

Figure 8: 2018e EBITDA Bridge (\$MM)



\*Source: MFIF Analysis

Figure 9: DCF

Financial Summary		DCF	
Price (4/23/18)	\$135.71	Beta	1.2x
52 Week Range	\$101 - \$141	KE	9.5%
Mkt Cap (MM)	\$105,254	KD	3.2%
Shrs Out. (MM)	776	WACC	6.9%
EV (MM)	\$120,923	Implied EV	13.1x
EV / EBITDA	11.7x	<u>Price Target</u>	
Div. / Yield	\$2.78 / 2.05%	Bull	\$186.3 37%
P/E	23.5x	Base	\$143.9 6%
FCF (MM)	\$4,808	Bear	\$101.4 -25%
ROE	49.5%		

\*Source: MFIF Analysis (4/23/18)

Figure 10: Top Security Holders

Top Equity Holders		Aggregate Debt Holders	
Vanguard	8.00%	Vanguard	3.25%
Blackrock	6.72%	State Farm	2.76%
State Street	4.24%	TIAA	2.76%
Wellington	3.20%	Prudential	2.03%
Capital Group	2.95%	Northwestern Mutual	1.94%
Bank of America	2.13%	New York Life	1.66%
JP Morgan	2.00%	Allianz	1.23%
Dodge & Cox	1.74%	American International	1.13%
Morgan Stanley	1.73%	Lincoln National	1.02%
Sun Life Financial	1.66%	MetLife	0.99%

\*Source: Bloomberg Terminals (4/23/18)

### Company Description

Union Pacific is one of the largest Class I railroads operating in North America. With approximately 32,000 route miles, they operate primarily in the western US, with track covering 23 states. Prior to 2018, Union Pacific has operated in 6 segments, being: Agricultural, Automotive, Coal, Chemicals, Intermodal, and Industrials. However, management has decided to consolidate these into 4 segments beginning in 1Q18. Agriculture will remain its own segment. Coal and Frac Sand, originally in Industrials, will now make up an Energy segment. Industrial products and chemicals, including plastics, will now operate under Industrials. Automotive and Intermodal will merge together to form the Premium segment. Management strategically chose to consolidate UNP's business segments geographically with hopes of cutting costs. Relative to the other Class I Rail companies, under this new business structure, UNP will have the least segments, contributing to operational efficiency. The majority of the other Class I companies have 5-8 segments. UNP competes primarily with Burlington Northern Sante Fe, privately owned by Berkshire Hathaway, and trucking companies.

## Union Pacific (UNP)

Summary Model | April 23, 2018

	2016	2017	1Q18e	2Q18e	3Q18e	4Q18e	2018e	2019e
<b>Energy</b>	\$ 4,114	\$ 4,684	\$ 1,149	\$ 1,187	\$ 1,306	\$ 1,252	\$ 4,894	\$ 5,027
% Growth		13.9%	4.3%	4.6%	4.5%	4.5%	4.5%	2.7%
<b>Agricultural Products</b>	\$ 3,625	\$ 3,685	\$ 951	\$ 916	\$ 923	\$ 931	\$ 3,722	\$ 3,796
% Growth		1.7%	1.0%	1.0%	1.0%	1.0%	1.0%	2.0%
<b>Industrials Products</b>	\$ 5,148	\$ 5,635	\$ 1,468	\$ 1,549	\$ 1,574	\$ 1,587	\$ 6,178	\$ 6,588
% Growth		9.5%	9.7%	9.6%	9.6%	9.6%	9.6%	6.6%
<b>Premium</b>	\$ 5,714	\$ 5,833	\$ 1,451	\$ 1,493	\$ 1,495	\$ 1,564	\$ 6,003	\$ 6,148
% Growth		2.1%	2.8%	2.8%	3.1%	3.0%	2.9%	2.4%
<b>Total Revenue</b>	\$ 19,941	\$ 21,240	\$ 5,362	\$ 5,488	\$ 5,641	\$ 5,678	\$ 22,169	\$ 22,932
% Growth		6.5%	4.5%	4.5%	4.3%	4.2%	4.4%	3.4%
Operating Expenses	\$ 9,634	\$ 10,338	\$ 2,520	\$ 2,579	\$ 2,651	\$ 2,669	\$ 10,419	\$ 10,778
D&A	\$ (2,038)	\$ (2,105)	\$ (568)	\$ (553)	\$ (568)	\$ (572)	\$ (2,233)	\$ (2,310)
Operating Income	\$ 7,464	\$ 8,139	\$ 2,119	\$ 2,173	\$ 2,239	\$ 2,255	\$ 8,785	\$ 9,113
Interest Expense	\$ (698)	\$ (719)	\$ (165)	\$ (163)	\$ (163)	\$ (160)	\$ (651)	\$ (618)
Taxes (Assume 23%)	\$ (2,533)	\$ 3,080	\$ (525)	\$ (537)	\$ (552)	\$ (555)	\$ (2,170)	\$ (2,238)
Adj. Net Income	\$ 4,233	\$ 4,525	\$ 1,429	\$ 1,472	\$ 1,523	\$ 1,539	\$ 5,964	\$ 6,257
<b>EBITDA Reconciliation</b>								
Net income	\$ 4,233	\$ 4,525	\$ 1,429	\$ 1,472	\$ 1,523	\$ 1,539	\$ 5,964	\$ 6,257
(+) Net interest expense	\$ 698	\$ 719	\$ 165	\$ 163	\$ 163	\$ 160	\$ 651	\$ 618
(+) Taxes	\$ 2,533	\$ 3,080	\$ 525	\$ 537	\$ 552	\$ 555	\$ 2,170	\$ 2,238
Operating income	\$ 7,464	\$ 8,324	\$ 2,119	\$ 2,173	\$ 2,239	\$ 2,255	\$ 8,785	\$ 9,113
(+) D&A	\$ 2,038	\$ 2,105	\$ 568	\$ 553	\$ 568	\$ 572	\$ 2,233	\$ 2,310
EBITDA (reported)	\$ 9,502	\$ 10,429	\$ 2,687	\$ 2,726	\$ 2,807	\$ 2,827	\$ 11,018	\$ 11,422
(+) Other 1x costs	\$ (67)	\$ (95)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EBITDA (adjusted)	\$ 9,435	\$ 10,334	\$ 2,659	\$ 2,726	\$ 2,807	\$ 2,827	\$ 11,018	\$ 11,422
% growth		9.5%	11.7%	5.9%	9.3%	8.7%	6.6%	3.7%
EBITDA Margin	47.3%	48.7%	49.6%	49.7%	49.8%	49.8%	49.7%	49.8%
<b>Free Cash Flow</b>								
Cash Flow from Operations	\$ 7,525	\$ 8,046	\$ 2,037	\$ 2,235	\$ 2,306	\$ 2,309	\$ 8,887	\$ 9,364
(+) CapEx	\$ (3,505)	\$ (3,238)	\$ (825)	\$ (850)	\$ (825)	\$ (900)	\$ (3,400)	\$ (3,425)
Net FCF	\$ 4,020	\$ 4,808	\$ 1,212	\$ 1,385	\$ 1,481	\$ 1,409	\$ 5,487	\$ 5,939
<b>Balance Sheet</b>								
Total Debt	\$ 14,249	\$ 16,944	\$ 18,544	\$ 18,718	\$ 18,345	\$ 18,113	\$ 17,513	\$ 16,782
Cash Balance	\$ 1,277	\$ 2,091	\$ 1,953	\$ 2,338	\$ 2,429	\$ 2,138	\$ 2,138	\$ 1,927
Net Debt	\$ 12,972	\$ 14,853	\$ 16,591	\$ 16,380	\$ 15,916	\$ 15,975	\$ 15,375	\$ 14,855
<b>Credit Metrics</b>								
Debt/EBITDA	1.59x	1.64x	1.82x	1.79x	1.71x	1.67x	1.66x	1.54x
Net Debt/EBITDA	1.37x	1.44x	1.56x	1.50x	1.42x	1.41x	1.40x	1.30x
EBITDA/Interest	13.52x	14.37x	16.12x	16.69x	17.24x	17.69x	16.93x	18.48x
FCF/Debt	28.2%	28.4%	26.1%	29.6%	32.3%	31.1%	31.3%	35.4%