

April 14th, 2017

Louisiana-Pacific Corporation: LPX
(Long)
 John Garrity

Sector: Materials / Industrials
Industry: Forest Products / Building Products
Current Price: \$25.71
Target Price: \$30.10

Company Description:

Louisiana-Pacific Corporation was founded on January 5th 1973, in Nashville, Tennessee and manufactures building materials and engineered wood products in the United States, Canada, Chile, and Brazil and have production facilities throughout North and South America. Their products are used by homebuilders and light commercial builders, which include oriented strand board (OSB) sheathing, flooring, radiant barrier panels, siding and trim, I-Joists, and laminated veneer lumber. Louisiana Pacific specializes in manufacturing products for floor, walls, and roofs. These products are used in new home and manufactured housing construction, repair, and remodeling. LP sells its products to distributors, dealers, professional lumberyards, and retail home center including The Home Depot. Louisiana-Pacific is trading near their 52 week high.

Key Statistics:

<u>Market Price:</u>	\$25.71	<u>ROE:</u>	13.54%
<u>Market Cap:</u>	\$3,720.2M	<u>Net Income</u>	
<u>WACC:</u>	9.05%	<u>Margin:</u>	6.7%
<u>ROIC:</u>	11.01%	<u>P/E:</u>	24.07 x
<u>EBITDA Margin:</u>	14.18%	<u>Volume:</u>	1.54 M
<u>Ke:</u>	9.84%	<u>Effective Tax:</u>	11.6%

Catalysts:

- > Growing housing starts (ST)
- > Existing & new home sales (ST)
- > Builder confidence strong (ST)
- > Job growth (MT)
- > Low cost of ownership vs rental (MT)
- > New housing starts (LT)

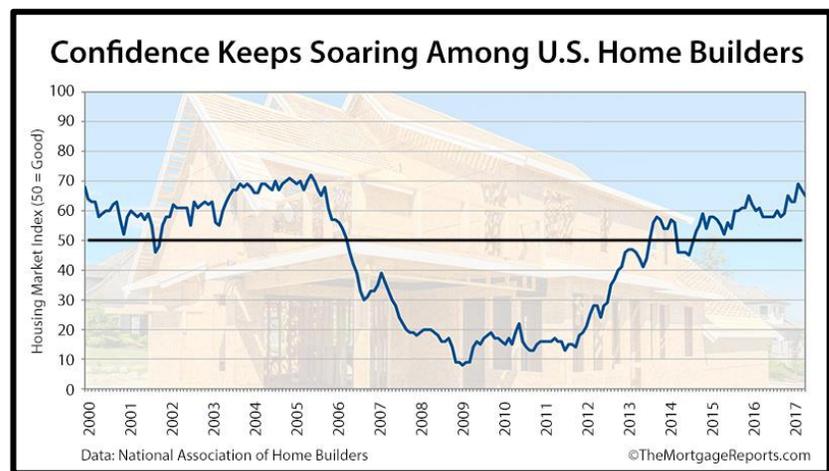


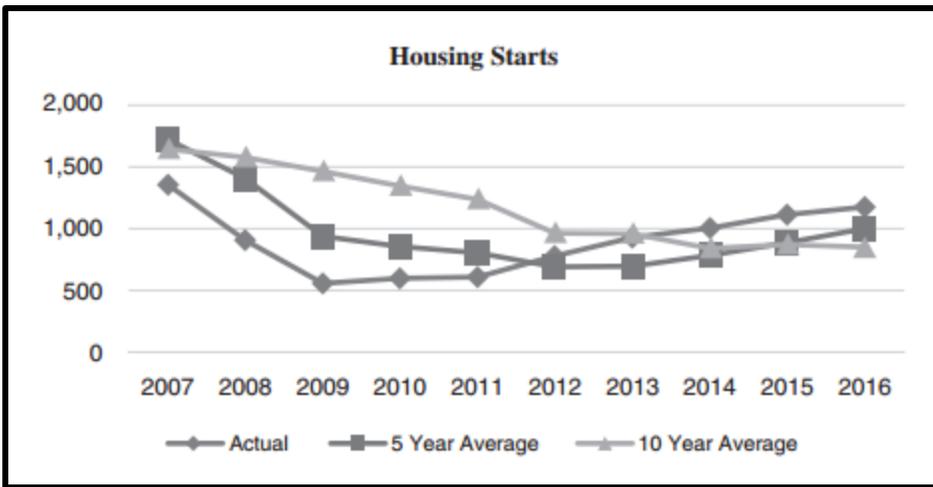
Thesis:

Louisiana-Pacific is a leading manufacturer of building products throughout North and South America with 20 modern facilities in the U.S. and Canada, two facilities in Chile with one under construction, and a single facility in Brazil. In both the short and long term, the homebuilding products industry presents significant growth opportunities, and LP seeks to deliver innovative, high-quality commodity and specialty building products to retail, wholesale, homebuilding, and industrial customers. LP will be positively impacted by many economic factors affecting the housing industry. Recently there has been an increase in housing demand due to the availability of lots and labor. The reasonable credit environment coupled with employment and job growth further make the case. So far in 2017, the existing new home sales are up and builder confidence is rising along with the number of housing formations. LP also competes in the repair and remodeling industry, which is recovering since 2008. LP is the leading producer of OSB in North America and the only producers of OSB and OSB siding in South America, mainly fueled by their competitive delivery cost. Drivers of the demand of OSB are new residential construction, repair and remodeling, industrial / light commercial needs, and opportunistic exports. LP is positioned for upside as the housing market continues to recover. LP is a leading participant in the upturn of the housing market shown by strong sales and marketing, and enhanced operational productivity. LP is an important supplier to industrial, non-residential, and R&R markets and look to diversify geographically. LP's strategy is to grow their OSB business further, continue to offer superior quality and service to customers, maintain their competitive delivery costs to meet the needs of their customers.

Industry Outlook:

In the latest Monthly New Residential Sales by the U.S. Census Bureau and the U.S. Department of Housing and Urban Development was released on March 23rd, which is based on information up until March. Sales of new single-family houses in February 2017 were 592,000 using a seasonally adjusted annual rate. This is a 6.1 percent increase from January 2017 and 12.8 percent increase from February 2016 estimate for 2017. The median sales price of new houses sold was \$296,200 and the average price was \$390,400 for February 2017. The improving macroeconomic environment following the election brings renewed optimism, wage and job growth, and consumer confidence. Barclays economist Rob Martin wrote in a new home sales report that the housing market has seen significant improvement and expects further gains this year. The new construction market is not at peaks seen in 2007, and not at the lows of 2010, which points to good opportunities due to improving economic conditions. With the Federal Reserve raising interest rates, mortgage rates will be on the rise, but Redfin Chief Economist does not see the 30-year fixed rate to reach higher than 4.3 percent, which is still lower than rates prior to 2010. Though rate may rise, mortgage credit will be more available, which would lower fees charged to first-time buyers by the Federal





Housing Administration. As of the turn of the year, Fannie Mae and Freddie Mac have begun backing larger mortgages for the first time in over a decade, which would allow easier financing. Top-tier economic cities like New York and San Francisco can't keep up with the demand for new construction due to geographic constraints and local government regulations. This

leaves younger buyers to move to medium-sized cities, which have recently seen building permit insurance soar over the past six years. Builders are calling for fast home sales, in other words higher prices, in the upcoming year. Many buyers may not know what a mortgage exactly is and its calculations, but rents are rising and buying a home could be cheaper than renting in 2017. For this, builders have optimism that this summer and fall could be one of the strongest buying seasons in more than a decade.

Products:



I-Joists

Oriented strand board is an innovative, affordable, and environmentally friendly product made from wood strands arranged in layers and bonded with resin. OSB sales accounted for 46 percent of LP's revenue in 2016. OSB serves many of the same purposes as plywood, including roof decking, sidewall sheathing, and floor underlayment, but can be produced at a significantly lower cost. In 2016, OSB accounted for approximately 65 percent of the structural panel consumption in North America, with plywood making up the rest. LP makes up for 21 percent of the OSB market, and 14 percent of the overall North American structural panel market. LP looks to enhance their leading position by leveraging their expertise in OSB to

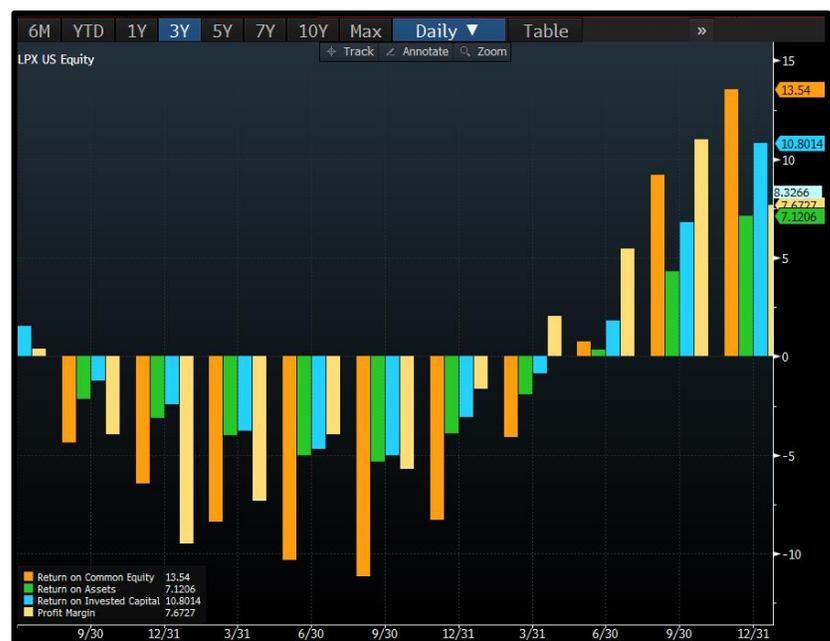
capitalize on new opportunities for revenue growth through value-added lines, deliver superior quality and service, and reduce costs by focusing on efficiency, raw materials, and logistics. Siding makes up just under 34 percent of LP's revenues for 2016. LP offers 3 siding offerings; SmartSide and CanExel. SmartSide products have quality and performance characteristics similar to solid wood, but at cheaper prices. CanExel sidings and accessories come pre-finished and are used in new home construction, remodeling, and outdoor structures like sheds. LP intends to increase these product offerings and production capacity of higher margin products through the addition of lower cost plants and the conversion of OSB plants to OSB-based exterior siding products. The engineered wood products (EWP) segment makes up a little over 13 percent of LP's revenue by manufacturing and distributing laminated veneer lumber (LVL), I-Joists, laminated strand lumber (LVL), among others. LP claims that their engineered I-Joists, which are used in residential and commercial flooring and

roofing systems, are stronger, lighter, and straighter than conventional construction joists. LP intends to enhance their name in the EWP market by enhancing quality their product mix and quality, providing superior technical support, and to leverage their sales and marketing relationships to cross-sell their EWP products. LP's South American segment makes up about 6 percent of total revenue for 2016. This South American segment is focused on manufacturing and distributing OSB and siding products, as they are the only producer of such products in all of South America and intend to capitalize on the growing demand for wood-based residential construction in this region. In 2016, the top ten customers made up roughly 41 percent of LP's sales in 2016. The main customers include wholesale distribution companies who supply building materials to retailers, two-step distributors who provide building materials to smaller retailers and contractors, building materials professional dealers who specialize in sales to professional builders, remodeling firms, and trade contractors that are involved in residential and light commercial building. LP also has customers from retail home centers that provide access to consumer markets with a broad selection of home improvement materials and shed producers, which design, construct, and distribute fully manufactured structures for consumer and professional.

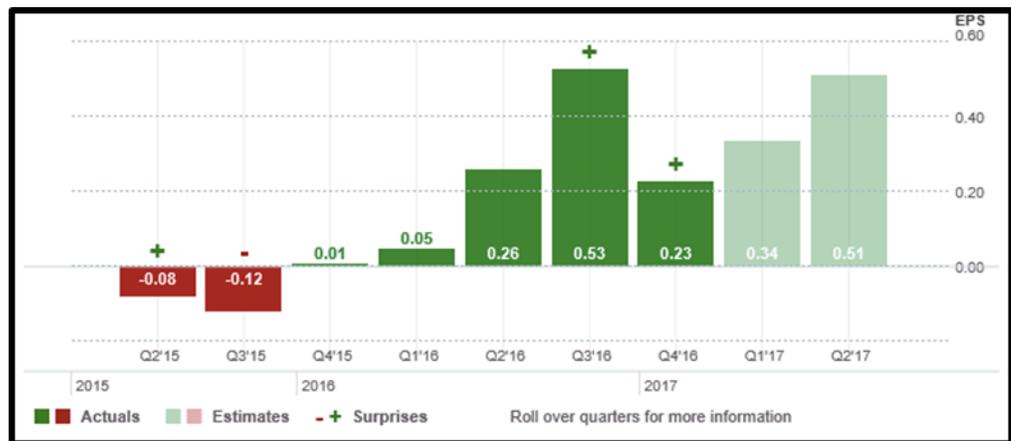


Revenue:

During the fiscal year of 2016, LP recorded \$2.23 billion in revenue, which was up 18 percent from a year ago. Part of LP's overall strategy is to eliminate costs to maximize margins, and they have been able to do so. While sales went up over 18 percent, the cost of goods sold has only increased at 2.45% over the same period. This extreme improvement in efficiency has more than doubled the gross profit margin from 11.1% in 2015 to 22.8 in 2016. Since 2007, LP has only posted positive net income in the years ending for 2012, 2013, and now 2016, mainly due to their ability to maintain low costs. In 2014, COGS represented 90.9 percent of all revenue, and 88.9 percent in 2015, and down to 77.2 percent in 2016. For the fiscal year of 2017, LP expects to have \$2.55 billion in sales, which would be an increase of 14 percent, and expects prices to increase slightly more than in the past at 12 percent. Even with the projected increase in costs, the gross profit margin is expected to increase to 612.3 million, increase of 20.2 percent. Net income increased \$237.9 out of the negatives, almost four times than the amount of the loss suffered back in 2015. As with most of their



margins and ratios, the profitability ones are quite dramatic. With all of the optimism with LP's recent performance, earnings are expected to increase by 81 percent to \$1.61 by the start of 2018, when they expected to return to normal growth. Thanks to The first positive net income since 2013, the earnings per share has bounced out of the red. For the year 2016, LP saw earnings per share jump from negative \$0.60 per share in 2015 to \$1.03 in 2016. In February 2017, the company posted 4th quarter earnings of 23 cents per share, beating the analysts' estimates of 19 cents per share. LP also beat 2016 earnings per share by 22 cents over 4 quarters. The next earnings announcement is expected on May 8th, 2017.



Company Ownership:

Over 72 percent of Louisiana-Pacific is owned by investment advisors, with hedge fund managers and pensions funds making up 17.5 percent and 6.4 percent, respectfully. Investment managers make up 90.2 percent of the business.

Cash Flows:

In the past year, LP generated \$342 million cash from operations; significantly more than any of the past years since the housing crisis. The most recent profitable year for obtaining cash from operations was 2013, when LP generated \$243 million in cash. As LP is able to decrease their cost of revenue, their fixed costs are rising, mainly due to the purchase of fixed assets or capital expenditures. Since 2012, LP has been purchasing fixed assets at a CAGR of 32.16%. A recent example of their purchases is the current development of a third facility in Chile. LP posted the first positive year for cash from investing activities, as they received over \$410 million of payments for notes receivable. 2016 was also the first year since 2012 that LP has issued any long term debt. Last year they issued \$350 million at 4.875% interest of Senior Notes due in 2024. Also included in the cash flow from financing activities was the substantial payment of long term debt. Last year, LP retired exactly half of their total debt, as total debt went from \$754 million to \$377 million. On the statement of cash flows, LP paid 392.5 million to repay outstanding debt. This is a positive sign when looking into the near future, as LP intends to increase their exposure to South America and further across North America.

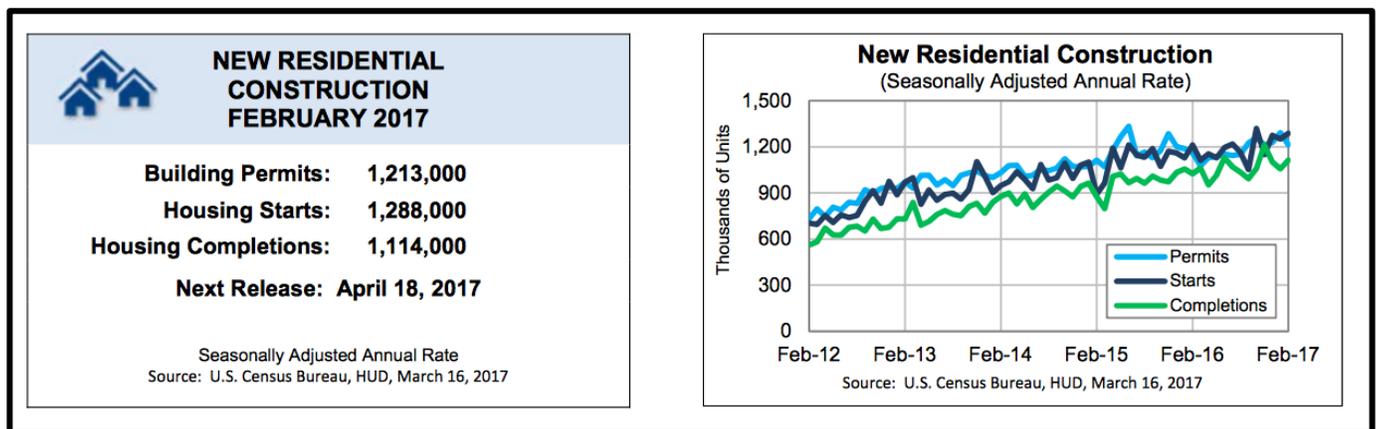
Competitors:

The incising aspect of Louisiana-Pacific is that they have no competitors in the OSB business in South America. They are the only ones who manufacture and sell oriented strand board, which means large growth in such areas can be expected. LP is more liquid than its competitors, as they have a current ratio of 4.4 and a quick ratio of 3.4. Comparable peers average current and quick ratios of 1.9 and 1.3 respectively. LP also beats the liquidity industry averages of 2.5 current ratio and a 1.6 quick ratio. LP has seen faster sales growth, better returns on assets, and higher gross margins than the industry and competitors. A similar competitor to LP in

North America is the Canadian company Norbord (NYSE: OSB). Norbord has a market capitalization of \$2.6b and has slightly higher margins in 2016. But Norbord is traded at almost 200 times less on the NYSE than LP, as Norbord is traded, on average, 15k times a day compared to over 3 million for Louisiana-Pacific. Another competitor to LP is Universal Forest Products Inc, which has a market capitalization of \$1.9b, but are traded 94.5k times a day on the NASDAQ. UFPI has operations in the United States, mainly on the east coast, China, India, Australia, and a single location in the UK. UFPI has an extremely diversified product portfolio, but do not manufacture OSB and have extremely low margins. LP has double the profit margin, and UFPI has a higher WACC than ROIC. LP is different than many of their competitors, because of their concentration in new home construction and renovation

Conclusion:

Louisiana-Pacific Corporation has seen the lows that the 2007 housing crisis brought. It has taken some time to recover out of the industry rut, but LP is in a prime position for significant growth within the next 24 months. They post impressive margins against their competitors and industry, as well have an improving balance sheet with the amount of debt they have retired and issued. The main factors that will drive their growth is the demand and use for OSB in the new housing market. OSB is stronger and more durable hybrid of wood and will be used more in the building process. This is important because they are one of the few who make this product, and LP considers themselves as the best provider of OSB. Another intriguing aspect of LP is their interest in the South American market. They currently have a strong hold in South America as they are the only producer of OSB, and believe they have the best quality products available. As consumer confidence grows into the summer, many first time buyers will look to build a new house or buy a “fixer-upper”. As this happens, expect Louisiana –Pacific to gain a larger market capitalizatio



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Louisiana-Pacific Corporation (lpx)

Analysis by **John Garrity**
4/17/2017

Current Price: \$25.71
Dividend Yield: 0.5%

Intrinsic Value: \$29.21
Target Price: \$32.54

BULLISH
Target 1 year Return: 27.06%
Probability of Price Increase: 9%



Description:
Louisiana-Pacific Corporation, together with its subsidiaries, manufacturer and seller building products primarily for use in new home construction, repair and remodeling, and out door structures, as well as light industrial and commercial construction.

General Information:
Sector: Materials
Industry: Paper and Forest Products
Last Guidance: November 3, 2015
Next earnings date: May 5, 2017
Estimated Country Risk Premium: 8.42%
Effective Tax Rate: 29%
Effective Operating Tax Rate: 6.0%

Market Data	Value
Market Capitalization	\$3,607.92
Daily volume (mil)	1.94
Shares outstanding (mil)	144.32
Diluted shares outstanding (mil)	145.30
% shares held by institutions	74%
% shares held by investment managers	73%
% shares held by hedge funds	17%
% shares held by insiders	0.49%
Short interest	1.57%
Days to cover short interest	1.26
52-week high	\$26.31
52-week low	\$15.74
Levered Beta	1.13
Volatility	34.32%

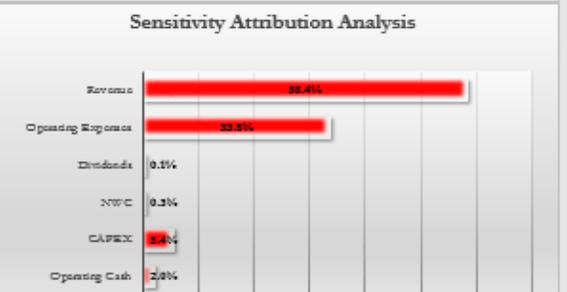
Quarter ending	Revenue	EBITDA
12/31/2015	-5.53%	-40.49%
3/31/2016	-11.32%	3.08%
6/30/2016	-2.61%	-9.56%
9/30/2016	-5.66%	-19.64%
12/31/2016	1.87%	-21.30%
Mean	-4.65%	-17.58%
Standard error	2.2%	7.2%

Peer	Total compensation growth	Total return to shareholders
Baird-Carrico Company	14.53% per annum over 5y	0.21% per annum over 5y
Weyerhaeuser Co.	64.57% per annum over 5y	18.73% per annum over 5y
Deltic Timber Corporation	22.25% per annum over 4y	-1.43% per annum over 4y
	109.87% per annum over 1y	5.11% per annum over 1y
	NM	NM
	NM	NM



Management	Position
Stevens, Curtis	Chief Executive Officer and Chief Financial Officer
Bailey, Sallie	Chief Operating Officer and Senior Vice President of Sales
Southern, William	Vice President of Corporate
Simr, Michael	Head of Investor Relations
Craus, David	
Kinney, Michael	

Profitability	lpx (LTM)	Industry (LTM)
ROIC	1.1%	2.64%
NOPAT Margin	1%	1.29%
Revenue/Invested Capital	1.11	2.04
ROE	-0.3%	1.98%
Adjusted debt margin	0%	-0.49%
Revenue/Adjusted Book Value	1.83	4.00



Invested Funds	lpx (LTM)	Industry (LTM)
Total Cash/Total Capital	38.1%	27.7%
Estimated Operating Cash/Total Capital	26.5%	26.0%
Non-cash working Capital/Total Capital	7.6%	10.4%
Invested Capital/Total Capital	100.4%	97.9%

Capital Structure	lpx (LTM)	Industry (LTM)
Total Debt/Common Equity (LTM)	0.14	0.31
Cost of Existing Debt	5.76%	5.25%
Estimated Cost of new Borrowing	5.07%	4.90%
CGFS Risk Rating	C	C
Unlevered Beta (LTM)	0.94	1.62
WACC	11.43%	16.87%

Porter's 5 Forces (scores are out of 100)	
Bargaining Power of Suppliers	38
Bargaining Power of Customers	57
Intensity of Existing Rivalry	58
Threat of New Competition	75
Threat of Substitutes	75
Overall	62

Period	Revenue growth	Selection	ROIC/WACC
Base Year	18.0%	1.0%	0.10
12/31/2017	9.5%	8.7%	1.04
12/31/2018	6.0%	7.5%	0.90
12/31/2019	6.9%	11.7%	1.46
12/31/2020	6.5%	12.5%	1.61
12/31/2021	6.2%	13.2%	1.77
12/31/2022	5.8%	13.9%	1.94
12/31/2023	5.5%	14.7%	2.13
12/31/2024	5.1%	15.4%	2.34
12/31/2025	4.8%	16.1%	2.57
12/31/2026	4.4%	16.8%	2.82
Continuing Period	4.1%	17.5%	3.12

Period	Invested Capital	Net Claim	Price per share
Base Year	\$1,841.02	\$405.68	\$28.62
12/31/2017	\$1,980.28	\$348.01	\$31.90
12/31/2018	\$2,190.82	\$321.63	\$35.03
12/31/2019	\$2,139.52	\$253.18	\$37.99
12/31/2020	\$2,006.84	\$245.73	\$40.50
12/31/2021	\$1,736.14	\$280.40	\$42.64
12/31/2022	\$1,830.72	\$333.69	\$44.56
12/31/2023	\$1,866.07	\$376.10	\$46.43
12/31/2024	\$1,909.99	\$372.84	\$48.45
Continuing Period	\$1,844.75	\$333.68	\$50.00