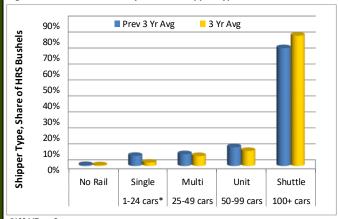
HARD RED SPRING WHEAT

AGRICULTURE SHIPMENT BRIEF

2019

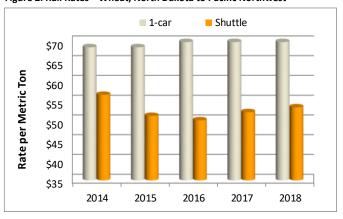
North Dakota is a leader in the U.S. wheat industry, ranking second among states in total wheat production and first in production of hard red spring wheat. This report summarizes some logistical trends associated with the movement of hard red spring wheat from elevator to domestic and export markets. Figure 1 shows a dominance of larger elevators, in terms of car track capacity, for marketing HRS wheat. Shuttle facilities' share during the most recent 3-year time frame was 82%. Further, rail rates to the Pacific Northwest continue to favor shuttles over smaller shipments, as shown in Figure 2 below.

Figure 1: Share of Business by Elevator Shipper Type



*100 MT per Car Source: NDPSC Grain Movement Data

Figure 2: Rail Rates—Wheat, North Dakota to Pacific Northwest



Markets Hard red spring (HRS) wheat is the second leading crop planted in North Dakota (N.D. Agricultural Statistics Service), making it a key commodity in North Dakota agriculture. North Dakota accounts for more than half of the total HRS wheat production in the United States. This wheat moves to domestic and export markets in both eastand west-bound shipments.

Portland (PNW) remained ahead of other destinations as a market for shipments of HRS wheat originating from North Dakota elevators in 2017-18 (Figure 3). WI/Other MN and Midland shipments typically move beyond the gateway to U.S. domestic millers. The Pacific Northwest is a large U.S. grain port and important gateway to Asian markets.

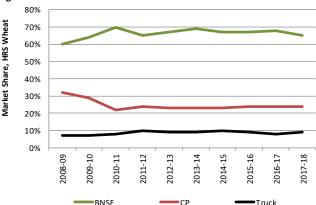
Crop reporting district (CRD) origin detail for these markets is provided on page 2, along with specifics on markets and export points.

Figure 3: Destination for HRS Wheat Originating from ND Elevators

ND PSC Grain Movement Summary, July-June Market Year													
	1,000 Bushels												
	Duluth	WI/Other MN	Midland & Gulf	PNW	ND	Other	Total						
Previous													
5 Yr Avg	6%	27%	10%	21%	8%	28%	241,762						
2013-14	4%	16%	11%	28%	8%	33%	250,168						
2014-15	5%	15%	11%	25%	9%	35%	284,631						
2015-16	3%	14%	11%	32%	8%	33%	283,666						
2016-17	4%	19%	8%	36%	7%	26%	305,961						
2017-18	2%	20%	9%	32%	8%	29%	225,647						

WI/Other MN includes Minneapolis, southeastern Minnesota and Chicago gateway
Midland & Gulf includes states west of the Mississippi River not in any other column: MO, AR, LA, KS, OK, TX, MT, WY, CO, NM, AZ, NV, CA Other includes other states primarily east of Chicago, Canada, Mexico, and unknown

Figure 4: Rail Line Market Shares Over Time



Rail Market Shares

Figure 4 shows the trends in market share for Burlington Northern Santa Fe Railway (BNSF)*, Canadian Pacific Railway (CP)**, and trucks for HRS wheat shipped from North Dakota elevators. BNSF remains the largest hauler of North Dakota wheat - 65%. CP's share of shipments from ND elevators is consistent with previous years at 24%. The truck share is 9% during this market year.

^{*}Includes Red River Valley & Western (RRVW) *Includes Dakota Missouri Valley & Western (DMVW), and Northern Plains Rail (NPR)

				ı	Destinatio	ns for Hard		Wheat Shipments fr	om ND C	RD's					
	CRD 1 - Northwest							CRD 2 - North Central							
	Duluth	MN/WI	Midland	PNW	ND	Other	Total		Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	4%	20%	7%	50%	4%	14%	28,224	Previous 5 Yr Avg	4%	21%	8%	22%	4%	41%	20,706
2013-14	4%	9%	9%	65%	3%	10%	35,864	2013-14	2%	13%	7%	22%	4%	52%	18,289
2014-15	9%	11%	13%	51%	6%	10%	43,731	2014-15	3%	9%	7%	48%	6%	28%	22,765
2015-16	4%	7%	11%	66%	3%	9%	44,357	2015-16	0%	4%	8%	65%	7%	16%	19,981
2016-17	1%	8%	8%	75%	2%	5%	38,505	2016-17	2%	9%	9%	56%	1%	23%	27,502
2017-18	2%	15%	7% R D 3 - Nort h	72%	2%	2%	26,874	2017-18	2%	25%	5%	51%	1%	15%	24,789
		Durlanda	-	4 - West C		ND	Out	T-4-1							
Drovious E Vr Ava	Duluth	MN/WI 26%	Midland 9%	PNW 11%	ND 14%	Other 32%	Total 74,106	Dravious E Vr Ava	Duluth 1%	MN/WI 21%	Midland 12%	PNW 18%	ND 8%	Other 41%	Total
Previous 5 Yr Avg 2013-14	8% 4%	17%	9% 11%	4%	17%	32% 46%	65,839	Previous 5 Yr Avg 2013-14	0%	5%	8%	33%	5%	41%	17,349 19,696
2013-14	4% 4%	13%	8%	4% 8%	16%	51%	85,138	2013-14	0%	5% 8%	9%	31%	2%	49%	22,359
2015-16	4%	14%	7%	8%	15%	52%	76,852	2015-16	4%	6%	5% 6%	28%	5%	51%	19,246
2016-17	5%	14%	7 <i>%</i> 7%	17%	14%	45%	90,353	2013-10	7%	38%	3%	37%	1%	13%	20,218
2017-18	1%	15%	7%	19%	15%	43%	80,248	2010-17	1%	30%	16%	23%	1%	29%	13,492
2017-10	1/0		CRD 5 - Cent		13/0	43/0	00,240	2017-10	1/0				1/0	2370	13,432
	Duluth	MN/WI	Midland	PNW	ND	Other	Total	CRD 6 - East Central Duluth MN/WI Midland PNW ND Other Total							
Previous 5 Yr Avg	8%	34%	8%	9%	8%	34%	24,717	Previous 5 Yr Avg	7%	20%	18%	29%	8%	18%	23,099
2013-14	7%	20%	15%	6%	12%	41%	17,960	2013-14	5%	25%	18%	8%	15%	29%	16,962
2014-15	13%	12%	9%	13%	10%	43%	23,398	2013 14	10%	16%	24%	9%	16%	25%	19,996
2015-16	5%	7%	9%	33%	9%	37%	24,938	2015-16	5%	22%	32%	3%	12%	27%	21,818
2016-17	10%	7%	4%	46%	6%	27%	29,574	2016-17	8%	41%	11%	11%	9%	20%	27,244
2017-18	3%	9%	8%	35%	6%	38%	22,055	2017-18	4%	31%	12%	20%	10%	23%	22,321
2017 20	3,0		D 7 - South		0,0	5575	22,000	2017 10	.,,		8 - South C		20,0	2070	22,021
	Duluth	MN/WI	Midland	PNW	ND	Other	Total		Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	9%	21%	12%	32%	1%	24%	29,022	Previous 5 Yr Avg	1%	69%	13%	3%	5%	10%	9,641
2013-14	2%	5%	11%	60%	1%	21%	43,677	2013-14	6%	31%	13%	25%	2%	23%	21,377
2014-15	5%	15%	11%	36%	1%	33%	33,579	2014-15	2%	33%	15%	27%	6%	17%	22,504
2015-16	3%	6%	10%	46%	2%	33%	41,109	2015-16	0%	30%	15%	34%	0%	21%	22,582
2016-17	2%	10%	15%	54%	0%	17%	36,591	2016-17	3%	36%	12%	30%	1%	17%	19,831
2017-18	5%	13%	16%	49%	1%	16%	17,011	2017-18	8%	37%	20%	12%	5%	18%	9,267
		CR	D 9 - South	east											
	Duluth	MN/WI	Midland	PNW	ND	Other	Total								
Previous 5 Yr Avg	1%	53%	6%	4%	5%	31%	14,808	**One metric ton =	36.74 Bush	els					
2013-14	3%	50%	4%	0%	9%	33%	10,505	Patterns and n	nethods (of shipping	HRS whe	at per the	- Annual	North Dak	ota
2014-15	2%	48%	4%	7%	3%	36%	11,162	Patterns and methods of shipping HRS wheat per the Annual North Dakota Elevator Marketing Report and the North Dakota Grain And Oilseed Transpor-							
2015-16	1%	50%	2%	0%	14%	33%	13,783								•
2016-17	0%	47%	2%	1%	14%	37%	16,143								market
2017-18	0%	50%	2%	0%	9%	38%	9,591	information are available at http://www.ugpti.org/resources/grain/.							
					-								_		
					1			HRS WHI	EAT EX	KPORT	BY RE	GION A	AND P	ORT AI	REA
Port Area	Mary	200.000			<u> </u>	>4			RF	CENT :	3-YEAR	ΔVFR	ΔGF		
Atlantic	S	uo l	*				4		1,7	CLIVI	, ILAN	AVEN	AGL		
Allantic		∯ 150,000 —									Thailand	Indonesia	Guatemala		
Gulf		100,000		->		A P				Korea	7%	4%	3%	Philipp	ines
Interior	1	한 50,000 —		(J	2)					89				309	6
Lakes	-		, 🖬 , 🖷 ,		The same					Taiwa	an				
		Pac	ifie—Lakes Gulf Ir	nterior Atlantic				Pacific		12%					
Pacific	,	514													
		S. J. S.	`	7	3	12.37									
	Average	e Bushels	in 1,000's	1							China 12%			Japan	
	11. Grag	- Bushels	45	nezuela	Mexico	3					12%			20%	
			Spain	6%	1%						10				
8 40 5 11			15%					1000							
					1			740							

North Dakota Wheat Commission (N.D.) Buyers and Processors. Retrieved Oct 2017, from http://www.ndwheat.com/buyers/

Mexico 26% Colombia

Guatemala

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Italy 78%

Republic 38%

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Mexico 100%

Venezuela 100%

Source: U.S. Department of Agriculture