NDSU
UPPER GREAT PLAINS TRANSPORTATION INSTITUTE
AGRICULTURE, ENERGY AND INDUSTRIAL FREIGHT CENTER

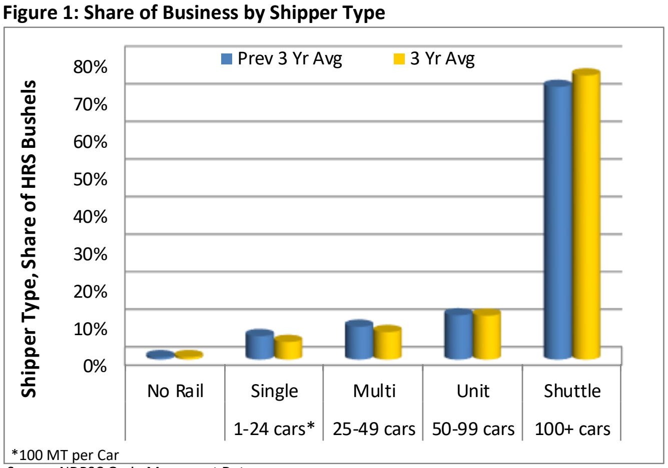
HARD RED SPRING WHEAT

AGRICULTURE SHIPMENT BRIEF JUNE 2017

North Dakota

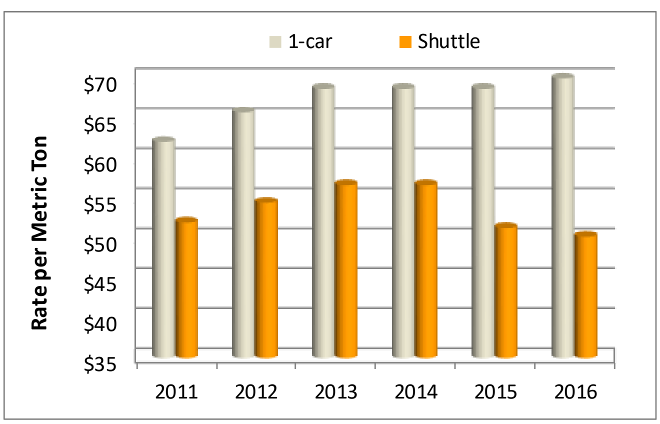
is a forerunner in the U.S. wheat industry, ranking second among states in total wheat production and first in production of hard red spring wheat. This report summarizes some logistical trends associated with the movement of hard red spring wheat from elevator to domestic and export markets. Figure 1 shows a sustained trend toward larger facility rail shipments in the wheat market. Shuttle facilities share during the 2013-16 time frame was 76%. 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 Shipper Type



Source: NDPSC Grain Movement Data

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



Markets

Hard red spring (HRS) wheat is the leading crop planted in North Dakota (N.D. Agricultural Experiment Station), making it a key commodity in North Dakota agriculture. North Dakota accounts for nearly one-half of total HRS wheat production in the United States. This wheat moves to domestic and export markets in both east- and west-bound shipments.

Portland (PNW) remained ahead of other destinations as a market for shipments of HRS wheat originating from North Dakota elevators in 2015-16 (Figure 3). Minneapolis 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 a world map depicting top markets and export points.

Figure 3: Destination for HRS Wheat Originating from ND Elevators

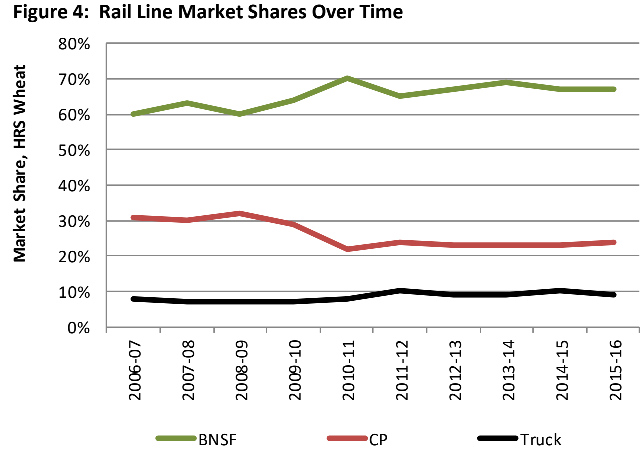
ND PSC Grain Movement Summary, July-June Market Year

1,000 Bushels

	Duluth	WI/Other MN	Midland & Gulf	PNW	ND	Other	Total
Previous 5 Yr Avg	7%	33%	11%	21%	7%	23%	255,980
2011-12	5%	22%	9%	23%	9%	31%	190,161
2012-13	4%	18%	11%	24%	9%	35%	231,495
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

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 (BNSF)* and Canadian Pacific (CP)** rail lines as well as trucks for HRS wheat shipped from North Dakota elevators. BNSF remains the largest hauler of North Dakota wheat - 67%. After maintaining several years of market share at or above 30%, CP remains low at 24% in 2015-16. The truck share is 9% for shipments from ND elevators during this market year.

*Includes RRVW **Includes DMVW and NPR

Destinations for Hard Red Spring Wheat Shipments from ND CRD's

(1000 Bushels)

CRD 1 - Northwest

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	2%	21%	7%	53%	5%	10%	28,159
2011-12	7%	12%	5%	58%	4%	15%	16,048
2012-13	3%	11%	6%	62%	2%	16%	36,381
2013-14	4%	9%	9%	65%	3%	10%	35,864
2014-15	9%	11%	13%	51%	6%	10%	43,731
2015-16	4%	7%	11%	66%	3%	9%	44,357

CRD 2 - North Central

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	6%	30%	13%	21%	3%	28%	24,958
2011-12	3%	13%	5%	33%	5%	40%	12,402
2012-13	2%	20%	1%	16%	4%	57%	19,431
2013-14	2%	13%	7%	22%	4%	52%	18,289
2014-15	3%	9%	7%	48%	6%	28%	22,765
2015-16	0%	4%	8%	65%	7%	16%	19,981

CRD 3 - Northeast

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	9%	31%	8%	11%	13%	28%	75,211
2011-12	8%	25%	7%	12%	14%	32%	72,528
2012-13	4%	19%	14%	10%	19%	35%	63,935
2013-14	4%	17%	11%	4%	17%	46%	65,839
2014-15	4%	13%	8%	8%	16%	51%	85,138
2015-16	4%	14%	7%	8%	15%	52%	76,852

CRD 4 - West Central

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	3%	27%	15%	11%	9%	35%	17,126
2011-12	0%	16%	19%	12%	7%	46%	12,822
2012-13	0%	8%	11%	34%	2%	45%	18,635
2013-14	0%	5%	8%	33%	5%	49%	19,696
2014-15	0%	8%	9%	31%	2%	49%	22,359
2015-16	4%	6%	6%	28%	5%	51%	19,246

CRD 5 - Central

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	8%	46%	9%	6%	7%	24%	28,269
2011-12	8%	13%	5%	17%	8%	49%	17,733
2012-13	10%	25%	8%	9%	12%	36%	17,535
2013-14	7%	20%	15%	6%	12%	41%	17,960
2014-15	13%	12%	9%	13%	10%	43%	23,398
2015-16	5%	7%	9%	33%	9%	37%	24,938

CRD 6 - East Central

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	9%	19%	17%	40%	6%	8%	26,783
2011-12	4%	23%	14%	32%	9%	18%	17,579
2012-13	5%	15%	12%	9%	14%	46%	18,984
2013-14	5%	25%	18%	8%	15%	29%	16,962
2014-15	10%	16%	24%	9%	16%	25%	19,996
2015-16	5%	22%	32%	3%	12%	27%	21,818

CRD 7 - Southwest

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	12%	20%	14%	31%	1%	22%	28,197
2011-12	1%	13%	13%	50%	1%	21%	22,351
2012-13	4%	16%	15%	36%	0%	29%	37,521
2013-14	2%	5%	11%	60%	1%	21%	43,677
2014-15	5%	15%	11%	36%	1%	33%	33,579
2015-16	3%	6%	10%	46%	2%	33%	41,109

CRD 8 - South Central

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	1%	85%	9%	1%	4%	2%	9,327
2011-12	1%	55%	21%	2%	9%	13%	8,693
2012-13	2%	41%	12%	10%	6%	29%	9,599
2013-14	6%	31%	13%	25%	2%	23%	21,377
2014-15	2%	33%	15%	27%	6%	17%	22,504
2015-16	0%	30%	15%	34%	0%	21%	22,582

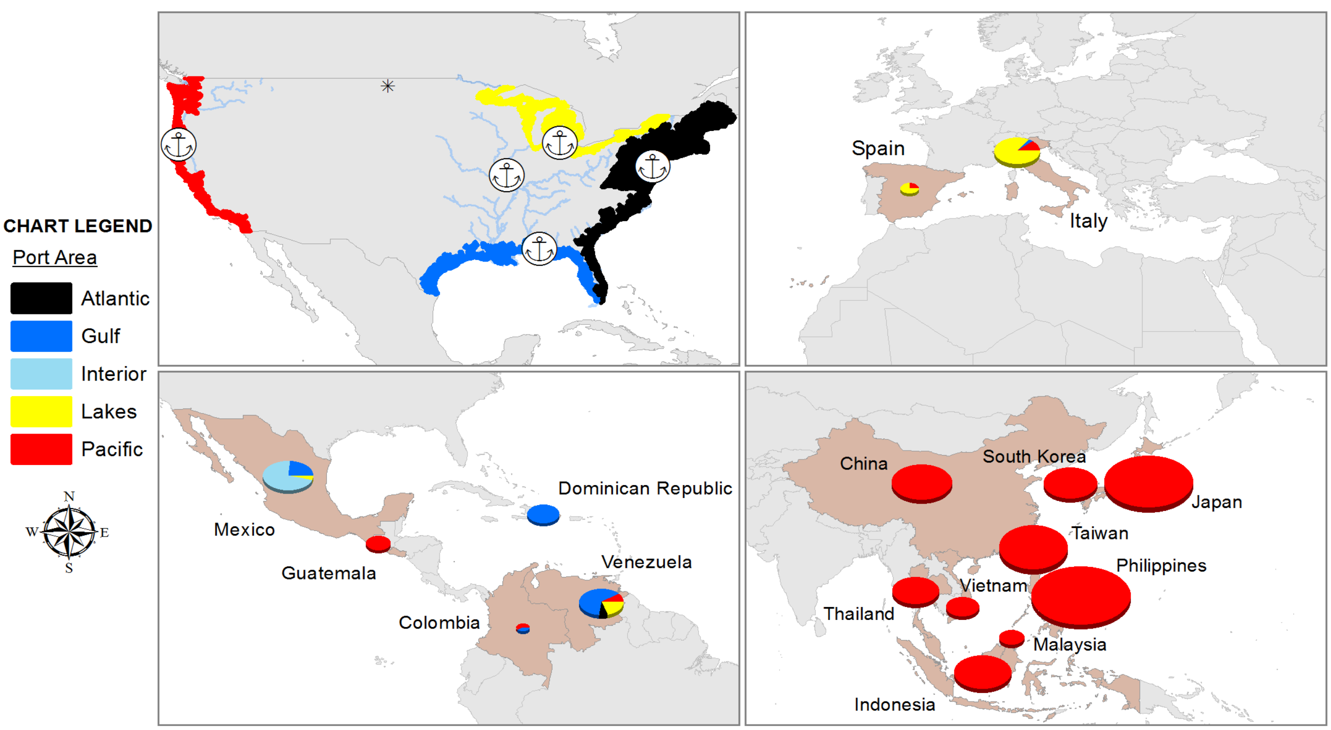
CRD 9 - Southeast

	Duluth	MN/WI	Midland	PNW	ND	Other	Total
Previous 5 Yr Avg	3%	54%	8%	8%	3%	23%	17,949
2011-12	0%	45%	5%	4%	8%	38%	10,004
2012-13	0%	40%	8%	0%	11%	41%	9,025
2013-14	3%	50%	4%	0%	9%	33%	10,505
2014-15	2%	48%	4%	7%	3%	36%	11,162
2015-16	1%	50%	2%	0%	14%	33%	13,783

**One metric ton = 36.74 Bushels

Patterns and methods of shipping HRS Wheat per the Annual North Dakota Elevator Marketing Report and the North Dakota Grain And Oilseed Transportation Statistics report. The complete reports, CRD map, and additional market information are available at http://www.ugpti.org/resources/grain/.

HRS Wheat Export by Region and Port Area



Source: U.S. Department of Agriculture

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

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