

DURUM

AGRICULTURE SHIPMENT BRIEF

SUMMER 2018

U.S. Durum production is around 30 million bushels annually. North Dakota accounts for more than half of that total followed by Montana, Arizona, California, and Idaho. Approximately 57% of land used in durum production in the United States is located in North Dakota.

Logistical data presented in this report reviews trends associated with the movement of durum from North Dakota elevators to markets. Figure 1 shows a continuing trend toward larger rail facilities in the durum market. Shuttle facilities share during the most recent 3-year time frame was 50% followed by multi (23%) and unit (22%) train facilities. Rail rates to Minneapolis have held steady for all train types from 2015 through 2017 (Figure 2).

Figure 1: Share of Business by Elevator Shipper Type

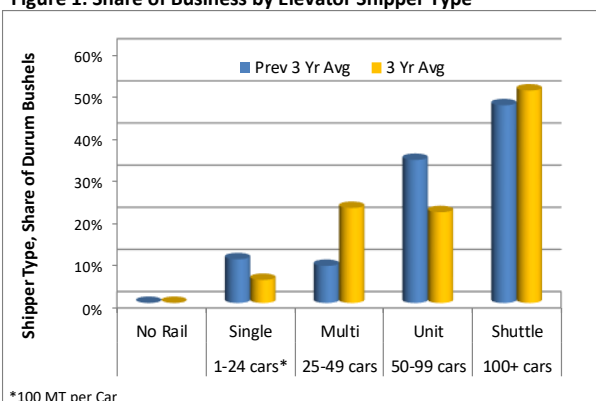
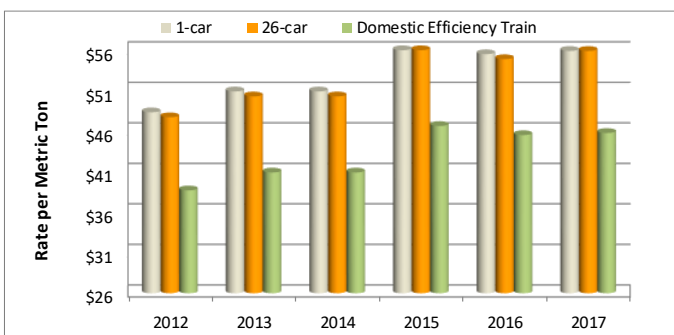


Figure 2: Rail Rates—Durum, North Dakota to Minneapolis



Rail Market Shares Burlington Northern Santa Fe (BNSF*) and Canadian Pacific (CP**) are the two major railroads providing service to North Dakota. Market share trends for these two railroads, as well as trucks, are shown in Figure 4. BNSF continues to hold the largest share, more than 50% since 2009-10. CP holds a 24% share in the 2016-17 crop year. The share held by trucks is currently about 10%.

*Includes RRWV **Includes DMVW and NPR

Markets Durum is used primarily for pasta products. In the United States, pasta consumption amounts to 20 lbs. per capita every year (North Dakota Wheat Commission). Export demand is based in Europe, North Africa, and Latin America, where durum is used in pasta, bread, and couscous.

Destination data (Figure 3) reveal that durum from North Dakota elevators moved in largest share to Duluth in 2016-17, followed by WI/Other MN. The Duluth shipments are destined for export customers in Europe and North Africa. WI/Other MN and Midland shipments typically move beyond the gateway to U.S. domestic millers. Overall destination percentages remain fairly consistent for all ports.

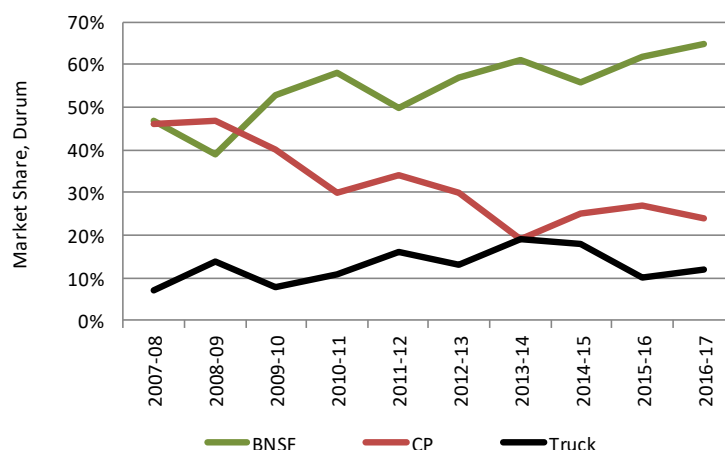
Crop reporting district (CRD) origin detail is provided on page 2, along with specifics on markets and export points.

Figure 3: Destination for Durum Originating from ND Elevators

| ND PSC Grain Movement Summary, June-July Market Year | | | | | | | |
|--|--------|-------------|----------------|-----|-----|-------|--------|
| 1,000 Bushels | | | | | | | |
| | Duluth | WI/Other MN | Midland & Gulf | PNW | ND | Other | Total |
| Previous 5 Yr Avg | 26% | 27% | 18% | 1% | 17% | 10% | 37,909 |
| 2012-13 | 16% | 29% | 19% | 1% | 22% | 13% | 38,496 |
| 2013-14 | 21% | 25% | 22% | 5% | 16% | 11% | 34,587 |
| 2014-15 | 25% | 22% | 21% | 2% | 16% | 15% | 25,216 |
| 2015-16 | 23% | 22% | 20% | 5% | 14% | 16% | 28,929 |
| 2016-17 | 32% | 26% | 15% | 1% | 14% | 13% | 30,564 |

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: Market Share Over Time



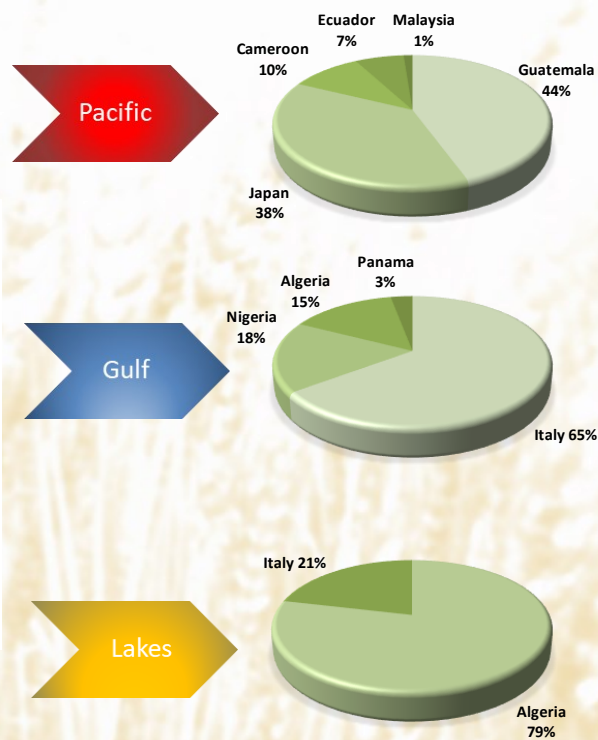
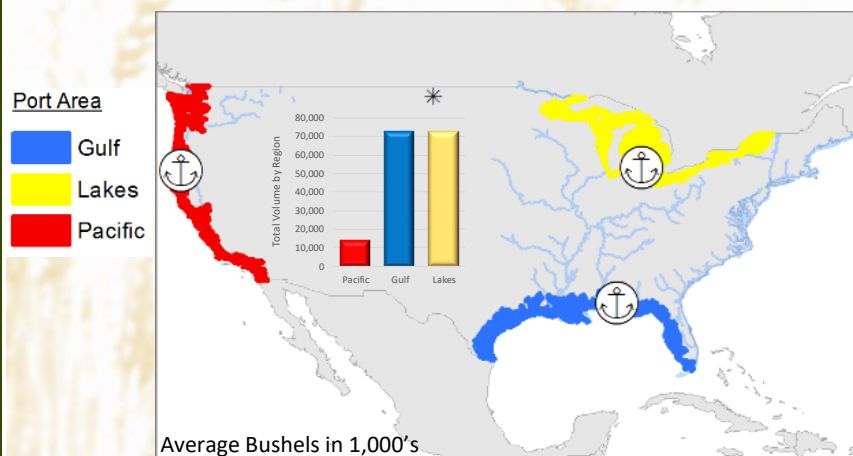
Destinations for Durum Shipments from ND CRD's (1000 Bushels)**

| 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 | 32% | 22% | 20% | 1% | 17% | 8% | 26,041 | Previous 5 Yr Avg | 8% | 27% | 2% | 0% | 50% | 13% | 1,264 |
| 2012-13 | 21% | 23% | 23% | 1% | 26% | 6% | 24,535 | 2012-13 | 1% | 21% | 0% | 0% | 57% | 21% | 1,127 |
| 2013-14 | 26% | 23% | 24% | 7% | 16% | 4% | 24,577 | 2013-14 | 6% | 39% | 0% | 0% | 53% | 2% | 732 |
| 2014-15 | 30% | 14% | 27% | 2% | 17% | 9% | 18,366 | 2015-16 | 0% | 54% | 1% | 0% | 30% | 15% | 341 |
| 2015-16 | 28% | 15% | 25% | 8% | 13% | 10% | 17,665 | 2015-16 | 15% | 16% | 6% | 0% | 62% | 1% | 506 |
| 2016-17 | 41% | 22% | 21% | 0% | 11% | 5% | 19,342 | 2016-17 | 21% | 0% | 3% | 5% | 51% | 21% | 1,649 |
| CRD 3 - Northeast | | | | | | | | CRD 4 - West Central | | | | | | | |
| | Duluth | MN/WI | Midland | PNW | ND | Other | Total | | Duluth | MN/WI | Midland | PNW | ND | Other | Total |
| Previous 5 Yr Avg | 6% | 27% | 14% | 2% | 18% | 32% | 619 | Previous 5 Yr Avg | 2% | 36% | 27% | 0% | 29% | 5% | 3,276 |
| 2012-13 | 4% | 35% | 0% | 0% | 35% | 25% | 764 | 2012-13 | 2% | 0% | 28% | 0% | 20% | 50% | 2,576 |
| 2013-14 | 41% | 10% | 6% | 0% | 31% | 11% | 378 | 2013-14 | 0% | 10% | 14% | 0% | 38% | 39% | 1,496 |
| 2015-16 | 30% | 18% | 1% | 0% | 36% | 16% | 552 | 2015-16 | 3% | 11% | 9% | 0% | 10% | 68% | 1,109 |
| 2015-16 | 16% | 20% | 4% | 0% | 40% | 19% | 950 | 2015-16 | 0% | 7% | 26% | 0% | 15% | 52% | 974 |
| 2016-17 | 16% | 16% | 1% | 2% | 34% | 32% | 924 | 2016-17 | 0% | 42% | 6% | 0% | 9% | 43% | 1,360 |
| CRD 5 - Central | | | | | | | | CRD 6 - East Central | | | | | | | |
| | Duluth | MN/WI | Midland | PNW | ND | Other | Total | | Duluth | MN/WI | Midland | PNW | ND | Other | Total |
| Previous 5 Yr Avg | 15% | 33% | 10% | 0% | 15% | 27% | 900 | Previous 5 Yr Avg | 0% | 34% | 0% | 0% | 17% | 8% | 51 |
| 2012-13 | 8% | 7% | 13% | 0% | 29% | 43% | 1,627 | 2012-13 | 0% | 100% | 0% | 0% | 0% | 0% | 2,254 |
| 2013-14 | 5% | 0% | 7% | 0% | 24% | 64% | 535 | 2013-14 | 0% | 0% | 0% | 0% | 0% | 0% | 0 |
| 2015-16 | 10% | 2% | 4% | 0% | 8% | 75% | 722 | 2015-16 | 0% | 0% | 0% | 0% | 0% | 0% | 0 |
| 2015-16 | 1% | 4% | 1% | 0% | 28% | 65% | 1,070 | 2015-16 | 0% | 100% | 0% | 0% | 0% | 0% | 4 |
| 2016-17 | 1% | 10% | 0% | 0% | 26% | 63% | 1,883 | 2016-17 | 0% | 100% | 0% | 0% | 0% | 0% | 64 |
| CRD 7 - Southwest | | | | | | | | CRD 8 - South Central | | | | | | | |
| | Duluth | MN/WI | Midland | PNW | ND | Other | Total | | Duluth | MN/WI | Midland | PNW | ND | Other | Total |
| Previous 5 Yr Avg | 21% | 45% | 12% | 2% | 3% | 18% | 5,610 | Previous 5 Yr Avg | 3% | 68% | 0% | 0% | 29% | 0% | 49 |
| 2012-13 | 14% | 42% | 11% | 2% | 4% | 27% | 5,079 | 2012-13 | 0% | 0% | 0% | 0% | 100% | 0% | 29 |
| 2013-14 | 9% | 40% | 18% | 0% | 3% | 29% | 6,794 | 2013-14 | 0% | 0% | 0% | 0% | 100% | 0% | 58 |
| 2015-16 | 10% | 65% | 4% | 0% | 7% | 13% | 4,093 | 2015-16 | 0% | 0% | 0% | 0% | 100% | 0% | 34 |
| 2015-16 | 18% | 48% | 9% | 0% | 8% | 17% | 5,695 | 2015-16 | 0% | 0% | 0% | 0% | 100% | 0% | 11 |
| 2016-17 | 29% | 46% | 8% | 2% | 4% | 11% | 5,110 | 2016-17 | 0% | 33% | 0% | 0% | 67% | 0% | 53 |
| CRD 9 - Southeast | | | | | | | | | | | | | | | |
| | Duluth | MN/WI | Midland | PNW | ND | Other | Total | | | | | | | | |
| Previous 5 Yr Avg | 0% | 55% | 0% | 0% | 26% | 0% | 98 | | | | | | | | |
| 2012-13 | 0% | 97% | 0% | 0% | 0% | 3% | 505 | | | | | | | | |
| 2013-14 | 0% | 100% | 0% | 0% | 0% | 0% | 17 | | | | | | | | |
| 2015-16 | 0% | 0% | 0% | 0% | 0% | 0% | 0 | | | | | | | | |
| 2015-16 | 0% | 1000% | 0% | 0% | 0% | 90% | 54 | | | | | | | | |
| 2016-17 | 16% | 84% | 0% | 0% | 0% | 0% | 180 | | | | | | | | |

**One metric ton = 36.74 Bushels

Patterns and methods of shipping Durum 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/>.

DURUM EXPORT BY REGION AND PORT AREA RECENT 3-YEAR AVERAGE



Source: U.S. Department of Agriculture

NDSU Plant Sciences, *Durum Wheat Production*. Accessed online Oct. 18, 2017, at <https://www.ag.ndsu.edu/plantsciences/research/durum/production>

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For more information contact:
info@ugpti.org • (701) 231-7767
NDSU Dept 2880 • P.O. Box 6050
Fargo, ND • 58108-6050