

# **Appendix D: Distribution Routes for Rural Grocers, January 2018**

N.C. Doty & Associates LLC

# Distribution Routes for Rural Grocers

Presented to: North Dakota Association of Rural Electric Cooperatives

NC Doty & Associates LLC  
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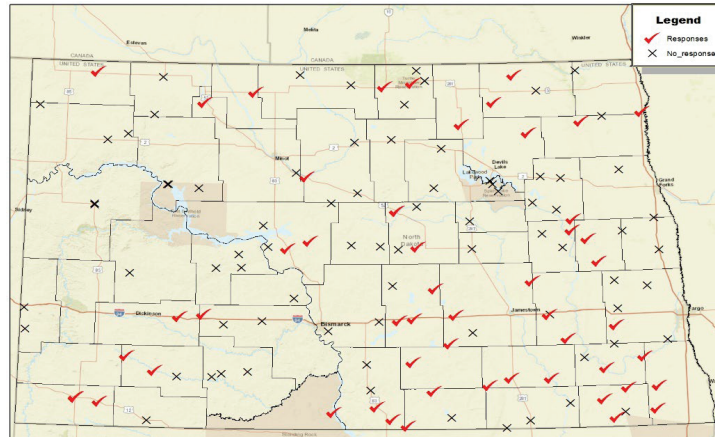
## Distribution Routes for Rural Grocers

The North Dakota Grocer Survey was sent to 135 rural grocery retailers and responses were received from 63 retail stores, 7 of which were convenience stores, for a 47% response rate. (Map 1) Included in the survey were questions that asked retailers to identify their primary food and beverage distributors, distributor prices, delivery frequency, and customer service. The top four distributors by volume were SpartanNash, Grand Rapids, MI, SuperValu, Eden Prairie, MN, Henry's Foods, Inc., Alexandria, MN, and Mason Brothers, Wadena, MN. The survey showed that 73% of respondents identified one of the top four wholesale distributors as their primary distributor.

Rural grocers in North Dakota are serviced by a group of diverse food and beverages distributors. SuperValu, Eden Prairie, MN and SpartanNash, Grand Rapids, MI are the largest full-service grocery distributors currently servicing rural grocers in North Dakota. SuperValu serves grocery customers through a network of more than 3,000 owned, franchised, and independently owned stores across the U.S. and employs more than 30,000 employees. Annual sales for publicly traded SuperValu topped \$13 billion in 2017. SuperValu has two distribution centers in North Dakota located in Fargo and Bismarck and owns and operates the six-store chain of Hornbacher's retail grocery stores in the Fargo/Moorhead area.

SpartanNash is the fifth largest food distributor in the U.S. SpartanNash operates more than 140 corporate-owned retail stores in eight states and distributes to more than 2,100 independent locations throughout the country. The publicly traded company had sales of \$7.7 billion in 2016. SpartanNash has two distribution centers in North Dakota, Fargo and Minot, and owns and operates 6 Dan's Supermarket stores in the Bismarck area and 3 Family Fare stores each in Fargo and Dickenson. SpartanNash also distributes products to the Hugo's grocery chain that has 10 stores in Eastern North Dakota and Northwestern Minnesota.

Two major regional grocery distributors that service rural North Dakota grocers are located in Western Minnesota. Mason Brothers is located in Wadena and Henry's is located in Alexandria. Mason Brothers is a family owned full line wholesale grocery distributor. The company distributes products to independent grocery retailers in six states including Minnesota, North Dakota, South Dakota, Iowa, Wisconsin, and Michigan. Henry's Foods Inc. is a privately held company that distributes a full line food service, paper, hardware, and wholesale groceries to grocery stores, convenience stores, food service operations throughout Minnesota, Eastern North and South Dakota, Northern Iowa, and Western Wisconsin.

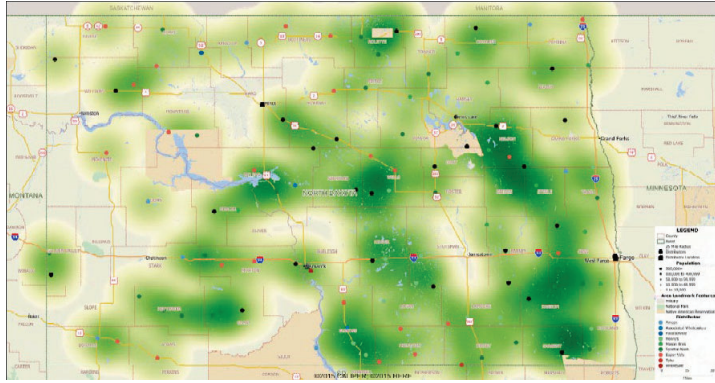


Map 1: ND Rural Grocery Contact List – Responses vs. No Response

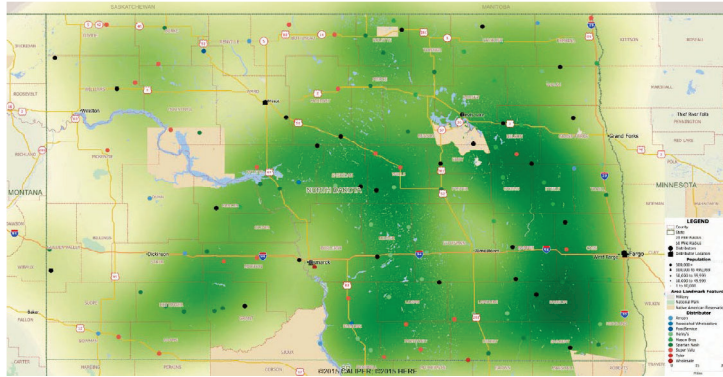
Survey respondents indicated that about 70% of food and beverage distribution was supplied by wholesale food distributors and 30% was supplied by direct store delivery (DSD) distributors in categories such as beverages (Coke, Pepsi, 7 up), snacks (Frito Lay, Old Dutch, Nestle, Little Debbie's), dairy (Kemps, Dean Foods, Land O Lakes), and pizza (Bernatello's, Pizza Corner, Tombstone). The majority of survey respondents indicated that deliveries from both wholesale and DSD distributors occurred on a weekly basis. Survey respondents indicated satisfaction with distributor delivery frequency, food quality, product choices, payment terms, minimum order quantities, customer service, and sales promotions to stores. Areas of improvement indicated were high product prices and advertising and promotional assistance.

Other primary food distributors, with warehouses in North Dakota, as indicated by the survey respondents were AmCon Distributing Company, Bismarck, ND (primarily distributing to convenience stores) and the food service distributors; U.S. Food Service, Grand Forks, ND, Sysco, Fargo, ND, and Food Services of America, Fargo, ND.

The Upper Great Plains Transportation Institute (UGPTI), NDSU, Fargo, ND analyzed the primary distributor delivery locations as provided by survey respondents. The UGPTI used the respondents' input to develop several maps that show distributor routes to deliver products to respondent rural grocers. Map 2 and Map 3 show the distributor delivery coverage within 25 miles and 50 miles respectively. The 50-mile coverage map shows that much of the state of North Dakota has adequate distributor coverage, especially in the eastern two thirds of the State.

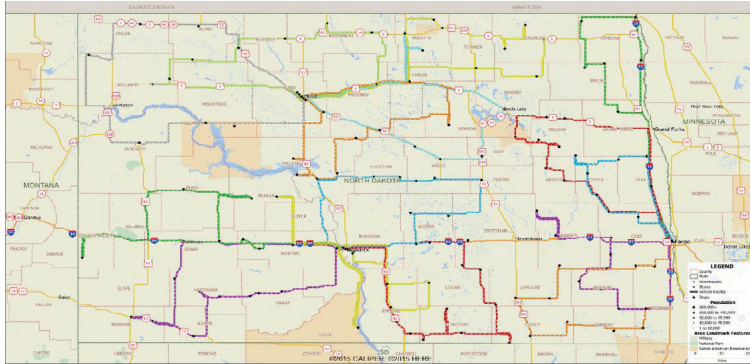


Map 2: Density Map of Primary Grocery Distributors 25 Mile Coverage

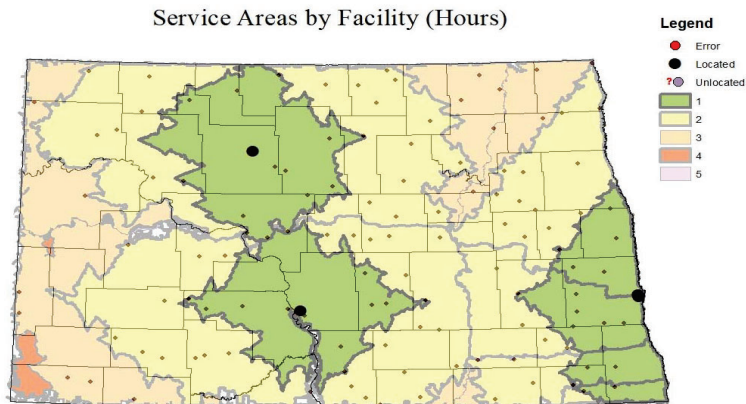


Map 3: Density Map of Primary Grocery Distributors 50 Mile Coverage

Using the primary distributor responses, the UGPTI produced Map 4 to show optimum one-day routes to delivery products to survey respondents. What becomes obvious is the large number of routes necessary to cover delivery to grocers in a large geographical area. From a distributor's viewpoint, an optimal route would provide maximum sales over minimum miles traveled. The large wholesale distributors, SpartanNash and SuperValu have distribution warehouses in Fargo, Bismarck, and Minot. Map 5 shows the delivery distance from those warehouses. It is obvious that SpartanNash and SuperValue have logistical advantages in terms of miles traveled to service rural grocers. The challenge for Henry's Foods, Inc. and Mason Brothers is to be cost competitive even though their warehouses are in Western Minnesota. what a route would look like for a single distributor to cover delivery to all survey respondents. optimum delivery routes for the four primary grocery distributors.

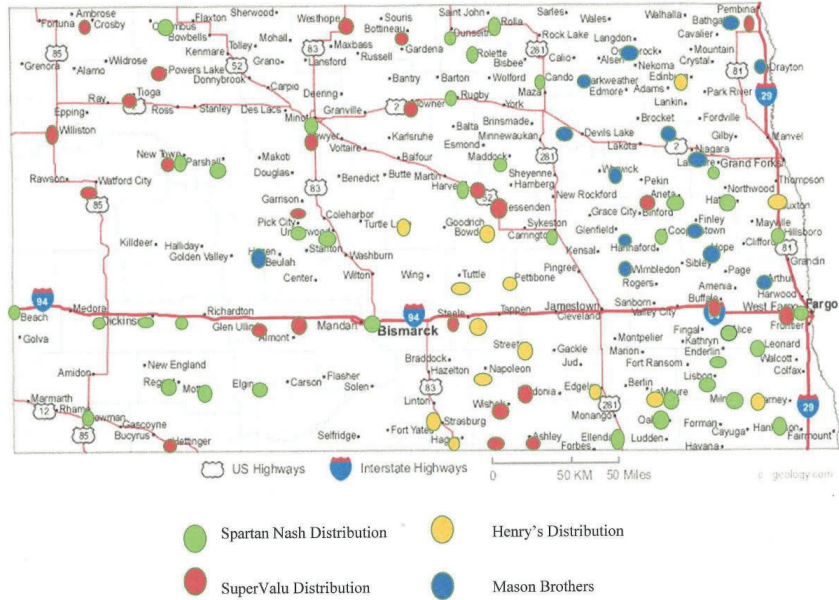


Map 4: Optimum One Shift Routes to Survey Respondent Stores



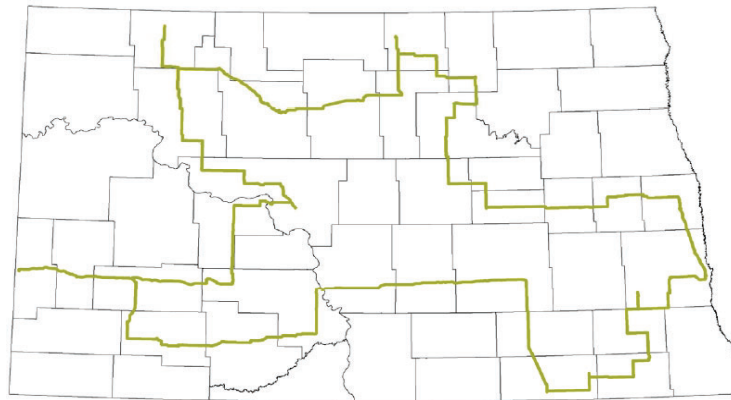
Map 5: Delivery Time from Fargo, Bismarck, and Minot Warehouses

Map 6 is a compilation of the major 4 food distributors to 96 rural grocers in North Dakota. The map shows statewide distribution by SpartanNash and SuperValu. Henry’s Foods, Inc. distributes primarily in the Central, South Central and Southeast regions of the state, while Mason Brothers distributes in the East Central and Northeast regions of North Dakota. what a route would look like for a single distributor to cover delivery to all survey respondents. optimum delivery routes for the four primary grocery distributors.



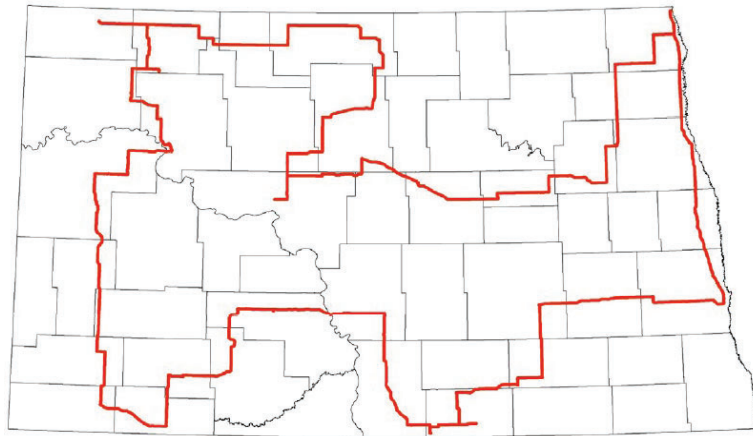
Map 6: Primary Distributors to Rural Grocers by Location

The UGPTI produced maps 7 through 10 show optimum distribution routes for each of the four largest distributors for 96 rural grocers in North Dakota. As can be seen, SpartanNash and SuperValu essentially cover the state due to their strategically placed in-state warehouses. Henry's Foods Inc. optimally covers the Southeastern part of the state and Mason Brothers optimally covers the Northeastern part of the state.

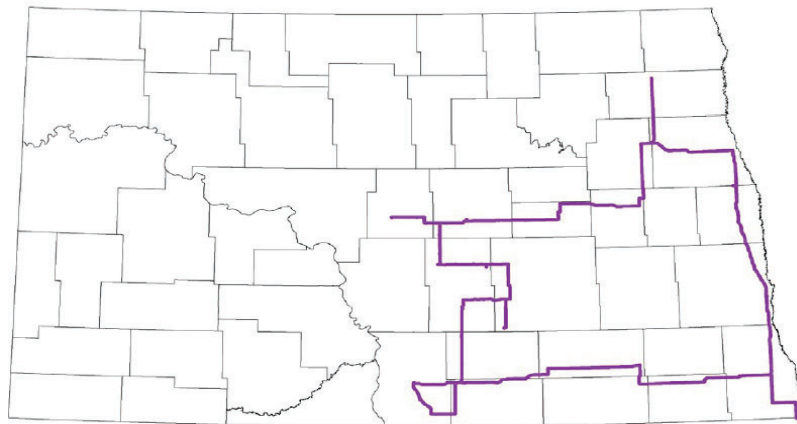


Map 7: SpartanNash Optimum Single Delivery Route to Rural Grocery Stores





Map 8: SuperValu Optimum Single Delivery Route to Rural Grocery Stores



Map 9: Henry's Food Inc. Optimum Single Delivery Route to Rural Grocery Stores





- Develop a private/public strategy that outlines development of a distributor/grocer collaboration to improve the competitiveness of both the distributor and collaborating grocers.

The North Dakota Grocer Survey provided North Dakota rural grocer input that indicated an interest by 40% of the respondents in collaborative purchasing of foods and beverages. The survey indicated that the cost of products from distributors was the primary concern of rural grocers. The demonstration of a collaboration between a major distributor and regional grocers could be a solution for cost concerns of the grocers and efficiency concerns of the distributor.

Neil C. Doty, Ph.D.  
N.C. Doty & Associates, LLC  
2427 Victoria Rose Drive S.  
Fargo, ND 58104-6824  
Phone: (701) 238-6169  
Email: [neildoty@gmail.com](mailto:neildoty@gmail.com)