Exhibit _____

I am David Darr; I serve as a Marketing Analyst for Dairy Farmers of America, Inc. (DFA), a Capper Volstead cooperative. In that capacity, I study the movement of milk within various regions of DFA. My business address is 10220 N Ambassador Drive, Kansas City, Missouri, 64153. I testify today as a proponent of proposals 1, 2, and 3.

I am here today to present results of a marketing study that I have undertaken for the Southern Marketing Agency (SMA), a Capper Volstead marketing agency in common operating in the southeast United States. In my study, I looked at the relationship between milk supplies and demands in the Southeastern United States, and will present testimony summarizing my findings.

The marketing study done for SMA has utilized a linear programming model to estimate costs (specifically freight) involved with various milk demand situations in the Southeast. The model that has been developed allows us to input data on milk production and sales, and then allocate milk to the ideal plant subject to constraints that were put on the model. A linear programming tool called "What's Best" – a Microsoft Excel add-in developed by a company named LINDO was used to compute the model. LINDO has developed linear programming software since 1979. More information about the software can be found at www.lindo.com. The mathematical process of linear programming is a widely accepted method of optimizing models with many variables and constraints. It was used by Cornell in the development of our current Class I

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differential floor. Using the purchased software, I developed the model that was used to produce the data I will review in a few minutes. While the model has not been officially peer reviewed, it has gone through several iterations, and undergone theoretical and practical revisions with the help of members of SMA. Similar models have been used in other regions of DFA, and the logic of the model has passed many tests.

Through SMA, I was presented with consolidated milk production information by county for June 2005. Milk production modeled represents in excess of 80 percent of the total milk produced in the two Federal Order marketing areas. Also through SMA, I was presented with demand sale information for Federal Order 5 & 7 pool distributing plants that SMA serves. Given this data, a model was created that moved milk from each county to the plant that is closest to that county. In some areas with multiple plants, demand sales information was consolidated to represent a metropolitan area demand, instead of **a** plant specific demand. Exhibit ___ is a graphical representation of the distribution of milk that resulted from running this model. The model was set so that there were no constraints placed on plant capacity – each plant could receive an infinite amount of milk. The goal was to allocate milk from each county to the closest possible pool distributing plant.

A mileage matrix similar to that found in an atlas drives the model. Distances for each combination of points were calculated using the center point of each county, and the center point of each zip code where each plant is located. Software by the name of PC Miler was used to calculate the distance between each combination of points. PC Miler is a product available from ALK Technologies, and according to their website, it is used by over 20,000 logistics companies around the world. More information on PC Miler is available from www.alk.com.

The model was set to move all milk production to the closest plant, at the minimum cost. Visually, you can see how the model worked in page 1 of E x h i b i t . Each of the lines on the map represents milk moving from a county, to a plant. Because there were no constraints placed on demand, all of the milk from each county goes to a single point. Also, each line on the map should be the shortest possible length from a county to a point, to represent the distance minimization function of the model. On average, farm milk traveled 51 miles from the center point of each county to the nearest point. Milk from some counties traveled over 100 miles to find the nearest point, while other counties traveled **less** than 5 miles. This analysis works towards identifying the closest viable market for producers located in each county in the Southeast.

Next, I wanted to see how much of each area's demand would be filled if all milk moved to the closest viable market. This is presented in page 1 of Exhibit ___ by the color-coded circles on the map. Plant demand was taken from SMA sales information from 2005. For each area, the highest monthly demand sales volume from January 2005 through October 2005 was used in the model. In areas with multiple plants in a close proximity, multiple plants were grouped together to form an area. In total, there are **42** possible delivery points in the model. I took the amount of milk placed into each area by the model, and divided that number by the maximum SMA monthly demand. This computation is referred to as the "share of demand received" by each area. I have color-coded the share of demand received into four categories. Circles on the maps that are red represent area that received less than 50% of the milk that they actually demanded. These are areas in the most deficit parts of the Southeast, and represent ½ of the delivery locations in the model. One area in Louisiana received no milk from the model. There were no counties for which it was the closest location. Areas shaded yellow received more than 50% of their demand, but less than 100% of what they wanted. 7 of the 42 delivery points' shipments fell within this category. When I add the number of red points to the number of yellow points, it tells me that 66% of the delivery points in the model received less milk than what they demanded. The other 33% of delivery points in the model received more milk than what they demanded. I have broken them down into two categories. Points that are light blue in color (8 points) represent areas that received between 100% of their demand and 200% of their demand. Beyond that, there were 6 points (colored dark blue) that received more than twice the milk that they demanded. At the high end of the scale, one point received 6 times the milk that was demanded. It is apparent that while most of the delivery points that were allocated more milk than what they demanded are located along the outside border of the Southeast, there are occasions where locations in the heart of the Southeast have a local milk supply that exceeds plant demand.

I wanted to present this same data in one additional way before we move on to additional testimony. Page 2 of the exhibit takes the same milk production and area demand information contained on page 1, but summarizes at the state level. The map looks at each state's milk production contained in the model, and divides that production by the pool distributing plant demand in that state. The result is a ratio that measures the pounds of production in each state in relation to the pounds of pool distributing plant demand sales. From the data in the model, only 5 states in the region had more milk production than demand from pool distributing plants. All of the states with an excess supply (except Mississippi) are located along the fringe of the Southeast. As we move deeper into the Southeast, the deficits tend to grow. For example, in Tennessee, for every 10 pounds of demand, there was 5.2 pounds of production. Additional supply would have to come from somewhere else. In South Carolina, for every 10 pounds of demand, there was less than 2.5 pounds of production. Alabama had the lowest ratio. In Alabama, for every 10 pounds of demand, there was less than 2 pounds of production. Put another way, in Alabama, over 80% of pool distributing plant demand would have to come from somewhere other than Alabama.

This completes my description of the model that has been developed to further describe the milk supply / demand relationships in the Southeast. In upcoming testimony, Mr. Jeff Sims will use the model that I have described as justification for proposals 1, 2, and 3.