Background:
Milk and cheese production have been major agricultural businesses in northeast Ohio for many years. During the past decade, there has been great contraction in the number of dairy farms in the region. Looking to the future, there are many difficult issues facing continued and expanded milk production. These include generational transition, federal milk pricing, input costs, workforce, waste management, and state regulations.

In an effort to understand better how these issues are playing out in northeast Ohio, a group of organizations worked together to develop a survey for dairy farms. These organizations included: OSU Extension, Geauga Growth Partnership, TeamNEO, Growth Partnership for Ashtabula County, Portage Development Board and the Youngstown-Warren Chamber of Commerce. With the survey results, these organizations will be able to identify and implement strategic programs to enhance the northeast Ohio dairy industry in Ashtabula, Geauga, Portage, Lake, and Trumbull Counties.

Response Rate & Demographics:
The dairy survey was mailed to 187 dairy producers (154 Grade A and 33 Grade M) in Ashtabula, Geauga, Lake, Portage, and Trumbull Counties in March 2013. Fifty-four farms responded to this initial mailing for a 28.9% response rate. A second mailing was mailed in April 2013 to the non-respondents. Twenty-seven of these surveys were returned for a final total of 81 surveys returned providing a 43.3% total response rate. The following number of surveys were returned from each county in the region: Ashtabula-17 (32.1% response rate), Geauga-35 (55.5% response rate), Lake-1 (50% response rate), Portage-2 (10.0% response rate) and Trumbull-26 (53.1% response rate).

Fifty-three percent (53.1%, n= 43) of the respondents reported they ship their milk through a cooperative with the remaining 46.9% (n=38) shipping as independent. Eighty-six percent (86.4%) of the respondents ship Grade A or Fluid Milk (n=70) with the remaining shipping manufacturer grade milk.

The respondents farm a combined 22,724 acres in the region with an average of 280.5 acres per operation (s.d. 524.4). The range of farm acreage was 7.5 acres to 4,000 acres. The respondents reported milking 6,001 dairy cows with an average herd size of 74 cows (s.d. 158.5). The 6,001 cow numbers represents 42.3% of the total milk cows in the region (n=14,200). The number of milk cows per farm ranged from 8 to 1,250 and the average milk production per cow was reported as 56.3 pounds per day (s.d. 12.9).

Seventy-six respondents reported 316 family members working on the farms. The average per farm was 4.2 family members (s.d. 2.6) of which 2.3 were classified as full time (s.d. 1.6). Thirty-two of the farms (39.5%) reported hiring non-family help. Non-family help was reported as 131 persons or an average of 4.1 per farm (s.d. 5.8). Forty-eight percent (47.7%) of these workers were classified as full-time workers. Three farms reported hiring 14 migrant workers.
Five-year Outlook
As part of the survey, dairy farms were asked to answer questions about their intentions during the next five years. The first question asked participants what would be the three principal reasons they would exit the dairy business during the next five years. Sixty-three of the respondents (77.7%) indicated they do not plan on leaving the dairy industry during the next five years. For the 18 producers who responded they were thinking of exiting the dairy industry, the major reasons cited were: retirement with someone else taking over (44.4%), shifting to other livestock or cash crops (38.9%), can’t make it financially (27.8%), and retirement with no one taking over the farm (27.8%). Table 1 shows the results of their selections.

<table>
<thead>
<tr>
<th>Reason for Exiting Dairy Business</th>
<th>Percent of Exit Farmers Citing this Reason</th>
<th>Percent of Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement, someone else taking over</td>
<td>44.4%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Shift to other livestock, cash crops, or other agriculture</td>
<td>38.9%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Can’t make it financially</td>
<td>27.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Retirement, no one taking over</td>
<td>27.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Want more time for family and other interests</td>
<td>16.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Other</td>
<td>16.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Better opportunities for off-farm employment</td>
<td>5.6%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Developer will buy land</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: Respondents were asked to select up to three choices

Some of the other reasons cited for exiting the dairy business during the next five years included: lack of quality help, drought of 2012, lack of forage supply, and death of the principal operator.

The second question asked was if the operation planned to continue to milk cows, what major objectives must be reached for them to be to do this. Fifty-four individuals responded to this question with the results show in Table 2. Fifty percent responded they needed to grow their herd size to meet profit goals.

<table>
<thead>
<tr>
<th>Major Objectives to Meet in Future to Continue Milking</th>
<th>Number</th>
<th>Percent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grow the size of my herd in order to meet profit goals</td>
<td>27</td>
<td>50.0%</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>35.2%</td>
</tr>
<tr>
<td>Modernize facilities to meet profit or family goals</td>
<td>13</td>
<td>24.1%</td>
</tr>
<tr>
<td>Change my style of dairying to meet profit goals (through, e.g. grazing, robotics or free stall parlors)</td>
<td>12</td>
<td>22.2%</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple choices

Over 1/3 (35.2%) listed “Other” as their response to this question. Some of the other major objectives listed on other included: stay the same (n=4); graze more (n=2); more value added projects such as cheese and bottling milk; continue to be more efficient; remodel barn; add heifer facility; change to organic; watch expenses and cut where possible; continue to increase crop farming operation to mitigate feed expense; will add three robots; better manure storage; improve genetics; clear more land, repair existing buildings and better grasses for grazing.
Respondents were also asked whether they planned on expanding their dairy operation during the next 5 years. Twenty-eight farms (34.6%) indicated they would expand their operation by adding an additional 818 milk cows in the region. The range for the additional cows per herd ranged from 3 to 150 cows. This increase equals 26 cows per farm (35.7 s.d.).

For the respondents looking to expand their operation, each was asked to select three major factors limiting expansion. These factors were in addition to milk prices and input costs such as feed and fuel. Fifty-one of the respondents provided answers to this question and their selections can be seen in Table 3. The top three factors limiting expansion were: land available to grow crops (60.8%), inadequate labor or unavailable labor (31.4%), and access to financing (29.4%).

<table>
<thead>
<tr>
<th>Table 3: Major Factors Limiting Expansion (not related to milk prices and feed &amp; fuel input costs)</th>
<th>Number</th>
<th>Percentage of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land available to grow crops</td>
<td>31</td>
<td>60.8%</td>
</tr>
<tr>
<td>Inadequate or unavailable labor</td>
<td>16</td>
<td>31.4%</td>
</tr>
<tr>
<td>Access to financing</td>
<td>15</td>
<td>29.4%</td>
</tr>
<tr>
<td>Local, State and/or Federal Regulations</td>
<td>10</td>
<td>19.6%</td>
</tr>
<tr>
<td>Land available for manure disposal</td>
<td>10</td>
<td>19.6%</td>
</tr>
<tr>
<td>Taxes</td>
<td>7</td>
<td>13.7%</td>
</tr>
<tr>
<td>Declining community support generally for dairy operations</td>
<td>7</td>
<td>13.7%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>11.8%</td>
</tr>
<tr>
<td>Weather</td>
<td>5</td>
<td>9.8%</td>
</tr>
<tr>
<td>Commercial or residential development in my area</td>
<td>5</td>
<td>9.8%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>3</td>
<td>5.9%</td>
</tr>
<tr>
<td>Community reaction, including zoning or permitting obstacles</td>
<td>3</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple choices

Participants in the survey were asked to select the facility improvements they plan on investing in over the next five years. Sixty individuals responded to this question. The top three responses were: housing for heifers (55.0%), increasing cow comfort (51.7%), and manure handling systems (35.0%). Some of the other facility improvements cited for the next five years were to build a machinery storage shed (n=2) and invest in a barley fodder system.

<table>
<thead>
<tr>
<th>Table 4: Facility Improvements Planned for the Next Five Years</th>
<th>Number</th>
<th>Percentage of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing for heifers</td>
<td>33</td>
<td>55.0%</td>
</tr>
<tr>
<td>Cow comfort</td>
<td>31</td>
<td>51.7%</td>
</tr>
<tr>
<td>Manure handling systems, including storage</td>
<td>21</td>
<td>35.0%</td>
</tr>
<tr>
<td>Feed handling systems, including storage</td>
<td>20</td>
<td>33.3%</td>
</tr>
<tr>
<td>Housing for calves</td>
<td>19</td>
<td>31.7%</td>
</tr>
<tr>
<td>Housing for dry cows</td>
<td>13</td>
<td>21.7%</td>
</tr>
<tr>
<td>Housing for milk cows</td>
<td>12</td>
<td>20.0%</td>
</tr>
<tr>
<td>Milking systems or facility, e.g. robots</td>
<td>9</td>
<td>15.0%</td>
</tr>
<tr>
<td>Renewable energy or energy conservation</td>
<td>5</td>
<td>8.3%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple choices
Dairy farmers were also asked to select which management improvements they anticipated to make over the next five years. Fifty-seven of the participants responded to this question. The top three management areas which improvement will be sought are: feed management (57.9%), genetic improvement (50.9%), and milking herd health management (45.6%).

<table>
<thead>
<tr>
<th>Table 5: Management Improvements Planned for the Next Five Years</th>
<th>Number</th>
<th>Percentage of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed management</td>
<td>33</td>
<td>57.9%</td>
</tr>
<tr>
<td>Genetic improvement</td>
<td>29</td>
<td>50.9%</td>
</tr>
<tr>
<td>Milking herd health management</td>
<td>26</td>
<td>45.6%</td>
</tr>
<tr>
<td>Calf and heifer health management</td>
<td>23</td>
<td>40.4%</td>
</tr>
<tr>
<td>Financial management</td>
<td>20</td>
<td>35.1%</td>
</tr>
<tr>
<td>Environmental improvement or conservation practices</td>
<td>13</td>
<td>22.8%</td>
</tr>
<tr>
<td>Transition cow management</td>
<td>12</td>
<td>21.1%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple choices

Under other management issues listed, the major item listed under “Other” comments was to improve their management ability to grow high quality crops (n=3) and pasture management.

**General Issues**

Each farm was also asked to respond to general issues affecting their farm. Respondents were asked to rank the importance of related topics to dairy farms and then provide qualitative feedback on their greatest success in dairy farming, their greatest concern for the future of dairy farming in Northeast Ohio, and to provide advice on how to maintain or increase regional milk production.

Respondents were asked to rate the importance of each of the following factors for their dairy operations. The highest rated areas included: dairy equipment and service (1.30); land availability (1.43); and labor (1.53).

<table>
<thead>
<tr>
<th>Table 6: Importance of related topics to dairy farms</th>
<th>1 = Very Important, 2 = Somewhat Important, and 3 = Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy equipment and service</td>
<td>1.30 (s.d. 0.52)</td>
</tr>
<tr>
<td>Land availability</td>
<td>1.43 (s.d. 0.70)</td>
</tr>
<tr>
<td>Labor</td>
<td>1.53 (s.d. 0.63)</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>1.57 (s.d. 0.72)</td>
</tr>
<tr>
<td>Farm equipment and service</td>
<td>1.58 (s.d. 0.61)</td>
</tr>
<tr>
<td>Milk market risks</td>
<td>1.61 (s.d. 0.70)</td>
</tr>
<tr>
<td>Feed providers</td>
<td>1.68 (s.d. 0.73)</td>
</tr>
<tr>
<td>Availability of financing</td>
<td>1.89 (s.d. 0.78)</td>
</tr>
<tr>
<td>Local community acceptance/support</td>
<td>1.91 (s.d. 0.74)</td>
</tr>
<tr>
<td>Outside advisors (nutritional, genetics, financial, Extension, legal/regulatory)</td>
<td>2.06 (s.d. 0.77)</td>
</tr>
<tr>
<td>Other</td>
<td>1.00 (s.d. 0.00)</td>
</tr>
</tbody>
</table>
Respondents were asked to list their greatest success in dairy farming. Below are their responses on a county by county basis.

**Ashtabula**
- Building a herd of registered cattle. There is more to profit than just milk. Breeding good cattle and selling them beats milking more cows.
- Change to free stall setup in 1995.
- Is coping with weather.
- Being top producing herd in the state of Ohio.
- A granddaughter coming back as dairy herdsperson and an excellent labor force.
- The fact I was able to obtain financing to get started 6 years ago.
- Grazing management.
- Breeding a 94 point cow.
- Staying financially viable for 32 years.
- Starting my dairy with no debt.
- Dairy farming has been good to us in the last 60 years. We paid for our farm, raised 5 kids, what more can anyone ask.

**Geauga**
- One simple answer: when milk prices are good you can be flexible.
- Raising my own feed and tiling ground.
- Making sure more goes out the back door that comes in the front door.
- Transition to organic and building up fertile soil.
- Was in the 80’s or 90’s when the milk price and feed price somewhat matched.
- Being able to give my children everyday availability to witness newborn animals giving them work which can be fun and satisfying.
- Being a care taker and good steward of the animals and the land.
- Working with the family and watching my genetics improving. Teaching the children how to an honest day’s work.
- Good feed and forages on the farm. Family support.
- Growing farm from nothing to becoming secure due to my good decisions. And hard work.
- Having good healthy cows.
- Paying my bills on time and raising 5 children.
- A dedicated staff. Healthy and productive herd of cows and heifers. Community support and acceptance because of the job we do. Forming alliances with processor, dair service providers, feed suppliers in NE Ohio.
- Grazing in spring and summer.
- Milk

**Lake**
- Giving visitors a better understanding of the dairy industry.
Portage
- Until lately we kept debt low. When we went out, the money received for cows covered all debt and we had some extra.

Trumbull
- Improvements, making a decent family living, learning as we grow older. Success is a journey not a destination.
- My first year 4-Her asking to go over to the barn. The job we have done the last couple of years in the show ring and number of heifers we have been having due to sexed semen.
- Having grown and expanded and modernized the farm since taking over from grandparents in the mid 80’s.
- Grass based dairy.
- Health and enjoying what you do.
- Developing a sound productive herd of cattle through genetics.
- Sand free stalls and spread sawdust in alleys.
- That we are still here.
- Starting in the early 80’s with nothing and raising our family to where we are today. Being able to supply a future for the next generation.
- Going organic in 2009-raise my own fed and get $32/cwt average for milk.
- Breeding genetically sound cattle that can represent themselves well at fairs and shows and are marketable.
- Milking more cows, for more production to buy newer equipment. Planting and having a good crop to harvest in the fall. Shed full of hay for the winter makes every year a success.
- Keeping cows healthy, bred back on time. Older cows give more milk than heifers. Quality milk to get bonuses. Stay on the ball with fieldwork, make as good as feed as possible.
- Udder care, feet and hoof management. Quality feed. Care of calves and heifers.

Respondents were also asked to identify their greatest concerns about the future of the dairy industry in Northeast Ohio. Below are their responses on a county basis.

Ashtabula
- New regulations and the continued constant fluctuation in milk prices.
- The loss of infrastructure.
- Animal rights activities.
- Land available.
- Young people are very disheartened about milking cows. Especially with grain prices as high as they are. Who wants to work 24/7/365 milking cows and not making money when you see grain farmers will all kinds of new paint.
- Legalized work force for cow milkers.
- Governmental regulation.
- Low milk prices and high cost of expenses.
• Lack of options for equipment dealers, replacement heifers, feed suppliers and milk marketing.
• Input costs.
• No market or services for small dairies.
• Lack of land for pasture and manure disposal. Lack of price for milk. Lack of dairy infrastructure.
• We need dairy farmers in Northeast Ohio but labor and 7 days a week work is hurting the young people.

Geauga
• Milk prices and how to keep overhead down.
• Not enough family farms—try sustainable farming practices
• High feed costs and milk prices not being profitable.
• Too many houses and not enough land & knowledge farmers and government money. Not having a fair price for conventional milk but going ahead and giving supplements to farmers. And burning 1/3 or corn resulting in government debt beyond help. I ship organic milk and I am very happy with the price they give.
• Community acceptance that operations need to grow in size to gain efficiencies to be profitable.
• Milk pricing. Feed and seed and fertilizer expenses. Profitability.
• People and their lack of knowledge on what we do.
• Pricing milk and feed prices.
• Regulations that might come.
• Feed Costs and Milk Price. Profitability or income over feed costs.
• High seed and fertilizer and feed prices.
• Milk Price (n=2)

Lake
• Inputs and availability of livestock getting farther away.

Portage
• Infrastructure is getting thin.
• Vet availability, high cost of production, and quality help.

Trumbull
• Young Farmers being able to survive financially. Cope with the peer pressure of not having such a responsibility. Land availability at an affordable price.
• The growing number of dairyman going to grain farming and causing a land grab at any cost. The continued urbanization of our region.
• Labor—having help available.
• Being able to sell raw milk. Keeping the grass based standard for organic milk.
• Government and people.
• Potential issues with EPA with regards to manure handling, herbicide application, ect.
• Milk price and feed cost (n=2)
• Stupid and ridiculous regulations.
• Keeping the infrastructure for the future. EPA and environmental concerns. Wondering how or when the government will mess us up again.
• Production costs exceed the prices consumers will be willing to pay for dairy products.
• We could be forced out of business by commercial or residential growth.
• Land being bought and developed. Trying to push farmers out.
• Big farmers push us little guys out the back door. Milk prices accordingly to other prices.
• Community support and to keep youth interested.
• Milk prices versus fuel, hay, groceries

Respondents were asked to offer their advice for organizations trying to maintain or increase milk production in NE Ohio. Below are their responses on a county basis.

Ashtabula
• Do not time dairyman’s hands with silly regulations –maintain a sustainable milk price for milk.
• Impact of governmental regulations. Ability to market milk directly to consumers.
• Keep milk price steady and feed cost lower.
• Somehow there has to be a better way to price milk. It is way too complicated. There needs to be a way to contract all milk price instead of classes.
• Price. In the last 10 years we have lost about 2,000 dairy farms a year about 50,000 dairy farms now in operation with total dairy cow numbers about 9.3 million. So what will the next 10 years be? Average 1896 head per farm now. 10 years….300 or???
• It is going to be hard unless the milk pricing becomes more realistic.
• You milk cows for 6 weeks twice a day for 7 days a week, then write your report.
• Push Congressman to cut direct payments to grain and dairy farmers. Cut USDA crop insurance program by increasing risk for grain farmers.
• Good luck.
• Economics will control the whole situation and these efforts would be better spent elsewhere.
• Work with young farmers that want to start a dairy.
• Pay more for milk so farmers can make a profit and have a better lifestyle.
• Years ago when you were told by your city friends that farming was lot of work; they did it with respect. Today, the younger people tell you it is a lot of work in a laughing manner. I wonder how much they know about life?

Geauga
• It is not about more milk. It is about decent prices for the milk.
• Good idea if we get paid enough.
• Somehow keep grain prices lower for dairy farmers or keep milk prices high enough to cover farm expenses.
• Support intensive grazing and soil knowledge (small farmers). Don’t support ethanol production.
• Public acceptance that grandpa’s way of food production will not meet today’s demands for high quality, safe, affordable, and plentiful food supply.
• Make sure the farmer gets a fair price for his product first. If there is no profit there is no use to increase milk production!
• Educate people that modern agriculture produces the safest food in the world.
• Good genetics.
• Overproducing anything does not make for good net profit.
• Entertain a system similar to hogs and poultry where there is more certainty with profitability. Dairy farming is a capital intense with increasing volatility. Our industry will continue to shrink because many are unable or unwilling to accept these high levels of risk.

Portage
• Don’t overlook small farms. Direct marketing farms, Amish, organic farms etc.
• Help family farms transfer to the next generation.

Trumbull
• Maybe hold more meetings such as Holmes and Wayne County areas on grazing and milking.
• The outlets for our milk are getting to be a real problem. We are milking 1000 pounds a day and can’t get someone to pick it up for Grade A.
• Finding financial support for anyone wanting to start. Workforce for established farms.
• Keep dairy quality premiums and fair pricing.
• I am more concerned with sales and marketing versus production.
• Good quality forage and a consistent ration.
• Make it profitable and the milk will be here.
• Keep letting people know how many jobs and how much money a dairy farm provides for the community. I like your regional short day meetings or schools. Most times I get very good information to apply at home.
• We need a better balance between the cost of inputs and the price consumer demand has set for our products.
• Manage supply versus demand. Provide an excellent product.
• Need a higher and steadier milk price.
• Just do your best in the 3 major categories. Herd Health. Maintenance and Field Work.