

**The Ohio State University
College of Veterinary Medicine
Veterinary Medical Center**

**Sustainable Rural Veterinary
Practice in Jackson, Ohio**

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Tab A – Background and Context



Sustainable Rural Veterinary Practice in Jackson, Ohio Background and Context

Background and Context

Appalachian Ohio consists of 29 counties located in the east-central, southeastern and southern areas of Ohio. Most of the counties in this region are considered economically distressed and people there live in poverty with an average per capita income of \$18,009. The federal and state governments recognize the unique challenges of communities in this area and have allocated resources to support economic development efforts in the region. The Governor's Office of Appalachia (GOA) was created in 1988 to promote economic development in the Appalachian region of Ohio through advocacy and financial partnership. Its formation came roughly 20 years after the creation of the Appalachian Regional Commission (ARC) in Washington D.C., when Ohio officials realized that Appalachian Ohio needed a central office to coordinate its economic development and partnership endeavors.

Veterinarians play a vital role in the social structure of rural communities and work at the interfaces of human, animal and environmental health. These interfaces are constantly changing due to a number of factors including alterations in land use; climate and environmental changes; interactions between domestic livestock and wildlife; creation and operation of large terrestrial and marine food production systems; microbial and chemical pollution of land and water resources; the development of antimicrobial resistant bacterial pathogens; and emerging infectious zoonotic diseases. The loss or absence of veterinarians and veterinary practices in rural areas has a significant and detrimental impact upon the community as a whole. Although veterinarians contribute to communities in many ways, one way that is particularly relevant to the Appalachian Ohio community is by working to improve food animal production systems ensuring a safe food supply, facilitating livestock bio-security, and safeguarding from foreign animal diseases. The safety of our food supply begins on our farms and healthy animals produce healthy food.

Ohio's number one industry is the \$107 billion agricultural industry and it is a vital industry in Appalachian Ohio where there are many small family farms with livestock. In these 29 counties there are a total of 16,780 farms with an average of 579 farms per county and an average of 144 acres per farm. The total number of animals (food animals, companion animals, horses and birds) in these counties is 11 million and according to the American Veterinary Medical Association, there were only 28 food animal veterinarians in these counties in 2008. Certain counties including Jackson and its surrounding counties appear to be underserved by the veterinary profession.

Understanding the economic challenges that communities in the Appalachian Ohio region face, and the significance the agricultural industry is to this region, livestock producers approached the Ohio State College of Veterinary Medicine (CVM) with a request to expand veterinary care in this region of the state. Subsequent to this meeting, constituents from a variety of backgrounds, including producers, area veterinarians, business, civic and community leaders, state and local government leaders, governmental agencies, were contacted and broader discussions were held among this group. In response to the request by these constituents, a White Paper

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(See Appendix D) was prepared by the CVM in August 2011 in which a proposal was presented to further explore two specific options to establish a sustainable rural veterinary practice as a satellite of the Veterinary Medicine Center in Appalachian Ohio. The first option was to acquire an existing practice in the region and make the required renovations to this facility or to renovate existing facilities in Jackson County currently operated by the Ohio Agricultural Research and Development Center (OARDC). The second option was to build a new stand-alone facility near one of the University's extension offices.

In November 2011, the CVM engaged John Schroepfer to assist with the preparation of a business plan for the proposed veterinary practice to be established at the existing facilities in Jackson County operated by OARDC. The business plan was developed through a process that utilized a variety of people and resources. The CVM provided Mr. Schroepfer with resources to support the development of the business plan including statistical data related to farm and pet animals and veterinarians in the 29 Appalachian counties of Ohio. After speaking with veterinarians from rural practices and reviewing travel times to county seats near the Jackson facility, it was determined that nine additional counties were serviceable from the OARDC facility in Jackson County. Most of the economic and market data for the 10 Appalachian counties were taken from reports by the US Dept. of Agriculture, 2007 Census. The CVM provided contact information for seven veterinarians practicing in rural communities of Ohio and two livestock producers in the Jackson County area. The following veterinarians were contacted to provide practice recommendations for the business plans:

1. Dr. Craig Miesse (rural mixed-animal practice in Mercer County)
2. Dr. Scott Pendleton (mixed-animal practice in Harrison County – Appalachian region)
3. Dr. Doug Wiley (mixed-animal practice in Columbiana County – Appalachian region)
4. Dr. Jon Ellis (equine and farm animal practice in Greene County)
5. Dr. Angie Dahse (primarily equine and farm animal practice in Gallia County – Appalachian region)
6. Dr. Harold Kemp (rural large animal practice in Belmont County – Appalachian region)
7. Dr. Valerie Anderson (rural primarily mixed animal practice in Jackson County – Appalachian region)

Each of the veterinarians had established successful mixed animal practices or large animal practices in rural communities of Ohio and many were practicing in the Appalachian Ohio region. These veterinarian practitioners provided valuable insight into the unique aspects of a successful rural veterinary practice and provided specific suggestions regarding development of a sustainable practice in the Appalachian region of Ohio. Their recommendations are the basis for the practice concepts included in the business plan. The producers contacted to provide suggestions for the business plan included:

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1. Jim Phillips – beef cattle, herd size of approximately 24 producing cows
2. Dale Neal – beef cattle, herd size of approximately 20 to 25

Producers were engaged to test key aspects and assumptions of the early drafts of the business plan. Concepts from early drafts were discussed and modified based on feedback from producers. The CVM also provided historical financial and census data for the large animal practice in Marysville, Ohio which served as a basis for the revenue and expense projections of the proposed satellite facility in Jackson County.

A meeting was convened on February 2, 2012 with a large and diverse group (see the list below) of people with an interest in economic development and in the agricultural/commodity industries where discussions led to a better understanding of several larger and significant issues impacting the Appalachian region, including deficiencies and gaps in the supply chain in the livestock and food production industry in Appalachian Ohio.

Some of the key points that emerged during these discussions included:

- Veterinarians play a vital role in rural communities, such as serving to promote the health and well-being of animals and people, a resource for infectious diseases in people, role models, professionals, community leaders, and mentors to motivate and inspire children, among others.
- Although not an exhaustive list, some of the deficiencies or gaps identified in Appalachian Ohio included a rather widespread lack of the necessary infrastructure (transportation, slaughterhouses, processing plants, freezers/coolers and other facilities), which limits the growth of the livestock or food production industry in this region.
- There are real business opportunities related to livestock and agricultural industries in Appalachian Ohio.
 - The land in the Appalachian foothills is ideal for producing differentiated or value-added foods such as organic, locally grown foods that can fill niche markets and/or open new markets.
 - The Snowville Creamery in Pomeroy, Ohio is a fine example.
 - It is important to capitalize on the unique strengths of this region, including some of the finest pastures for growing pasture-reared livestock, including grass-fed beef and lamb, free-range meats such as pork and goat, and free-range poultry and eggs.
- Participants of the meeting discussed the need to better understand the culture and livestock rearing practices of the Appalachian Ohio area, and to nurture relationships, build trust among different constituents, and work together toward a common goal.
 - Pasture-reared meats using rotational grazing and other sustainable practices are aligned with goals of appropriate treatment of animals, the production of high quality food, which provides for good health, and that can benefit the producers and region economically.
- Effective solutions will require an integrated approach to animal health that includes but not limited to plant and soil sciences, crop production, nutrition, reproduction, and veterinary medicine among others.

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- Finding solutions to the complex and interconnected problems associated with the Appalachian Ohio region will require a bold, visionary and collaborative (private-public partnership) approach among the broad and diverse constituencies that are impacted by and/or impact economic development and agricultural/food production systems and industries.

The participants in the meeting on February 2nd included the following:

1. Lonnie King, DVM, Dean, OSU College of Veterinary Medicine
2. Rustin Moore, DVM, Associate Dean, OSU College of Veterinary Medicine
3. Evan Blumer, DVM, New Harvest Ventures
4. David Wilhelm, Woodland Venture Partners and Hopewell Ventures
5. Jason Wilson, Director, Ohio Governor's Office of Appalachia
6. Tony Logan, State Director, USDA Rural Development
7. Jeanne Wilson, Regional Representative, Senator Brown's office
8. Warren Taylor, Owner, Snowville Creamery
9. John Cary, Shawnee State University
10. Bill Dingus, Director, Lawrence County Economic Development Corporation
11. Valerie Anderson, DVM, Animals Unlimited, (Practitioner)
12. Brad Mitchell, Senior Director, Battelle for Kids
13. John Schroeffer, Principal, CFO Partners, LLC
14. Thomas Parkinson, Partner, Hopewell Ventures
15. Angie Hawk Maiden, Director, ACENet Ventures
16. Michelle Decker, Director, Rural Action
17. Lisa Jollick, Ohio University George Voinovich School
18. Karen Griffith, Founder, Southeast Ohio Animal Science and Veterinary Technology Center

Three business plans have been developed for CVM to consider. Each plan should be reviewed and considered independent of others since each business plan has different service offerings and, therefore, varying types of professional capabilities and capital resources required to establish and operate the practice. Prior to further pursuing any of the three options presented, it is recommended that CVM engage in discussions with several large producers to 1) confirm the need for veterinary services in this region and to 2) more accurately understand the veterinary services that are in demand by producers in the region. The three plans are presented in Tab B (full-service veterinary practice for farm animals, horses and companion animals) Tab C (full-service veterinary practice for farm animals) and Tab D (limited-service veterinary practice for farm animals). There are notable differences in the capital required in each plan as well as the required professional capabilities of the veterinarians in each of the business plans. The differences are summarized below.

The full-service veterinary practice for farm animals, horses and companion animals will require external capital resources of approximately \$2.0 million for infrastructure and facility costs and an additional \$200,000 for start-up and operating expenses during the

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first four years of operations. It is also important to note that this business plan requires a wide spectrum of professional veterinary capabilities since the plan assumes a full-service practice for farm animals, horses and companion animals. The full-service veterinary practice limited to farm animals requires external capital resources of approximately \$2.0 million for infrastructure and facility costs and \$175,000 for start-up and operating expenses during the first three years of operations. Although not as broad as the previous business plan, this full-service practice will also require a wide range of medical and surgical veterinary skills to treat farm animals. The limited-service veterinary practice will require external resources of approximately \$150,000 for limited infrastructure improvements and construction of a modest facility and an additional \$125,000 for start-up costs and operating expenses during the first three years of operations. Relative to the previous two plans, this plan requires the narrowest range of veterinary skills.

The business plans presented in this document are not intended to address the larger issues or other deficiencies or gaps discussed during the meeting. The business plans are however, presented to address the apparent lack of available veterinary care for farm animals in the ten county region surrounding Jackson County in Appalachian Ohio and is a proposed solution to only one of several significant issues discussed during this meeting.



**Sustainable Rural Veterinary Practice in Jackson, Ohio
Background and Context**

A White Paper: Establishing a Sustainable Rural Veterinary Practice in Appalachian Ohio

Establishing a Sustainable Rural Veterinary Practice in Appalachian Ohio



The Ohio State University College of Veterinary Medicine – August 2011

COLLEGE OF VETERINARY MEDICINE



Sustainable Rural Veterinary Practice in Jackson, Ohio Background and Context

Executive Summary

Establishing a Sustainable Rural Veterinary Practice in Appalachian Ohio



Veterinarians play vital roles in rural communities because they work at the interface of human, animal and environmental health. For example, veterinarians promote the health and well-being of domestic animals; help prevent the spread of disease between wildlife and domestic animals; and often times they are the most knowledgeable public health officials in communities regarding infectious zoonotic diseases, which are transmissible between animals and people. Veterinarians receive a broad-based and comprehensive education that, when coupled with real world experiences, uniquely positions them to contribute meaningfully to and positively impact the lives of both animals and people.

Appalachian Ohio is an economically depressed 29-county region in the eastern part of the state extending from east-central to southern Ohio. Several rural counties and communities in this region of Ohio have limited access to routine or emergency veterinary care and are thus underserved by veterinarians. Animals and animal-related agriculture are vital to the economic stability of rural communities. Thus, veterinary services are immensely important and eminently needed to provide much needed services and support farmers' livelihoods and improve productivity and economic profitability of these enterprises. This region of Ohio has numerous farms, many of which have livestock and/or poultry. However, these farms are characterized by fewer animals of mixed species. This type of agricultural production system is counter to the shift toward large-scale farms with greater numbers of animals of the same species. Animals are more dispersed and thus veterinary medical services are more difficult to provide.

The lack of a dedicated veterinary presence can be detrimental to a community. Veterinarians are a valuable resource not only for issues related to domestic animals but also for public health concerns, wildlife conservation, and maintenance of ecosystems. Shortages of veterinarians in rural Ohio and America are due to several factors, including shifting animal populations and demands for veterinary services, decreasing numbers of veterinary school applicants with rural backgrounds, increasing educational debt, limited career opportunities for spouses in rural communities, and the rigors of the activities associated with large animal practice. This is especially true if the veterinarian is the sole practitioner in the area.

Veterinary colleges and state and federal governments have taken action in response to the anticipated shortage in veterinarians to serve rural areas by recruiting and encouraging veterinarians

to pursue careers in rural veterinary practice via scholarship and tuition reimbursement programs. These actions have begun to have an impact on the recruitment of veterinarians into rural communities but retention of veterinarians in these areas remains a challenge that must be addressed for long-term success. Long-term sustainability in a rural community is dependent upon a veterinarian's ability to generate sufficient income to provide quality veterinary care, service student debt load, and support a family. Recruitment and retention of veterinarians in rural communities, such as in Appalachian Ohio, will require the development of a sustainable business and practice model that addresses the salary, debt reduction and quality of life issues. The traditional practice model no longer appears to be sustainable in these settings.

In the summer of 2010, the Ohio State College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. The ensuing meeting generated broader discussions among other producers, veterinarians, businesses and community and civic leaders in Appalachian Ohio.

What resulted was a simple, but monumental, request by the producers: **Would the Ohio State College of Veterinary Medicine consider establishing a satellite rural veterinary practice and clinic in the Appalachian region of Ohio to serve these underserved communities and citizens?**

In 2010, the Ohio State College of Veterinary Medicine began to explore the feasibility and logistics of establishing a rural veterinary practice in Appalachian Ohio. The potential benefit to the veterinary profession of a successful rural practice includes serving as a model for rural veterinary practice in other rural communities in Ohio and across the United States. The College proposes to perform an inclusive and in-depth assessment of veterinary business options to determine the feasibility of establishing such a practice model. We will engage a diverse group of constituents and partners, including producers and animal owners; area veterinarians; business, civic and community leaders; local, state and federal legislators; governmental agencies; foundations; associations; and other appropriate individuals and organizations.

Establishment of a sustainable rural veterinary practice in Appalachian Ohio will require external financial assistance in the form of start-up capital and fixed-asset costs, and will likely require some level of ongoing funding. Further study and exploration are necessary to determine the resource needs for such a model practice.

The Ohio State University College of Veterinary Medicine – August 2011

Sustainable Rural Veterinary Practice in Jackson, Ohio

Background and Context

Background and Need

Important Role and Responsibilities of Veterinarians in Society and Communities



Veterinarians play a vital role in the social structure of communities, especially in rural America where they provide valuable services to both community members and food production systems. Veterinarians view health through the lens of public health, the branch of veterinary medicine that deals with people and animals as populations rather than individuals; thus they work at the interfaces of human, animal and environmental health. These interfaces are constantly changing due to a number of factors including alterations in land use; climate and environmental changes; interactions between domestic livestock and wildlife; creation and operation of large terrestrial and marine food production systems; microbial and chemical pollution of land and water sources; the development of antimicrobial resistant bacterial pathogens; and emerging infectious zoonotic diseases. Over the last three decades, 75% of human infectious diseases have originated from or through animals. Veterinarians are uniquely positioned with their broad-based and comprehensive education and experience to understand these and other issues facing rural communities, and to contribute ideas to solutions to address these complex challenges. Today, veterinarians are very much part of a community health team and work closely with other health professionals.

Veterinarians contribute to communities in many ways. Veterinarians promote the health and well-being of animals through preventive wellness care and treatment of ill and injured animals. Veterinarians work to improve food animal production systems ensuring a safe food supply, facilitating livestock biosecurity, safeguarding from foreign animal diseases, and serving vital roles in community-based emergency and disaster preparedness. The safety of our food supply begins on our farms and healthy animals produce healthy food. Frequently, veterinarians become leaders, mentors and role models in the community serving as members of school boards and as local public health officials. The loss or absence of veterinarians and veterinary practices, especially in rural areas, has significant and detrimental impact upon the community as a whole.



Shortage of Rural Practice Veterinarians

A landmark study was conducted in 2006 by The Food Supply Veterinary Medicine Coalition. The study forecast that the demand for veterinarians in food supply medicine would outpace the supply of graduates to fill those jobs through 2016. Food supply veterinary medicine is a major component of most rural practices but the two terms are not synonymous. Most rural communities across Ohio and the United States have diverse needs with respect to veterinarians. Veterinarians provide services to small family farms or large producers with a variety of livestock, but they also care for llamas and alpacas, horses and household companion animals such as dogs and cats. Veterinarians in rural practice settings serve as general practitioners, which like in human medicine (family medicine physicians) is counter to the trend for increased numbers pursuing careers in various specialties. This among other factors contributes to the deficiency of veterinarians and services in many rural communities across the state and country.

The percentage of new veterinary graduates pursuing careers in rural communities appears to be diminishing. The American Veterinary Medical Associations (AVMA) estimates that there are approximately 500 counties in the United States with significant populations of food animals without a resident veterinarian. Potential factors contributing to this trend include the rigors of large animal practice, shifting animal populations and demands for veterinary services, decreased number of current veterinary students who have rural backgrounds, lack of social and cultural opportunities in rural communities, lack of suitable career opportunities for spouses of veterinarians in rural communities, increasing veterinary student educational debt, starting salaries for veterinarians in rural communities, lack of mentorship and support of new graduates, and concern about work-life balance and quality of life.

The long-term sustainability of a veterinarian in a location is dependent upon his or her ability to generate an income sufficient to maintain the equipment and facilities required to provide quality veterinary care while paying back student loans, establishing a residence, and providing the quality of life they want for themselves and their families. The average debt load for a veterinary graduate in 2009 increased to approximately \$130,000 with about one-third of graduates having a debt of more than \$150,000. Starting salaries have failed to keep pace with the increased tuition and debt load; the starting salary of new graduates in 2009 was \$64,826 regardless of the career area they chose. The imbalance between debt load and starting salaries leads new graduates to pursue career opportunities that enable them to repay their student educational debt while covering their cost of living, which often steers them away from rural practice even if they have such a career interest.

Clearly, the current economic model of rural practice is not sustainable in many locations in the United States. No matter the causes of this failure, the absence of a veterinarian deprives communities of much needed services and reduces the prospects for growth. A viable and sustainable business and practice model must therefore be developed to recruit and retain veterinarians in these currently underserved areas.

The Ohio State University College of Veterinary Medicine – August 2011

Sustainable Rural Veterinary Practice in Jackson, Ohio

Background and Context



Actions to Address the Rural Veterinary Shortage

Veterinary colleges and state and federal governments have taken a number of actions in response to the perceived and anticipated shortage of veterinarians in rural areas. Some colleges have altered their admissions programs, reserving positions for food animal oriented students or starting "early-admissions" programs for students with demonstrated interest. Other colleges have expanded scholarships for students with a demonstrated career interest in this area.

Loan repayment programs have been enacted by states and the federal government, including the Veterinary Medicine Loan Repayment Program (VMLRP) through the United States Department of Agriculture (USDA). This program provides up to \$25,000 annually for each veterinarian selected to practice in a designated shortage area. These areas are determined by factors such as geographic area and the need for specific types of practice. In November 2010, the USDA's National Institute of Food and Agriculture (NIFA) announced it will offer 62 rural veterinarian awards to repay their veterinary school loans in return for their services in areas lacking veterinary services. Recipients are required to commit three years to this rural practice and loan repayments are limited to the principal and interest on government and commercial loans received for the attendance at an American Veterinary Medical Association (AVMA)-accredited college of veterinary medicine. Loan repayments made by the VMLRP are taxable income to participants but a federal tax payment equal to 39 percent of the loan payment is made directly to the awardees' IRS tax account to offset the increase in income tax liability. While this is a helpful program, it lacks the scale and scope to attract and retain veterinarians in rural communities across the United States.

At least 19 states have enacted legislation or created programs to give financial incentives to veterinarians who work in food animal practice. There are also financial incentive programs provided by non-governmental agencies or associations, including the Food Animal Veterinarian Recruitment and Retention Pilot Program organized by the AVMA and the American Veterinary Medical Foundation and sponsored by several veterinary pharmaceutical companies. There were five recipients announced in October 2010 each receiving a \$100,000 incentive distributed over four years of service in areas of need.

Although these financial incentives may help to recruit veterinarians into these underserved areas, unless a sustainable business and practice model is developed, it is uncertain whether these recipients will stay in these areas once their term of service is completed. The long-term success of these programs is dependent upon development and implementation of a sustainable practice and business model. It is our belief that these incentives will not lead to a long-term sustainable situation to ensure retention of veterinary services in these areas, and thus a different, and perhaps complimentary, approach will be necessary.

Agriculture and Rural Ohio

Rural communities are vital to Ohio's economy and way of life but these communities face challenges regarding economic development, agriculture, education, health and more. Ohio's rural communities can thrive and help solve pressing national problems such as providing a safe and healthy food supply; producing renewable energy to move us toward energy independence; and helping address global warming, environmental pollution and loss of biodiversity; among others. Furthermore, improved animal health services should lead to improved income for producers and could eventually lead to increased numbers of animals in these areas. If these occur, economic security of this region may improve gradually.

Ohio's number one industry is the \$107 billion agricultural industry. Ohio has 75,000 farms and 45,000 of these have some type and level of animal production system. More than one in seven Ohioans are employed in an agricultural related business. Ohio is a world leader in producing milk, cheese and eggs. Nationally, Ohio ranks 1st in swiss cheese production, 2nd in egg production, 5th in dairy manufacturing plants, 7th in number of chickens sold, 9th in hog production and cheese production, and 11th in milk production. Ohio is also a leader in terms of crop production and between 40-50% of grain production is used for animal feed. Thus, a healthy and growing animal agricultural system is a critical market for plant/crop agriculture.

So that all Ohioans can be confident of a safe and wholesome food supply, veterinarians play key roles in assuring food safety and protecting and caring for food animals on farms throughout the state. This includes promoting the health and well-being of food animals, testing and monitoring animals to make sure they are healthy and safe to enter the food chain, and continues through manufacturing and processing where state inspectors oversee cleanliness and sample products, and finally verification of safety through stringent, scientific testing in state labs to make sure animal-derived food products are safe to eat. Food safety begins on the farm (pre-harvest) and healthy animals with good disease prevention practices result in reduced risk of food-borne illnesses in people and a safer food supply chain.



The Ohio State University College of Veterinary Medicine – August 2011

Sustainable Rural Veterinary Practice in Jackson, Ohio

Background and Context

Important Role and Impact of Veterinarians in Ohio

Nearly 8 million people in Ohio start the day by interacting with animals. Ohioans share their homes with 3.6 million cats, 3.2 million dogs and nearly one-half million birds. There are approximately 2.6 million “food animals”, primarily cattle and hogs, residing on 45,000 farms along with more than 30 million chickens and turkeys. Additionally there are more than 320,000 horses and thousands of goats, sheep, llamas, alpacas and other, more exotic creatures that dwell among us across Ohio. Animals are vitally important to the lives of Ohio’s citizens.

Animals enrich our lives and improve our health. They depend on us and we are dependent upon them. We depend on dogs and other animals for companionship as well as service in the form of police protection, visual assistance, and numerous other activities. Pets have become an integral and vitally important component of the family structure. Interaction with pets provides mental and physical health benefits. Owners and caretakers of animals expect the same sophisticated medical care for their pets that they receive for other family members, and they deserve access to veterinary medical care for their pets and animals. We depend on livestock and poultry for food and nourishment, and they depend upon veterinarians to ensure their health and well-being.

The responsibility for the health and safety of all of these animals rests with Ohio’s veterinarians. Nearly 3,500 veterinarians work in the state and 85% of these are graduates of The Ohio State University College of Veterinary Medicine. Of these veterinarians, at least 65% are engaged in private practice where they are responsible for the health and well-being of companion animals, food animals, horses, exotics and wildlife.

Veterinary practitioners, as small business owners, contributed \$1.1 billion to Ohio’s economy in 2008 and are responsible for many jobs. When other related segments are included, veterinary medicine provided nearly \$2 billion to the state’s economy. Ohio has approximately 1,100 private veterinary practices and clinics, which represent key businesses employing more than 12,000 personnel and service communities across the state. The impact of veterinary medicine on jobs in Ohio extends beyond those employed as veterinarians. More than 59,000 Ohioans work in 14 separate economic sectors related to veterinary medicine, from animal food manufacturing to zoos and racetracks, from pet supply stores to veterinarians’ offices; from medical equipment and supply manufacturers and wholesalers to biotechnical research and development laboratories. In total, there are approximately 3,600 establishments devoted to one of those activities and closely associated with both public and private practices and businesses. These businesses add another \$3 billion to the state’s economy. Collectively, Ohio veterinarians directly contribute nearly \$2 billion to the state economy, add \$3 billion in associated businesses, and protect the \$107 billion agricultural industry. Whether working with individual animals or large herds or flocks, Ohio veterinarians improve animal and human health, add to the economy, and protect key assets.



The Ohio State University College of Veterinary Medicine – August 2011

Sustainable Rural Veterinary Practice in Jackson, Ohio

Background and Context



Rural Appalachian Ohio and Veterinary Medicine

Of Ohio's 88 counties, 29 are located in the bioregion and political unit in the eastern part of the state extending from east-central to southern Ohio and characterized by the foothills of the Appalachian Mountains, known as Appalachian Ohio. These 29 counties are further divided into 11 in southern, 8 in southeastern, and 10 in east central Ohio. Ten of the 29 Appalachian counties are considered economically distressed – a criteria based on 150% of the US employment rate, 150% of the US poverty rate, and 67% or less of per capita income. Four additional counties are considered on the margin for this definitional standard. It is estimated that 17.4% of Ohio's Appalachian citizens live in poverty with an average per capita income of just \$18,009.

Much of the veterinary profession's impact is felt in Ohio's rural-based agricultural sector, and is responsible, for among other things, assuring an abundant, relatively inexpensive and safe food supply for Ohio citizens. Many farms in Appalachian Ohio are small family farms, including beef cattle, hogs, and sheep and goats. And yet, some rural areas of the state, especially Appalachia, are significantly underserved by the veterinary profession.

According to the Ohio Veterinary Medical Association's database of veterinarians, there are a total of 215 veterinarians in the 29 counties representing Appalachian Ohio with 71 classified as either food animal (28) or mixed-animal (43). The number of total veterinarians range from 0 (Coschocton, Monroe, Noble, and Vinton) to 29 (Clermont) and the number of food animal or mixed-animal veterinarians in these counties range from 0 (9 counties, including Coschocton, Jefferson, Monroe, Morgan, Noble, Adams, Lawrence, Pike and Vinton) to 9 (Columbiana). Most veterinarians in these counties work principally on companion animals with a relatively small number and percentage willing or interested in providing at least limited services for food animals. According to a report by the American Veterinary Medical Association, there were only a total of 28 food animal veterinarians in these counties in 2008.

The total number of animals (food animals, companion animals, horses and birds) in these counties is nearly 11 million with numbers per county ranging from 25,821 (Vinton) to over 5.5 million (Holmes) and an average of 343,414 animals per county. The average number of animals per veterinarian in these counties is over 41,958 with a range from 8,100 (Clermont) to 618,740 (Holmes). The counties that appear to be "underserved" include Adams, Coschocton, Gallia, Harrison, Hocking, Jackson, Lawrence, Meigs, Monroe, Morgan, Noble, Perry, Pike, Ross and Vinton, and others are vulnerable. Some of these counties might receive sufficient veterinary services from veterinarians in adjacent or nearby counties which may have more veterinarians classified as food-animal or mixed-animal practitioners; however, it is unlikely this occurs with any regularity, consistency or dependability.

There are a total of 16,780 farms with an average number of farms per county of 579, average total farm acreage per county of 4,177 acres, and an average farm size of 144 acres in these Appalachian counties. The total land area of these counties is 14,276 square miles with an average of 492 square miles per county. It should be noted that regardless of the total number of animals in a given county, veterinarians in these areas often are required to travel long distances to provide on-farm veterinary services. This is neither an efficient nor cost-effective practice model, especially when providing services for individual animals vs. preventive healthcare for herds or flocks. This is particularly true for veterinarians who function as solo practitioners since traveling long distances from their practice base leads to inefficiencies and inability to provide regular and reliable services for their clients. The issue of geographical distance and related travel time (fuel costs, inefficient business model, etc.) must be taken into consideration when assessing a sustainable practice and business model.

When farmers and producers in this region need veterinary assistance for their animals, the limited options include trying to access a local veterinarian or trying to get by without one. If a veterinarian in the region is contacted, these practitioners could travel to the farm to provide services, refer the client to another practice, request the owner transport the animal to their practice/clinic, or refer the client to the Ohio State College of Veterinary Medicine's Veterinary Medical Center (90+ mile drive). Regardless of the option selected, rural Appalachian Ohio can be accurately characterized as underserved by the veterinary profession. The potential consequences are serious. Farmers and producers depend on the veterinary profession to help sustain their livelihoods, and Ohioans depend on healthy farm animals for a safe food supply.

In the summer of 2010, the Ohio State College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. The ensuing meeting generated broader discussions among other producers, area veterinarians, businesses, and community and civic leaders in Appalachian Ohio. In addition, numerous meetings and conversations took place among College leaders, the University administration, and the Ohio Veterinary Medical Association, among others.

What resulted was a simple, but monumental, request by the producers: **Would the Ohio State College of Veterinary Medicine consider establishing a satellite rural veterinary practice and clinic in the Appalachian region of Ohio to serve these underserved communities and citizens?**

This proposal presents the College's response to that request.

The Ohio State University College of Veterinary Medicine – August 2011

Sustainable Rural Veterinary Practice in Jackson, Ohio

Background and Context

Proposal

As part of The Ohio State University, Ohio's land grant university, the College of Veterinary Medicine is committed to respond to this request by constituents from Appalachian Ohio and to further explore the feasibility and logistics of establishing a successful and sustainable rural veterinary practice as a satellite of the Veterinary Medical Center in Appalachian Ohio to serve and support the communities in this region.

The College already has shown that it has the ability to operate such a rural veterinary practice. The OSU Marysville Large Animal Service was first established in 1971 by acquisition of an existing veterinary practice. A new 10,000 square foot facility was completed in 2005. Today, it serves farmers and producers in 17 north- and west-central Ohio counties, providing high quality veterinary care and modern production assistance. The practice has grown dramatically since its inception. Its five-person veterinary staff generates \$1.4 million in economic activity every year. In addition, the Marysville clinic has engaged hundreds of fourth-year veterinary students in farm animal care, introducing them to a potential career path that many had not previously considered.

Although the College's experiences with the Marysville facility will help inform development, planning and establishment of a similar practice in Appalachian Ohio, this model is not directly translatable because of the demographic and economic differences between these two regions of the state. A rural mixed-animal practice in Appalachian Ohio would provide ambulatory as well as limited in-house medical and surgical facilities for large- and small-animal patients.

With evidence of sufficient interest and available resources, the College will continue to explore options for such a practice, including engaging community, business and civic leaders; governmental agencies; foundations and associations; and other potential partners to develop a successful and sustainable business and practice model for a rural veterinary practice in Appalachian Ohio. A successful rural veterinary practice would serve the needs of the people and their animals in this region. Likewise, such a practice would serve as a sustainable model for other rural communities across Ohio and the United States. Immersing and embedding veterinary students, veterinary technician students, and other paraprofessionals in experiential learning and practical hands-on training in this practice will provide direct exposure to a successful rural veterinary practice and may encourage some of them to pursue work in such a practice upon graduation or at sometime during their professional career. Furthermore, as governmental budgets tighten, public/private partnerships may prove beneficial to the agricultural industry as a whole, to livestock producers and other animal owners of this region, and to the local communities through economic development and strengthening a vitally important Ohio industry, while also contributing to improved public health and environmental sustainability.

After an initial review of the opportunities and challenges involved in establishing such a practice, the College has identified two options as being most feasible. **Each option will require financial assistance to address the start-up capital and fixed-asset needs, and will likely require some level of ongoing funding.**

Option 1 – Acquire or Renovate an Existing Facility

One possible location for a satellite veterinary clinic in the region is the existing facilities in Jackson County operated by the Ohio Agricultural Research and Development Center. The facility would require several modifications, including but not limited to:

- A complete bull and cattle handling facility, requiring a portable alley and chute and a sorting tub;
- Electrical, sanitary water, and drain upgrades;
- Outside modifications to allow producers truck and trailer access and loading and unloading facilities for their animals; and
- Additional fencing to prevent animals from inadvertently exiting the premises and obtaining access to the adjacent roads.

Other necessary fixed expenses include vehicles for the practice, initially including specially equipped practice trucks to allow service to producers at more than one location. The practice will require an initial infusion of equipment and pharmacological supplies and, of course, funding for staffing needs.

A second possibility would be the acquisition of an existing veterinary practice in the region, as was the case when the Marysville practice began operations.

Option 2 – Build a New, Stand-alone Facility

Pursuit of this option would include construction of a built-to-specifications facility most likely near one of the university's extension offices in the region. In addition to construction costs, the facility would incur fixed expenses similar to those in Option 1.



The Ohio State University College of Veterinary Medicine – August 2011

Sustainable Rural Veterinary Practice in Jackson, Ohio

Background and Context

Next Steps

If sufficient and broad-based interest and extramural resources are identified, the College would initiate and perform a comprehensive assessment to explore the feasibility and logistics of establishing a successful and sustainable satellite rural veterinary practice in Appalachian Ohio to service the animals and people of the area, and to serve as a model for a rural veterinary practice for other rural communities in Ohio and across the United States. The intent would be to establish a database in support of this endeavor, to guide selection of a location and animal handling needs, and to determine the potential economic impacts to this region. If this information proves supportive and funding can be secured, the College would consider moving forward in establishing a rural veterinary practice in this region to provide veterinary services to its animals and support its people.

Such a comprehensive assessment would require resources to hire a consultant(s) to help coordinate and lead the study and to develop a viable and sustainable business plan and practice model for a rural veterinary practice in Appalachian Ohio. No matter the option, the College cannot operate a rural veterinary practice that loses money. A combination of fee-for-services and external subsidy support through a cooperative arrangement with other stakeholders will likely both be needed to make this a sustainable model.

Development of a sustainable rural veterinary practice model in Appalachian Ohio would provide vitally important and needed services to these communities as well as serve as a pilot program and template for similar practices in the many other counties and communities currently underserved by veterinarians across Ohio and the United States.

The process will involve engaging a diverse and broad group of constituents and “partners”, including livestock producers and animal owners; area veterinarians; business, civic and community leaders; local, state and federal legislators; governmental agencies (e.g., Ohio Department of Agriculture, United States Department of Agriculture, etc.); foundations (e.g., Appalachian Regional Commission, etc.); associations (e.g., Ohio Farm Bureau, Ohio Veterinary Medical Association, American Veterinary Medical Association, etc.), and other appropriate individuals and organizations.

For more information, please contact Dr. Rustin Moore, associate dean of Clinical and Outreach Programs, via telephone (614)-292-7105 or email (Rustin.Moore@cvm.osu.edu).



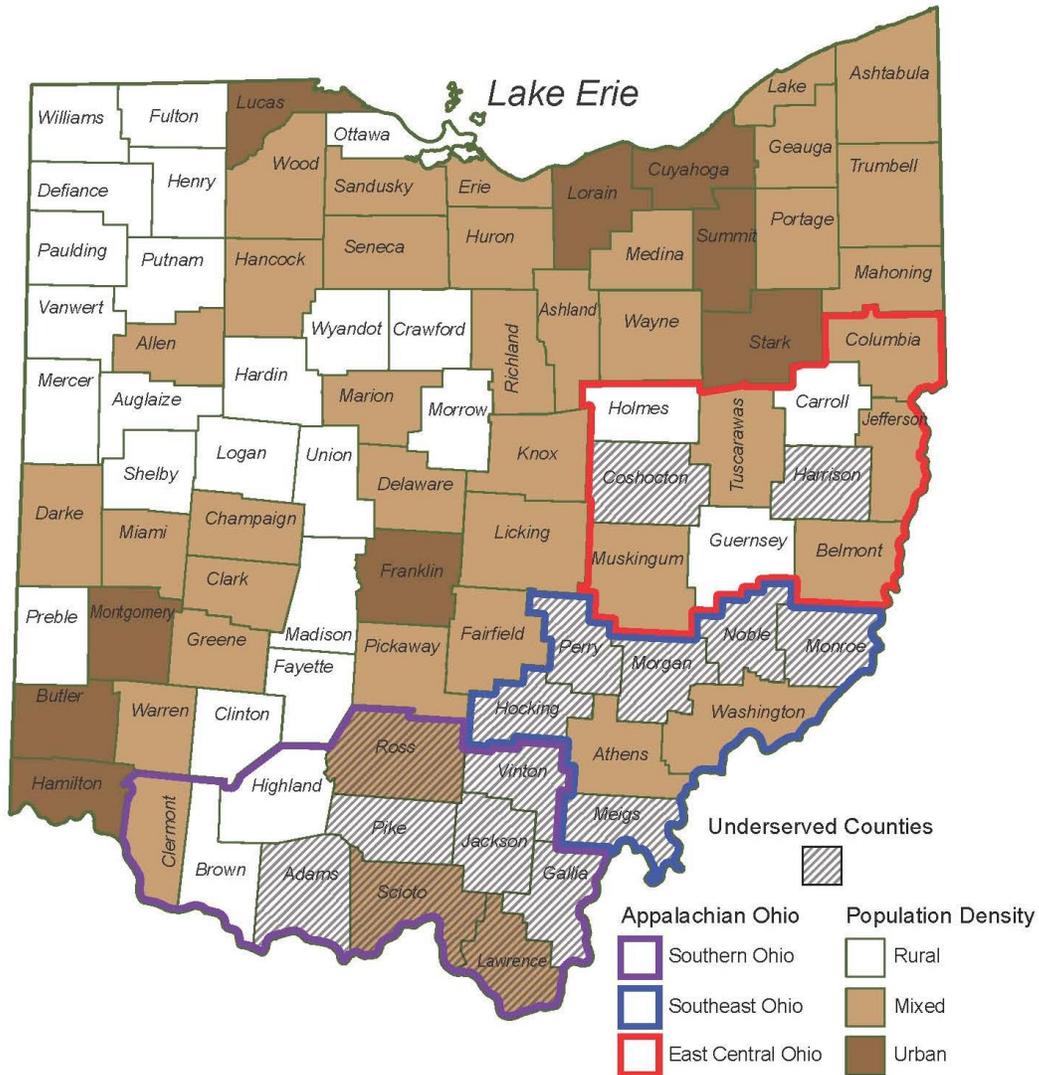
The Ohio State University College of Veterinary Medicine – August 2011

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- 3) Appalachian Regional Commission in Ohio. http://en.wikipedia.org/wiki/Appalachian_Ohio#Appalachian_Regional_Commission.
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Sustainable Rural Veterinary Practice in Jackson, Ohio Background and Context

Appalachian Ohio



The Ohio State University College of Veterinary Medicine – August 2011

Tab B – Sustainable Rural Veterinary Practice providing full-service preventive, production, routine and emergency veterinary services for farm animals, horses and companion animals



**The Ohio State University
College of Veterinary Medicine
Veterinary Medical Center**

Sustainable Rural Veterinary Practice in Jackson, Ohio

*Providing full-service preventive, production,
routine and emergency veterinary services for
farm animals, horses and companion animals*

Business Plan April 11, 2012

The College of Veterinary Medicine
Full-Service Mixed Animal Veterinary Practice
April 11, 2012

Executive Summary

In the summer of 2010, The Ohio State University's College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. When farmers and producers in this region need veterinary assistance for their animals their options for experienced veterinary care for large animals are limited. The College of Veterinary Medicine ("CVM") was asked to consider establishing a satellite rural veterinary practice and clinic in the Appalachian region of Ohio to serve these communities and citizens. The Jackson Agricultural Research Station, an existing facility operated by the Ohio Agricultural Research and Development Center (OARDC), has been identified as one possible location for a satellite veterinary clinic.

Producers have requested that OSU's College of Veterinary Medicine establish a veterinary practice in this region with a focus predominantly on service to large animal producers. Although the practice in Jackson will serve predominantly large animal producers, service revenue from treating equine and companion animals will be required to help cover operating expenses of the practice and help supplement the less profitable food animal practice. A mixed-animal veterinary practice established by CVM, located in the Jackson Agriculture Research Center should leverage its excellent education and research reputation with large animal producers and other animal owners in the region. The practice will be staffed by faculty and staff veterinarians with experience and knowledge of large animal and companion animal medical, surgical, preventive and production medicine issues. Our clients will include dairy farmers, cattle and swine producers, equine owners, camelid clients, small ruminant herd owners, and pet owners.

Given the apparent lack of available and affordable veterinary care in this region, producers have learned to make herd health decisions based on information they learn from farm journals or discussions with other producers. Most producers are skeptical of the economic benefits a large animal veterinarian can provide. They may not be informed about appropriate alternatives suitable for the condition of their specific herd. If producers are educated about new veterinary drugs and techniques available that provide a clear economic benefit, producers may be more likely to use the services of the Jackson County satellite facility. There are a significant number of horse and small animal owners in this ten county region and approximately 15 licensed veterinarians to provide veterinary services. It is anticipated that horse and small animal owners would also benefit from a practice established by the CVM.

Like most other service providers, veterinarians must develop a bond of trust with the clients they serve. Engaging food producers with seminars or other educational programs with content that is relevant to livestock producers is one way to build trust and develop confidence in the information and services the veterinarian provides.

Two pricing models for food producers will be developed. The first model will provide continuing incentives to clients to utilize veterinary services through a scheduled

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program. The second model for livestock producers will reflect higher pricing based upon a combination of time and procedures performed.

Since there are a few practitioners in the area competing for large animals, it will be important to the practice to remain as non-disruptive as possible to these practitioners. Practitioners in the area will view The Ohio State University CVM practice as a serious threat, and it will be important to take steps to minimize their concerns. Pricing for equine and companion animal services will be priced at a slight premium to prices offered for similar services by practitioners in the Jackson County area. Pricing strategy is one way to address the concerns of practitioners in the region. Additional steps should be identified once the capabilities of the practice and facility are established. Building healthy working relationships with other local practitioners in the region will be important to the success of the practice. Pricing of services offered at a premium to current market prices should be viewed more positively than discounted pricing by local practitioners.

The Jackson County facility will organizationally and operationally operate as a service unit under the Ohio State University's College of Veterinary Medicine's, Veterinary Medical Center. Faculty from the Veterinary Medical Center will have day-to-day operating responsibility and will be supported by registered veterinary technicians, veterinary assistants and a small administrative staff. The Director of the Veterinary Medical Center and the Associate Dean of Clinical and Outreach Programs will provide overall administrative oversight for this satellite facility and its operation.

Substantial renovations would be required to provide the services required for a full service mixed animal veterinary practice. The costs of renovating the facility are estimated to be \$2.0 million in the projections. An engineering and architectural study will be necessary to more accurately identify the costs associated with the renovations. The financial projections presented reflect the seasonal nature of a veterinary practice with a substantial amount of farm animal clients in its practice. The business plan assumes that in order to generate sufficient revenue to cover operating expenses, a limited companion animal practice would be developed to supplement the large animal practice. The projections suggest that the practice would begin generating positive cash flow from its operations after the fourth year of its operations. Furthermore, external resources of \$200,000 are required to supplement cash flow from the practice during its first four years of operations until revenue from the business is sufficient to cover its operating expenditures. It should be noted that the date used in these financial projections for beginning operations (i.e. July 2013) was selected only for the purposes of presentation and not as an objective in and of itself. If the CVM determines to proceed with establishing a practice, the actual date will be subject to funding and many other variables and, as a result, the actual opening date will likely be different.

In order to facilitate the next steps toward establishing a sustainable veterinary practice in this Appalachian region of southern Ohio, it is recommended that CVM engage several large producers in discussions to try and understand their reluctance to utilize

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veterinarian services in the region and to understand how these obstacles might be overcome by a veterinary practice established by the CVM. By doing this, the CVM would gain valuable information on the business issues and risks this practice would face. In addition, the CVM might also be able to modify its delivery and/or service offering to address these issues and risks. The CVM may also conclude that it will not be able to overcome the issues and risks identified in these discussions and decide that a practice in this region is not a suitable solution at all.



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Project Description – Jackson County Veterinary Practice

In the summer of 2010, The Ohio State University's College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. After the meeting, broader discussions were held with other producers, veterinarians, businesses and community and civic leaders in Appalachian Ohio. From these discussions, the College of Veterinary Medicine was asked to consider establishing a satellite rural veterinary practice and clinic in the Appalachian region of Ohio to serve these communities and citizens.

The Need – Veterinary Medicine in Appalachian Ohio

Of the 88 counties within Ohio, 29 have been designated as part of the Appalachian Region of eastern and southern Ohio, known as Appalachian Ohio. These counties are located south of the diagonal line which runs from the southwest to northeast portion of the State. Known for its scenic, mountainous ranges, Appalachian Ohio is also recognized for its high poverty rates. Close to one-half of the counties in Appalachian Ohio have between 22% and 29% of all persons living in poverty, compared to the State average of 10.31%.

These rural communities are vital to Ohio's way of life, but face challenges regarding economic development, agriculture, education, health and more, not found in most other communities in the state. Much of the veterinary profession's impact is felt in Ohio's rural-based agricultural sector, and is responsible, for among other things, assuring an abundant, relatively inexpensive and safe food supply for Ohio citizens. Many farms in Appalachian Ohio are small family farms, including beef, cattle, hogs, sheep and goats. Few veterinarians in this area choose to service large food animals and as a result, many areas of Appalachian Ohio are significantly underserved by the veterinary profession. Studies have been performed to try and better understand the reasons why so few veterinarians choose to practice in rural communities and the results suggest that the following are all factors; requirements of emergency duty, insufficient time off, compensation, practice atmosphere and family concerns.

Jackson County and its surrounding counties are located in the southern Ohio area of Appalachian Ohio. Producers of food animals in these counties have limited access to routine or emergency veterinary care for their livestock. According to the Ohio Veterinary Medical Association's database of veterinarians, there are a total of 33 veterinarians in Jackson and the six surrounding counties in this region. Only four of these veterinarians in this seven county region are classified as food animal veterinarians. Most veterinarians in these counties have developed companion animal practices with few remaining that are willing or interested in providing at least limited services for food animals.

When farmers and producers in this region need veterinary assistance for their animals, the limited options include trying to access a local veterinarian or trying to get by without one. Many of the veterinarians in this region will only see companion animals. If a

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veterinarian in the region agrees to help the farmer or producer, these practitioners could travel to the farm to provide services, refer the client to another practice, request the owner to transport the animal to their practice/clinic, or refer the client to the Ohio State College of Veterinary Medicine's Veterinary Medical Center (a 90+ mile drive). Regardless of the option selected, rural Appalachian Ohio can be accurately characterized as underserved by the veterinary profession. The potential consequences are serious. Farmers and producers depend on the veterinary profession to help sustain their livelihoods, and Ohioans depend on healthy farm animals for a safe food supply.

Jackson County Facility

One possible location for a satellite veterinary clinic is the existing facilities in Jackson County operated by the Ohio Agricultural Research and Development Center (OARDC). Located on 495 acres in the rolling hills of southern Ohio, near the intersection of Highways 32 and 93, the Jackson Agricultural Research Station has been a primary site for reproductive management and production management research in beef cattle for more than three decades. The Station has served as a key source for animals used in research designed to increase reproductive efficiency, test groundbreaking cattle production technologies, and develop value-added products from beef cattle.

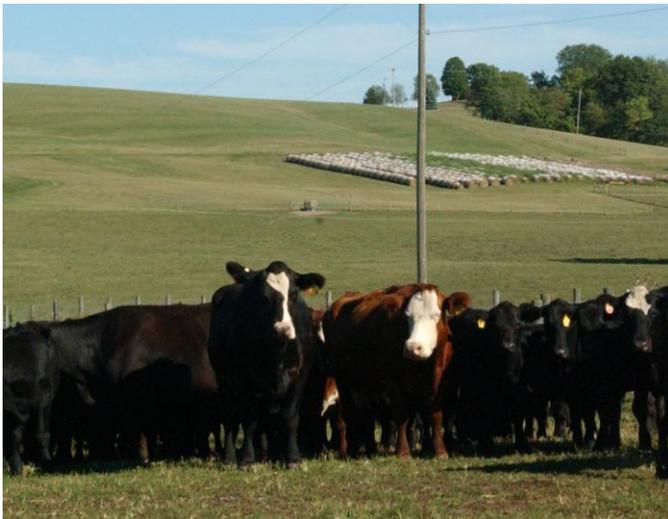


The Station's reproductive management studies have helped set estrus-synchronization standards used by industry in Ohio, the United States, and around the world – including the Select Synch, CO-Synch, and Hybrid-Synch programs. The Jackson Station is also recognized as the key site for research to determine the proper use of technology from the Center for Inherited Disease Research at the Johns Hopkins University for increasing conception rates in beef cattle. Researchers and personnel at the Jackson Station work to match feed resources to beef cow milk production, which helps optimize calf nutrition, health, and development while making beef operations more efficient. Additionally, research at the Jackson Station in forage management systems has contributed to implementing successful grazing approaches used by producers today. The Station conducts forage studies using both small, replicated plots and large pasture acreage. Both are critical to the economy of Ohio's Appalachian counties.

In addition to research, the Jackson Station engages in outreach activities and works with various community organizations. The role of the Station's Advisory Committee is crucial in this regard, as it contributes to planning and keeping in direct contact with local clientele and stakeholders. Facilities and other resources at the Jackson Station give OARDC scientists the ability to obtain highly competitive federal grants and industry funding – supporting research and development activities that directly impact the economy of southern Ohio.

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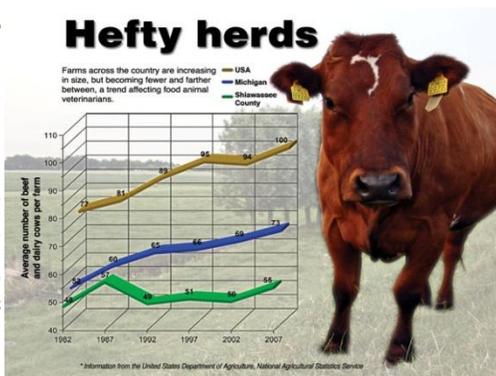
The Jackson Agricultural Research Station was established in 1968, when OARDC signed a 40-year lease for 334 acres belonging to the former Jackson County Home Farm. The size of the Station was expanded through the purchase of an additional 158 acres by the state of Ohio. The lease with Jackson County was renewed in 2008. The Jackson County OSU Extension office is housed next door to the station office, providing a great opportunity for collaborative research and demonstrations. The facility is located approximately 82 miles south of The Ohio State University campus in the city of Jackson, approximately 2 miles from the intersection of State Routes 32 and 35. Although the facility would require structural modifications, its location and its excellent reputation with local livestock producers make it an attractive site for a veterinary practice in this region.



Market Overview

Ohio is a leading food exporter, ranking 13th among all states and exporting more than \$2.6 billion in agricultural products in 2009. Ohio exports a wide range of agricultural products from processed food and food ingredients to livestock and their genetics. According to the Ohio Department of Development, Ohio is home to more than 77,000 farms and 45,000 of these have some type and level of animal production system. Ohio flourishes because of the strong agricultural industry, which employs one in six Ohioans. The food and agriculture industries provide more than \$79 billion to the state's economy, making agriculture a critical industry to the State of Ohio. Ohio's beef industry, the 16th largest in the United States by number of beef cattle operations, has an annual value of \$1.3 billion, generating nearly \$745 million in total production impact for the Buckeye state. Ohio is one of the leading producers of milk, cheese and eggs. Nationally, Ohio ranks 1st in Swiss cheese production, 2nd in egg production, 5th in dairy manufacturing plants, 7th in the number of chickens sold, 9th in hog production and cheese production and 11th in milk production. According to the Ohio Alpaca Breeders Association, Ohio leads the nation with the largest number of alpaca farms and the greatest number of alpacas. Ohio is also a leader in terms of crop production. Between 40 to 50% of grain production is used for animal feed. Livestock genetics is another important aspect to the productivity of Ohio's agricultural industry.

The long-term sustainability of a veterinarian is dependent upon his or her ability to generate income sufficient to maintain the equipment and facilities required to provide quality veterinary care while paying back student loans, establishing a residence and providing the quality of life they want for themselves and their families. The average debt load for a veterinary graduate in 2009 increased to approximately \$130,000 with about one-third of graduates having a debt of more than \$150,000. Starting salaries have failed to keep pace with the increased tuition and debt load; the starting salary of new graduates in 2009 was \$64,826 regardless of the career area they chose.



A mixed-animal veterinary practice established by CVM, located in the Jackson Agriculture Research Center should leverage its excellent education and research reputation with large animal producers, horse owners and other animal owners in the region. A core group of livestock producers willing to quickly engage the services of the new practice to provide ongoing herd management services, including vaccination and de-worming programs, reproduction programs, and replacement rearing programs, will be an important step toward developing a successful and sustainable practice in the region.

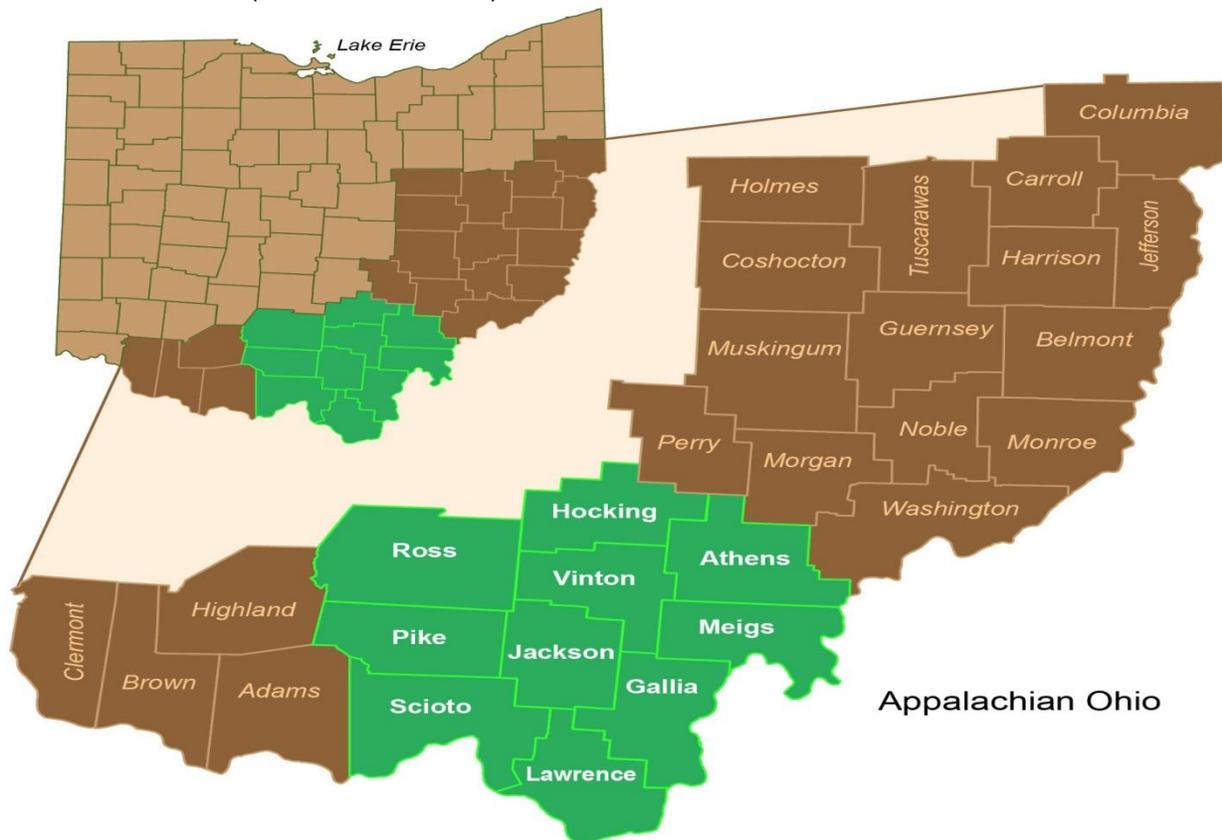
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Geographic Market Area

Distance and drive time is a primary consideration when clients consider their options for veterinary care. Potential clients of the mixed-animal veterinary practice at the Jackson facility are large animal farmers (beef and dairy cattle, hogs, sheep and goats) and pet owners who reside in Jackson and surrounding counties. County seats of the six contiguous counties (Gallia, Lawrence, Pike, Ross, Scioto and Vinton) are all within a one-hour drive from the proposed satellite facility (20 to 49 miles). County seats of three additional counties nearby (Athens, Hocking and Meigs) are also within a one hour drive (41 to 44 miles) and

could be serviced from the facility. All ten counties are considered part of Appalachian Ohio.

| Travel Time to Surrounding County Seats | | | |
|---|-------------|----------|----------|
| County | County Seat | Distance | Time |
| Gallia | Gallipolis | 30 miles | 40 mins. |
| Lawrence | Ironton | 41 miles | 53 mins. |
| Pike | Waverly | 28 miles | 35 mins. |
| Ross | Chillicothe | 33 miles | 41 mins. |
| Scioto | Portsmouth | 49 miles | 56 mins. |
| Vinton | McArthur | 20 miles | 30 mins. |
| Athens | Athens | 41 miles | 47 mins. |
| Hocking | Logan | 44 miles | 59 mins. |
| Meigs | Pomeroy | 41 miles | 57 mins. |



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Economy in Appalachian Ohio

Rural communities are vital to Ohio’s economy and way of life. However, these communities face challenges in terms of economic development, agriculture, education and healthcare. The Appalachian Regional Commission (ARC) is a regional economic development agency that represents a partnership of federal, state, and local government. The ARC uses an index-based county economic classification system to identify the economic status of Appalachian Counties (Attainment, Competitive, Transitional, At-Risk, and Distressed). Index values are based upon comparisons of county and national data for three-year average unemployment rates, per capita market income, and poverty rates. Jackson and three neighboring counties (Gallia, Lawrence and Scioto), are considered economically “at-risk” according to this classification system. Four additional nearby counties (Athens, Meigs, Pike and Vinton), are considered “distressed” according to this classification system.

Economic Data for Jackson and 9 Surrounding Counties

| County | Population | Rural/Urban or Mixed | County Economic Status ⁽¹⁾ | 2009 | Index Value Rank | Quartile (1 is the best) ⁽¹⁾ |
|----------|------------|-------------------------|--|-------------------------------------|---|--|
| | | | | Unemployment Rate ⁽²⁾ | in U.S., 1 is the best) ⁽¹⁾ | |
| Jackson | 33,225 | Rural | At-Risk | 7.9 | 2,644 | 4 |
| Gallia | 30,934 | Rural | At-Risk | 6.3 | 2,421 | 4 |
| Lawrence | 62,450 | Mixed | At-Risk | 5.3 | 2,482 | 4 |
| Pike | 28,709 | Rural | Distressed | 9.4 | 2,857 | 4 |
| Ross | 78,064 | Mixed | Transitional | 7.0 | 2,055 | 3 |
| Scioto | 79,499 | Mixed | At-Risk | 7.7 | 2,742 | 4 |
| Vinton | 13,435 | Rural | Distressed | 8.3 | 2,914 | 4 |
| Athens | 64,757 | Mixed | Distressed | 6.2 | 2,844 | 4 |
| Hocking | 29,380 | Rural | Transitional | 6.7 | 2,221 | 3 |
| Meigs | 23,770 | Rural | Distressed | 9.1 | 2,910 | 4 |

⁽¹⁾ Appalachian Regional Commission, March 2010.

⁽²⁾ "Ohio County Profiles", a publication by the Policy Research and Strategic Planning Office (A State Affiliate of the US Census Bureau) of the Ohio Department of Development.



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Market Analysis

Analysis of farm and livestock data for this 10-county region from the 2007 Census by the US Department of Agriculture provides insight into financial opportunities and challenges of a mixed-animal veterinary practice in this region. According to census data, product sales from cattle, calves, milk and other dairy products in this 10 county area were approximately \$52.9 million. The average value of livestock products sold in each of these 10 counties is \$5.3 million with a range of \$0.7 million in Vinton County and \$9.9 million in Scioto County. Although the livestock market is small compared with other counties in Ohio, the data suggests that the serviceable veterinary market in this region may be large enough for an additional practice focused on servicing the livestock and large animal owners and producers in these 10 counties.

Farm Income Ranking for Jackson and 9 Surrounding Counties

| County | # of Farms (Crops and Livestock) ⁽¹⁾ | # of Farms with Livestock ⁽²⁾ | Market Value of Livestock Products Sold (\$ 000's) ⁽¹⁾ | Avg. Product Sales per Farm with Livestock |
|----------------|---|--|---|--|
| Jackson | 462 | 280 | \$5,126 | \$18,307 |
| Gallia | 993 | 700 | \$9,539 | \$13,627 |
| Lawrence | 649 | 443 | \$2,821 | \$6,368 |
| Pike | 538 | 262 | \$3,489 | \$13,317 |
| Ross | 1,009 | 374 | \$8,457 | \$22,612 |
| Scioto | 755 | 448 | \$9,897 | \$22,092 |
| Vinton | 250 | 123 | \$715 | \$5,813 |
| Athens | 585 | 358 | \$4,965 | \$13,869 |
| Hocking | 387 | 219 | \$1,258 | \$5,744 |
| Meigs | 551 | 302 | \$6,672 | \$22,093 |
| Total | 6,179 | 3,509 | \$52,939 | |
| Average | 618 | 351 | \$5,294 | \$15,087 |

⁽¹⁾ US Department of Agriculture, National Agriculture Statistics Service, 2007 Census of Agriculture.

⁽²⁾ Data from the US Department of Agriculture, Table 45 - 2007 Census of Agriculture.

The following table indicates that the majority of farm operations in the region (i.e. 6,179) are small. These smaller farms with livestock would not be considered a consistent serviceable unit. According to the US Department of Agriculture's 2007 Census of Agriculture, over 92% of all farms (crop and livestock farms) in this region have sales of less than \$50,000 annually, compared to 65% of farms in the 10 most successful farming counties of Ohio. Given the lack of farm income in these households, it is not surprising that the majority of these farmers pursues other occupations to supplement their farm income and do not consider farming their primary occupation. However, the analysis also shows that 465 (or 7.5%) farms in this 10-county region have farm sales receipts greater than \$50,000 per year and may present an opportunity for veterinary service.

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Farm Size (Crop and Livestock) by Sales ⁽¹⁾

| County | Less than \$10,000 | \$10,000 to \$49,999 | \$50,000 to \$99,999 | \$100,000 to \$249,999 | \$250,000 to \$499,999 | \$500,000 or more |
|-------------------|-------------------------------|---------------------------------|---------------------------------|-----------------------------------|-----------------------------------|------------------------------|
| Jackson | 330 | 93 | 23 | 9 | 6 | 1 |
| Gallia | 802 | 147 | 27 | 7 | 7 | 3 |
| Lawrence | 568 | 67 | 9 | 2 | 3 | 0 |
| Pike | 419 | 72 | 25 | 15 | 3 | 4 |
| Ross | 707 | 141 | 57 | 54 | 24 | 26 |
| Scioto | 587 | 121 | 17 | 16 | 11 | 3 |
| Vinton | 211 | 30 | 5 | 1 | 0 | 3 |
| Athens | 467 | 88 | 14 | 9 | 4 | 3 |
| Hocking | 314 | 57 | 9 | 5 | 1 | 1 |
| Meigs | 389 | 104 | 29 | 13 | 6 | 10 |
| Total | 4794 | 920 | 215 | 131 | 65 | 54 |
| % of total | 77.6% | 14.9% | 3.5% | 2.1% | 1.1% | 0.9% |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, 2007 Census

Establishing a sustainable rural veterinary mixed-animal practice (livestock, horses and companion animals) will require a core group of large food producers that consistently utilize the services of the practice throughout the year. Establishment of herd health management strategies and preventative medicine programs (such as vaccination and parasite control programs, reproductive programs) and monitoring the effects of such programs will be an important service offered by this practice. Although owners of smaller farms might utilize the services of a veterinarian for emergencies, they will try to get by without incurring additional cost of a veterinary and address health issues of their livestock (including dispensing drugs and vaccines) on their own. If veterinary services that offer healthcare and livestock management are available and producers utilize the services, these producers should develop the capacity to manage larger numbers of animals with associated increases in income. It will be imperative to build relationships with food producers and engage these producers to utilize a minimal amount of veterinary services each year.

The data in the following table shows that there are 149 producers that meet the criteria (farms with greater than 100 head of cattle) of a serviceable client and suggests that in order to build a sustainable large animal veterinary practice in this 10 county region, veterinary services for other types of animals, including equine and small companion animals, would be necessary to supplement the large animal practice.

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Size of Cattle Herds ⁽¹⁾

| County | Farms with 100 to 199 head | Farms with 200 to 499 head | Farms with >500 head | Total Farms with > 100 head | Inventory of Cattle on Farms with > 100 head | |
|--------------|-------------------------------|-------------------------------|-------------------------|--------------------------------|--|-----|
| Jackson | 14 | 14 | 0 | 28 | 5,997 | |
| Gallia | 7 | 13 | 2 | 22 | 3,235 | (2) |
| Lawrence | 6 | 1 | 0 | 7 | 0 | (2) |
| Pike | 5 | 4 | 0 | 9 | 2,833 | |
| Ross | 29 | 8 | 2 | 39 | 6,597 | (2) |
| Scioto | 9 | 3 | 1 | 13 | 1,172 | (2) |
| Vinton | 2 | 0 | 0 | 2 | 0 | (2) |
| Athens | 7 | 6 | 0 | 13 | 2,847 | |
| Hocking | 2 | 0 | 0 | 2 | 0 | (2) |
| Meigs | 7 | 5 | 2 | 14 | 2,619 | (2) |
| Total | 88 | 54 | 7 | 149 | | |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, Table 11, 2007 Census

⁽²⁾ Not all respondents to census provided data related to inventory quantities in these counties.

Herd health management strategies and preventive medicine programs depend on the type of animals and the objectives of the producers. Dairy programs can often be profitable due to the income generated through consistent herd checks required throughout the year. However, the data presented in the table below suggests that there are few dairy cattle farmers and far more beef cattle farmers in the region. Beef herds tend to require more seasonal veterinary care than dairy herds and requirements from a veterinarian are more intense during the spring and fall seasons, but less throughout the remainder of the year. As a result, beef producers may be less likely to utilize an annual preventive medicine program, but might consider a seasonal program in the spring and fall designed to meet their objectives. The analysis of the market data available suggests that the greatest opportunity to establish a mixed animal practice in Jackson County will be with beef cattle producers that have herds of greater than 100 head of cattle.

Given the lack of available veterinary care in this region and financial pressures farmers are facing, most producers have grown accustomed to making decisions regarding vaccinations and basic herd health management issues themselves and are reluctant to consult with a veterinarian because of the cost. Producers from the Jackson County area and veterinarians that have served cattle farmers in rural communities suggest that most producers are skeptical of the economic benefits a large animal veterinary can provide. Many producers make decisions based on information they learn from farm journals or from discussions with other producers. They may not be informed about appropriate alternatives suitable for the condition of their specific herd. If producers are educated about new veterinary drugs and techniques available that provide a clear economic benefit, producers will be more likely to use the services of the Jackson

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County satellite facility. Utilizing the expertise of reproductive medicine specialists at the College (theriogenology) to provide advanced reproductive technologies and services, including but not limited to artificial insemination, embryo transfer, and assisted-reproductive techniques to improve reproductive efficiency and/or to improve the herd genetics are examples of expertise the College can provide and convince producers of the financial value a veterinary can provide to their operations. Likewise, utilizing other services and expertise in soil and crop sciences, pasture-management, and nutrition among others will be important to enhance production and economic return for livestock producers in this area.

Livestock Farms ⁽¹⁾

| County | Beef cattle ranching and farming | Cattle Feedlots | Dairy cattle and milk production | Hog and pig farming | Poultry and egg production | Sheep and goat farming | Animal Aquaculture and other animal |
|---------------|---|----------------------------|---|--------------------------------|---|-----------------------------------|--|
| Jackson | 187 | 10 | 11 | 2 | 6 | 21 | 43 |
| Gallia | 474 | 19 | 12 | 36 | 21 | 34 | 104 |
| Lawrence | 290 | 10 | 8 | 6 | 15 | 32 | 82 |
| Pike | 165 | 6 | 11 | 12 | 15 | 8 | 45 |
| Ross | 216 | 31 | 6 | 13 | 19 | 22 | 67 |
| Scioto | 289 | 11 | 4 | 14 | 22 | 19 | 89 |
| Vinton | 77 | 0 | 3 | 5 | 3 | 8 | 27 |
| Athens | 196 | 16 | 16 | 4 | 21 | 22 | 83 |
| Hocking | 109 | 14 | 0 | 5 | 19 | 28 | 44 |
| Meigs | 197 | 11 | 30 | 6 | 9 | 11 | 38 |
| Total | 2,200 | 128 | 101 | 103 | 150 | 205 | 622 |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, Table 45, 2007 Census

The veterinary service market for horses presents an opportunity for a veterinary located in the proposed Jackson County satellite facility. There are 11,752 horses in Jackson and the nine surrounding counties. In addition, the veterinary service market for small animals presents an opportunity. The estimated number of small animals in the 10 county region is 250,898. The veterinary service market for equine and for small animals appears to present an opportunity for this practice given that only 15 mixed animal vets are within this region.

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Veterinary Service Market for Horses and Small Animals

| County | Horses | Small Animals | Total Mixed Animal |
|--------------|---------------|----------------|--------------------|
| | | | Vets |
| Jackson | 924 | 19,724 | 2 |
| Gallia | 837 | 17,866 | 3 |
| Lawrence | 1,718 | 36,671 | 0 |
| Pike | 779 | 16,635 | 0 |
| Ross | 1,898 | 40,521 | 3 |
| Scioto | 2,183 | 46,609 | 2 |
| Vinton | 357 | 7,630 | 0 |
| Athens | 1,589 | 33,916 | 2 |
| Hocking | 787 | 16,810 | 2 |
| Meigs | 680 | 14,516 | 1 |
| Total | 11,752 | 250,898 | 15 |

Marketing and Promotion

Like most other service providers, veterinarians must develop a bond of trust with the clients they serve. Producers are under significant financial pressure and are constantly considering the most efficient way to operate their business. Establishing health programs with producers will require that the practitioners develop communication and trust with the producers in the community. In order to effectively implement and monitor health programs with producers, producers will have to be convinced that the economic benefits of such programs outweigh the costs. Engaging food producers with educational seminars or other educational programs is one way to build trust and develop confidence in the information and services the veterinarian provides. Regular electronic newsletters and promotional e-mail and other materials with content that is relevant to livestock producers is another way of creating awareness and confidence in the value veterinarians can provide to their operations.

Pricing Strategy

Effective use of financial concepts in the practice at the satellite facility will be as critical to its success as providing quality care. Studies reveal that veterinarians who understand and become experts in utilizing various pricing strategies to increase profitability have considerably more financial success than those that don't understand and utilize this tool. A 2011 report by Bayer Health Care's Animal Health Division and the National Commission on Veterinary Economic Issues examines decreasing client visits and the resulting loss of revenue at veterinary hospitals nationwide. Although this study involved only companion animal practices, the insight and business practices recommended, can be useful for mixed and farm animal practices as well. The Bayer Veterinary Care Usage Study reveals that 62 percent of practices do not use financial concepts to manage their business and that the practices that do employ a range of

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financial concepts, such as pricing strategies, are two-thirds more profitable. The pricing model for all services of the facility should reflect the superior quality and value of the services delivered. The model should provide financial incentives to livestock producers to utilize the veterinary staff to develop herd health management and other health and production programs for their operations. Understanding that not every livestock producer will choose to use veterinarians in this way, two pricing models will be developed. The first model will provide continuing incentives to clients to utilize veterinary services through a scheduled program. The pricing model will provide pricing discounts and service privileges to those clients 24 hours a day, 365 days a year. The second model for livestock producers will reflect higher pricing based upon a combination of time and procedures performed.

Since there are a few practitioners in the area competing for large animals, it will be important to remain as non-disruptive as possible to these practitioners. Practitioners in the area will view The Ohio State University CVM practice as a competitor and it will be important to take steps to minimize their concerns. Pricing for equine and companion animal services will be priced at a slight premium to prices offered for similar services by practitioners in the Jackson County area. Pricing strategy is one way to address the concerns of practitioners in the region. Additional steps should be identified once the capabilities of the practice and facility are established. Building healthy working relationships with other local practitioners in the region will be important to the success of the practice. Pricing of services offered at a premium to current market prices should be viewed more positively than discounted pricing by local practitioners. When local pricing information is not available, pricing guidelines published by the American Animal Hospital Association will be used (see "The Veterinary Fee Reference"). Pricing for services will, at a minimum, cover the estimated cost of delivering the service and a margin of profit for each service. Annual budgets will include the anticipated number of clients and the mixture of services requested. When establishing the price for each service, the minimum price will include consideration of the total operating expenses and capital costs of the Jackson facility.

Operating Plan

The College of Veterinary Medicine mixed-animal practice located in Jackson, Ohio, will be a unique veterinary practice providing full-service routine medical and surgical services for animal owners in Jackson and surrounding counties. Serving as a satellite of the Ohio State College of Veterinary Medicine's Veterinary Medical Center, the practice will be staffed by faculty and staff veterinarians with experience and knowledge of large animal and companion animal medical, surgical, preventive and production medicine issues. Our clients will include dairy farmers, cattle and swine producers, equine owners, camelid clients, small ruminant herd owners, and pet owners.

Full-Service Mixed-Animal Care Practice

Producers have requested that OSU's College of Veterinary Medicine establish a veterinary practice in this region with a focus predominantly on service to large animal

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producers. Although the practice in Jackson will serve predominantly large animal producers, it is anticipated that service revenue from treating equine and companion animals will be required to help cover operating expenses of the practice and help supplement the less profitable food animal practice.

The veterinarians at Ohio State's Jackson satellite facility will have clinical experience in food animal, equine and companion animal veterinary care. As OSU faculty, they base all treatment decisions and protocols on the latest scientific research and best practices in the field. They also have access to faculty in the College of Veterinary Medicine, OSU Extension, Department of Animal Sciences, and the Ohio Agricultural Research and Development Center, on a fee-for-service basis, allowing them to draw on the knowledge of the many experts within The Ohio State University system to optimize preventive, diagnostic, therapeutic, and production medicine programs for livestock and other animals.

Veterinarians have been entrusted to protect the livelihood of farmers, both by caring for their animals and by safeguarding the human food they produce. The College of Veterinary Medicine at The Ohio State University is committed to having each one of our veterinary students work within an on-farm ambulatory practice, giving them hands-on experience in large and small-scale livestock operations. As part of a fourth-year rotation, Ohio State veterinary students will work under the supervision of the Jackson faculty and staff veterinarians and assist them as members of part of a high-performing and cohesive team.



Large Animal Services

The Ohio State University's Jackson County satellite facility will offer veterinary services for large animals of all species, including but not limited to beef and dairy cattle, swine, sheep, goats, camelids, poultry and horses. It will be a unique veterinary practice providing comprehensive medical and surgical services for animal owners. For large animal farm operators, our service will include herd health management strategy as well as preventive and production medicine programs. The ambulatory clinic will be a full-service mixed-animal veterinary practice providing services for individual animals, customized herd-based programs and emergency services for food and fiber animals and horses. Along with full medical and surgical services, the OSU Jackson County satellite facility offers year-round, 24-hour in-house and ambulatory emergency coverage. Individual animal care, ultrasound, endoscopic and radiology exams will also be provided. Routine surgeries, exams and other procedures are usually performed on

the farm, but in some cases, animals will be transported to and cared for in our clinic building.

Vaccination and De-worming Programs

Preventing infectious disease outbreaks requires a comprehensive herd approach. Veterinarians traveling to the farm gain an appreciation of the management scheme on each producer's facility. This information, in combination with individual animal skills is critical to preparation of real world, customized herd health program for each farm. The vaccination and parasite mitigation programs developed reflect specific concerns on each farm and encompass critical preventive and production management events, such as reproductive programs (cow and bull fertility and health), calf health (scours and respiratory disease prevention), and internal and external parasite control. Development of vaccine protocols are based upon the producers' pre-breeding, pregnancy and calving system. Only a comprehensive and integrated herd health and production medicine program can provide protection against the financial losses associated with an outbreak of infectious diseases.

Herd-Based Reproduction Programs



Reproductive performance is a major factor affecting the production and economic efficiency of cattle operations whether in milk, replacement animals or calves for fattening. Today, fewer animals are expected to achieve ever-higher levels of production. Reproductive failure is the main reason for replacement in beef and dairy herds. Therefore efficacious and convenient reproduction management is central to the concerns of every cattle operation. A major and realistic goal of every cow/calf operator and dairy

producer should be to raise reproductive performance every year. Reproductive performance can be improved by the following: 1) properly identifying animals; 2) keeping records that enable determination of important herd indices, such as percent calf crop, pregnancy rate, length of calving season, culling rates, calf morbidity and mortality, breeding efficiency of bulls, and performance and production information; 3) meeting the nutritional requirements of various classes of livestock in the herd, emphasizing nutritional needs and cost efficiencies; 4) establishing a breeding program for heifer replacements and cows; 5) practicing sire selection and reproductive management, including selected use of advanced reproductive technologies such as artificial insemination, embryo transfer, assisted-reproductive techniques and other ways of improving herd genetics; 6) adopting an immunization program for the cow/calf herd, bulls, and calves; 7) evaluating reproductive failure and abortions; 8) providing adequate facilities; and 9) ensuring that the calf is well cared for at birth and receives adequate colostrum.

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Additional Ambulatory and In-House Clinical Services Offered

Additional ambulatory and clinical services will include the following:

- Full-service medicine and general surgery
- Diagnosis, treatment and prevention of individual animal disease
- Herd performance evaluation and consultation
- Record analysis (DHIA, CTAP , DC 305)
- Ration evaluation
- Nutritional consultation
- Replacement rearing programs
- In-house laboratory support
- Castration, dehorning and routine production procedures
- Breeding soundness examination
- Pre-purchase and insurance exams
- 24/7/365 emergency services

Equine Services

The Jackson County satellite facility will leverage the world-class equine practices in clinical treatment and research of The Ohio State's Galbreath Equine Center and provide comprehensive diagnosis and care of horses, ponies and foals. The facility and staff will offer diagnostic and treatment options for minor and severe injuries and provide 24 hour emergency and intensive care for equine medical and surgical emergencies. The staff will provide horses and their owners with the highest quality care necessary to maintain optimal health and performance.

The Jackson County facility and staff will also offer on-farm primary equine care services in Jackson and surrounding counties. In addition, an innovative wellness program started at the Galbreath Equine Center will be adapted to the Jackson County facility and offered owners to ensure their horses are properly cared for year round. The new Equine Wellness Program contains all the basic preventive care services we recommend, scheduled and coordinated at least twice annually, at a reduced cost to horse owners. The comprehensive package will be offered in three service levels and may include the following:



- Physical exams with health reports
- Vaccinations
- Parasite control
- Dental care
- Coggins testing
- Blood work
- Soundness exam
- Sheath/udder cleaning

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Companion Animal Practice

The College of Veterinary Medicine's mixed-animal satellite veterinary practice in Jackson County will offer a full-service companion animal clinic designed to provide preventive care and basic sick appointments for pets and pet owners as well as 24/7/365 emergency care.

Wellness Care

Physical Examinations – During a pet's wellness examination they will receive a thorough physical exam by veterinary students and a licensed veterinarian. This allows students and veterinarians to examine all body systems and detect potential problems with each pet. Pets age much faster than do people (5-7 years for every person year), which suggests health problems can progress 5 - 7 times more quickly in pets. Therefore, it is recommended that all adult pets (ages 1-7 years) receive annual exams. The sooner a problem is detected the greater the likelihood of effective treatment.

Vaccinations – During a visit, veterinarians will discuss a pet's lifestyle, and determine which infectious diseases he or she is at a risk of being exposed to. They will tailor a vaccination plan specifically for each pet. Vaccination is a key component of disease prevention in companion animal medicine.

Parasite Prevention – Even healthy pets are at risk of acquiring an infection with internal (digestive or heartworm) and external (fleas, mites and lice) parasites. Most of these are easy to prevent and it is recommended that pets are kept on parasite prevention year round. Pets should be tested for certain parasites yearly in healthy patients. A parasite surveillance and prevention program also helps to reduce risk of disease transmission from pets to family members and others.

New Puppy and Kitten Care

A new puppy or kitten should be seen as soon as possible after they are adopted. Visits to the Jackson County satellite facility will include a complete physical exam, an educational puppy/kitten kit that includes a Vaccine/Health Record with tips on puppy/kitten care and behavioral concerns, flea and tick control, heartworm prevention, fecal examinations for intestinal parasites and appropriate de-worming, vaccination schedules and necessary vaccine boosters.

Routine Dental Care

The Jackson satellite facility will offer routine dental care for patients, including dental cleaning, dental radiographs along with simple and complex tooth extractions. As part of wellness appointments, the staff will evaluate a pet's teeth and will recommend an oral healthcare plan. If a dental cleaning and oral examination are necessary, general anesthesia is required. More complex oral and dental treatments can be referred to the Veterinary Medical Center's Hospital for Companion Animals.

Routine Surgery (Spay and Neuter)



Both male and female dogs and cats can start reproducing between the ages of six to nine months. Therefore, neutering these pets between 4 and 6 months of age is recommended.

Female dogs generally go through an estrus or heat cycle every six months. Female cats come into heat cycles every three to four weeks during certain times of the year. Surgical neutering (spay) of female dogs and cats called ovariectomy, completely eliminates all heat cycles and the accompanying unwanted bleeding cycle, nervousness, and desire to mate. Neutering your female dog or cat will also protect your pet from uterine infections and other diseases as well as difficult or dangerous pregnancies. Studies show that neutering female dogs before their first heat cycle will greatly reduce its chances of developing mammary cancer later in life. Deciding when the best time to neuter pets is a decision that should discuss with a licensed veterinarian.

Nutrition and Weight Management

The College of Veterinary Medicine satellite facility in Jackson County will offer weight management services for dogs and cats with weight-related health problems. The goal of our healthy weight program is to help clients achieve a healthy weight for their pet. The most successful outcomes result from combining follow up (e.g. visits, weigh-ins, and phone consultations) and ongoing communication. The Jackson County facility will offer both pay-as-you-go and package programs to meet different client/patient needs.

Services include the following:

- Initial doctor and technician evaluation includes complete physical exam, extended environmental history, evaluation of current dietary intake, therapy recommendations, and lab evaluation as indicated.
- Follow-up consultations by phone and office visit.
- Take home packet including weight management information, at-home environmental enrichment, and expected goals/progress for each pet.

Senior Pet Care

Pets age much faster than people do. It is said that dogs and cats age about five to seven years for every human year. In fact, older pets age even more rapidly than this so seeing the veterinarian yearly is equivalent of an older person visiting a doctor once in a decade. This suggests health problems can progress five to seven times faster in your pet. The average dog or cat seven to 10 years of age and older qualifies as a "senior." There is a progressive decline in organ function, immunity, and physical and mental abilities as pets grow older. While some age-related



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diseases may not be preventable, early detection and intervention are keys to successful management. Therefore, senior pets need just a little bit of extra care and attention to feel great and to live long, healthy and productive lives.

It is recommended that all adult pets receive annual examinations and that senior pets receive a thorough physical examination every six to 12 months. During these exams, the staff will assess the pet's body condition and make dietary and exercise recommendations to help maintain its ideal body weight. In addition, the staff will carefully assess the health of your pet's teeth and gums, as dental disease can be a significant problem for senior pets. Vaccinations should be brought up to date for pet during these visits.

The veterinary staff recommends annual blood work [complete blood count (CBC), chemistry profile and thyroid function tests], urinalysis, and fecal examination. These tests will enable them to detect changes that indicate a disease is present and will be the first step to slow or stop its progression. Depending upon the pet and findings during the exam, the staff may recommend blood pressure monitoring or other diagnostics to help improve the pet's health as well.

End-of-life care and keeping a pet's comfort and well-being foremost in the treatment plan are very important, whether it is age-related or from a serious illness or injury.

Emergency Services

Our Emergency and Critical Care service will operate 24/7/365, and includes on-site veterinarians, and registered veterinary technicians.



Description of Business Practices

Providing a consistent and reliable amount of veterinary care services is critical to developing a sustainable practice in any region. Business practices identified in this business plan are therefore focused on developing a base of clients who have a consistent, significant and recurring need for veterinary services. For food producers, proactive veterinary medical care that includes herd management preventive medicine practices will improve both the quality of food produced and efficiency of the producers operations, resulting in greater financial returns. For veterinarians, it will reduce the number of emergency calls they make and significantly improve their quality of life.

Engaging the Livestock Producer Community

Beef and other food producers in this area of Appalachian Ohio have learned to handle nutrition and other herd health issues on their own, primarily out of financial necessity. It will be important to the success of the practice to actively engage with as many food producers of the region as possible to develop relationships and earn their trust. Communication programs designed to provide information about relevant issues can be used as a tool to deliver new herd management concepts, introduce new technology or provide an objective professional medical opinion on issues that could have a significant financial impact on the producers' operations. Educational programs and seminars should also be developed to engage the veterinary and producer communities in this area. Feedlot owners and other organizations that could benefit should be solicited to financially support the efforts of these programs. Communication and education programs are not anticipated to generate quick, short-term financial results and therefore, it will be important for the practitioners and staff members to engage producers early with these programs.



Herd Health Management and Preventive Medicine

It pays to have a good working relationship with a veterinarian to assist in herd health management strategy and preventative medicine, rather than just relying on a veterinarian for emergencies. The veterinarian can answer questions and help prevent problems, often increasing a producer's profit margin. There are several advantages for the producer when arranging a veterinarian to be a consultant in the operation. The veterinarian can help the producer look over the entire operation in terms of herd health, find any weak areas and identify places for improvement. Consulting on use of new vaccines and matching vaccines with a production or health maintenance program can improve financial results for producers. The veterinarian may also connect the producer with other professionals such as a nutritionist, agronomist or reproductive specialist. Unless the animals are adequately fed, nothing the veterinarian can do or suggest will work well to sustain reproductive performance and milk production.

Emergency Medical Care

According to practitioners in rural communities, providing emergency veterinary medical care 24 hours a day and 365 days out of the year is another way of developing relationships and trust with producers in the area. It is also something that must be shared among a sufficiently staffed team in order to make this sustainable in the long term. When a producer calls a veterinarian during the late hours of the day or during a holiday, it's often a stressful time for the producer and presents a unique opportunity for veterinarians. Helping the producer out of a difficult situation by providing care to their livestock provides an opportunity to build a relationship and develop trust with the producer. It also provides an opportunity to discuss other herd management issues and strategies that might prevent costly medical emergencies in the future, which will benefit both the producer and the veterinary practice.

Fee Structure – Two Plans

The pricing model developed for the practice should encourage and incentivize food producers to utilize the practice staff to develop herd management programs for their operations. Understanding that not every livestock producer will choose to use the veterinarian in this way, two pricing models will be developed. The first model will provide preferred pricing and other incentives to clients that commit to utilize veterinary services through a scheduled program outlined in a service agreement. In addition to reduced fees for services, clients enrolled using this pricing model are provided priority service privileges 24 hours a day, 365 days a year. The program helps create predictable workflow and financial stability for the veterinary practice.

Features of the scheduled preferred pricing program include:

- Herd management program fees based on the type and size of the producers' herds and significant events anticipated during the year (e.g. breeding, pregnancy-checking, calving and winter feeding). The objective of herd management programs is to improve the overall profitability of the producer by increasing production and lowering operational costs. The pricing plan provides producers with a predictable cost for veterinary services for their herd inventory.
- Preferred after-hours response for emergencies.
- Exclusive educational meetings for clients participating in the program.
- Monthly billing and additional benefits for prepaid packages.

The second fee structure is for clients that have elected not to participate in the scheduled preferred pricing program and for owners of companion animals. Not all producers will decide to participate in the scheduled preferred pricing program. Services will be provided to these clients at rates that are consistent with the local rates of other veterinarians with a modest premium. When veterinarians are called for emergency services, it is sometimes the only opportunity to discuss options for better care for their herd. Fees for responding to emergency calls will reflect a premium and provide incentive to consider the scheduled preferred pricing program. Additional features of the second fee structure include:

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- Procedural fees based on published rates.
- Reduced fees for those that use the practices services consistently.
- Compliance with a strict travel policy – policy for billing travel time to farms.
- Hourly billing for emergency calls and for farm visits. Incentivize owners to have the animal(s) ready (caught and restrained) to be examined when they arrive.
- Payment will be expected at the time of service.

Superior Service and State-of-the-Art Technology

Superior professional, friendly service using state-of-the-art knowledge and technology will be a core business principle of the practice. Staff will be trained to manage difficult clients and certain situations that occur frequently with animal owners. In addition, staff members will be trained to utilize “state of the art” information and technology in the facility, and to communicate their advantages.

Organizational Structure - Personnel



The Jackson County facility will organizationally and operationally operate as a service unit under the Ohio State University’s College of Veterinary Medicine’s, Veterinary Medical Center. Faculty from the Veterinary Medical Center will have day-to-day operating responsibility and oversight and will be supported by Registered Veterinary Technicians, Veterinary Assistants and a small administrative staff. The

Director of the Veterinary Medical Center and the Associate Dean of Clinical and Outreach Programs will provide overall administrative oversight for this satellite facility and its operation. Following is a list of staff positions that would be required based on anticipated levels of service provided at the Jackson County satellite facility:

- Licensed Veterinarians – two veterinarians upon opening the facility.
- Veterinary Residents – one veterinary resident upon opening the facility and one additional resident in the fifth year of operations.
- Veterinary Technicians – one veterinary technician upon opening and one additional technician in the third year of operations.
- Veterinary Assistants – one veterinarian assistant upon opening the facility and one additional veterinary assistant in the first year of operations (after 6 mos.).
- Reception and administrative staff – one receptionist upon opening the facility.

Financial Summary

Jackson County Facility Capital Improvements

The Jackson Agricultural Research Station has been a primary site for reproductive management and production management research in beef cattle for more than three decades. Substantial renovations and additions would be required to provide the services required for a full service mixed animal veterinary practice. The facility would require several modifications, including but not limited to the following:

- A complete bull and cattle handling facility, requiring a portable alley and chute and sorting tub,
- Electrical, sanitary water and drain upgrades,
- Outside modifications to allow producers truck and trailer access and loading and unloading facilities for their animals, and
- Additional fencing to prevent animals from inadvertently exiting the premises and obtaining access to the adjacent roads.

An engineering and architectural study will be necessary to more accurately identify the costs associated with the renovations. However, two points of reference provide a basis for estimating a range of costs that would be necessary.

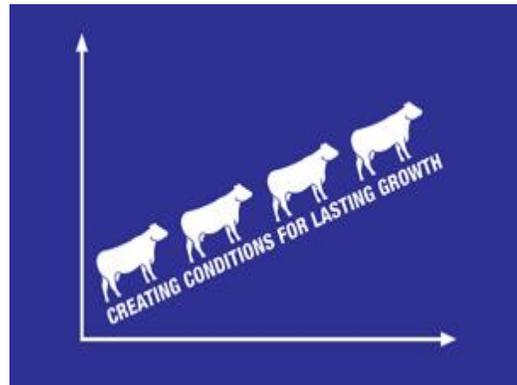
The construction costs of the Marysville Large Animal facility, including installation of utilities, driveway and parking improvements, building improvements and fees for architectural fees, were approximately \$2.0 million. Based on a site visit to the proposed facility in March 2011 and preliminary discussions with equipment providers, the renovations required in the facility include a portable alley, sorting tub and chute for cattle, equipment for minor surgeries, (C-section, breeding soundness examinations, pregnancy examinations and other general practice procedures to producers). A more detailed study of the requirements of the facility is required to more accurately identify the modifications needed and equipment required and to estimate the costs of the project. However, based on these points of reference the facility improvements are currently estimated to require external sources of capital of approximately \$2.0 million.



The College of Veterinary Medicine
Full-Service Mixed Animal Veterinary Practice
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Financial Projections

The financial projections prepared for the Jackson County mixed-animal veterinary practice discussed in this business plan are presented below. The assumptions used for preparing the projections are presented in Appendix B. Veterinary practices that have a substantial farm animal mix will often have a significant seasonal fluctuation in its revenue. These financial projections reflect the seasonal nature of these practices. The plan assumes that in order to generate sufficient revenue to cover operating expenses, a limited companion animal and equine practice would be developed to supplement the food animal practice. The projections indicate that revenue generated from the mixed animal veterinary service practice would not be sufficient to cover operating expenses until the fourth full year of operations. Furthermore, the projections indicate the practice would require external capital of approximately \$200,000 to cover start-up and operating expenses during the first four years of operations.



Balance Sheet 5-Year Projections

Jackson County Veterinary Practice
5 Year Financial Projections
Balance Sheet

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|--------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <u>Assets</u> | | | | | |
| Cash | \$ (130,015) | \$ (180,018) | \$ (179,676) | \$ (160,450) | \$ (143,847) |
| Accounts receivable | 4,457 | 4,497 | 5,368 | 6,636 | 6,951 |
| Less: allowance for uncollectibles | (223) | (225) | (268) | (332) | (348) |
| Accounts receivable, net | 4,234 | 4,272 | 5,100 | 6,304 | 6,603 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (122,781) | (172,745) | (171,576) | (151,146) | (134,244) |
| Total assets | \$ (122,781) | \$ (172,745) | \$ (171,576) | \$ (151,146) | \$ (134,244) |
| <u>Liabilities and equity</u> | | | | | |
| Accounts payable | \$ 11,355 | \$ 11,457 | \$ 13,677 | \$ 16,907 | \$ 17,709 |
| Accrued salaries and wages | 7,072 | 7,223 | 7,494 | 8,429 | 8,640 |
| Sales tax payable | 819 | 826 | 2,959 | 14,630 | 15,324 |
| Total current liabilities | 19,246 | 19,507 | 24,131 | 39,966 | 41,673 |
| Total equity | (142,027) | (192,252) | (195,707) | (191,113) | (175,916) |
| Total liabilities and equity | \$ (122,781) | \$ (172,745) | \$ (171,576) | \$ (151,146) | \$ (134,244) |

The College of Veterinary Medicine
Full-Service Mixed Animal Veterinary Practice
 April 11, 2012

Statement of Operations 5-Year Projections

Jackson County Veterinary Practice
5 Year Financial Projections
Statement of Operations

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|-------------------------------------|---------------------|--------------------|-------------------|-----------------|------------------|
| Revenue | | | | | |
| Professional fees | \$ 180,275 | \$ 280,699 | \$ 319,913 | \$ 390,683 | \$ 409,207 |
| Laboratory fees | 25,398 | 39,547 | 45,071 | 55,042 | 57,652 |
| Drug fees | 133,352 | 207,636 | 236,643 | 288,993 | 302,695 |
| Other fees | 28,435 | 44,275 | 50,460 | 61,622 | 64,544 |
| Total revenue | 367,460 | 572,157 | 652,086 | 796,341 | 834,098 |
| Operating expenses: | | | | | |
| Compensation | 325,258 | 346,720 | 340,680 | 404,596 | 414,711 |
| Benefits | 99,396 | 108,073 | 116,017 | 130,563 | 133,828 |
| Cost of drugs | 84,726 | 131,923 | 150,353 | 183,614 | 192,320 |
| Supplies expense | 17,478 | 27,214 | 31,016 | 37,877 | 39,673 |
| Postage expense | 1,713 | 2,667 | 3,039 | 3,712 | 3,888 |
| Utilities expense | 7,137 | 11,113 | 12,665 | 15,467 | 16,200 |
| Building repairs & maintenance | 4,208 | 6,552 | 7,467 | 9,119 | 9,552 |
| Lab services expense | 8,363 | 13,022 | 14,841 | 18,124 | 18,983 |
| Other purchased expenses | 12,291 | 19,138 | 21,812 | 26,637 | 27,900 |
| Misc expense | 3,836 | 5,973 | 6,807 | 8,313 | 8,707 |
| Equipment purchases | 16,279 | 25,348 | 28,889 | 35,280 | 36,953 |
| University overhead | 14,628 | 22,777 | 25,959 | 31,702 | 33,205 |
| Exp transfer | (19,108) | (29,752) | (33,908) | (41,410) | (43,373) |
| Total operating expenses | 576,206 | 690,768 | 725,637 | 863,595 | 892,546 |
| Operating income | (208,746) | (118,612) | (73,551) | (67,255) | (58,449) |
| Other income (expense): | | | | | |
| Other income (expense) | - | - | - | - | - |
| General funds - teaching support | 66,719 | 68,387 | 70,096 | 71,849 | 73,645 |
| Total other income (expense) | 66,719 | 68,387 | 70,096 | 71,849 | 73,645 |
| Net income | \$ (142,027) | \$ (50,225) | \$ (3,455) | \$ 4,594 | \$ 15,196 |

The College of Veterinary Medicine
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Statement of Cash Flow 5-Year Projections

Jackson County Veterinary Practice
5 Year Financial Projections
Statement of Cash Flow

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Net income | \$ (142,027) | \$ (50,225) | \$ (3,455) | \$ 4,594 | \$ 15,196 |
| Adjustments to reconcile net income to net cash provided by operating | | | | | |
| (Increase) decrease in operating assets: | | | | | |
| Accounts receivable | (4,234) | (38) | (828) | (1,204) | (299) |
| Prepaid expenses | (3,000) | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | |
| Accounts payable | 11,355 | 102 | 2,220 | 3,230 | 802 |
| Accrued salaries and wages | 7,072 | 151 | 271 | 935 | 211 |
| Sales tax payable | 819 | 7 | 2,133 | 11,671 | 694 |
| Total adjustments | 12,012 | 223 | 3,796 | 14,632 | 1,407 |
| Net cash provided by (used in) | (130,015) | (50,002) | 341 | 19,226 | 16,603 |
| Cash used in investing activities | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - |
| Beginning cash balance | - | (130,015) | (180,018) | (179,676) | (160,450) |
| Ending cash balance | \$ (130,015) | \$ (180,018) | \$ (179,676) | \$ (160,450) | \$ (143,847) |

Appendices

Appendix A: Detailed Financial Projections

Jackson County Veterinary Practice 5 Year Financial Projections Balance Sheet

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Assets | | | | | | | | | | | | | |
| Cash | \$ (15,666) | \$ (32,501) | \$ (45,278) | \$ (56,605) | \$ (67,865) | \$ (78,602) | \$ (90,163) | \$ (101,224) | \$ (110,339) | \$ (118,222) | \$ (125,292) | \$ (130,015) | \$ (130,015) |
| Accounts receivable | 1,174 | 1,748 | 2,412 | 2,756 | 2,845 | 2,934 | 3,212 | 3,420 | 3,722 | 3,953 | 4,113 | 4,457 | 4,457 |
| Less: allowance for uncollectibles | (59) | (87) | (121) | (138) | (142) | (147) | (161) | (171) | (186) | (198) | (206) | (223) | (223) |
| Accounts receivable, net | 1,115 | 1,661 | 2,292 | 2,618 | 2,703 | 2,787 | 3,052 | 3,249 | 3,536 | 3,756 | 3,908 | 4,234 | 4,234 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (11,551) | (27,840) | (39,987) | (50,987) | (62,162) | (72,815) | (84,112) | (94,975) | (103,803) | (111,467) | (118,385) | (122,781) | (122,781) |
| Total assets | \$ (11,551) | \$ (27,840) | \$ (39,987) | \$ (50,987) | \$ (62,162) | \$ (72,815) | \$ (84,112) | \$ (94,975) | \$ (103,803) | \$ (111,467) | \$ (118,385) | \$ (122,781) | \$ (122,781) |
| Liabilities and equity | | | | | | | | | | | | | |
| Accounts payable | \$ 2,990 | \$ 4,455 | \$ 6,146 | \$ 7,021 | \$ 7,248 | \$ 7,474 | \$ 8,184 | \$ 8,712 | \$ 9,483 | \$ 10,072 | \$ 10,479 | \$ 11,355 | \$ 11,355 |
| Accrued salaries and wages | 6,480 | 6,480 | 6,480 | 6,480 | 6,480 | 6,480 | 7,072 | 7,072 | 7,072 | 7,072 | 7,072 | 7,072 | 7,072 |
| Sales tax payable | 216 | 321 | 443 | 506 | 523 | 539 | 590 | 628 | 684 | 726 | 756 | 819 | 819 |
| Total current liabilities | 9,686 | 11,256 | 13,069 | 14,008 | 14,251 | 14,493 | 15,846 | 16,413 | 17,239 | 17,870 | 18,307 | 19,246 | 19,246 |
| Total equity | (21,237) | (39,097) | (53,056) | (64,995) | (76,413) | (87,309) | (99,958) | (111,388) | (121,041) | (129,337) | (136,692) | (142,027) | (142,027) |
| Total liabilities and equity | \$ (11,551) | \$ (27,840) | \$ (39,987) | \$ (50,987) | \$ (62,162) | \$ (72,815) | \$ (84,112) | \$ (94,975) | \$ (103,803) | \$ (111,467) | \$ (118,385) | \$ (122,781) | \$ (122,781) |

The College of Veterinary Medicine
Full-Service Mixed Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice
5 Year Financial Projections
Balance Sheet

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Assets | | | | | | | | | | | | | |
| Cash | \$ (133,402) | \$ (136,021) | \$ (141,041) | \$ (142,213) | \$ (149,427) | \$ (153,651) | \$ (159,326) | \$ (162,219) | \$ (166,575) | \$ (166,894) | \$ (174,297) | \$ (180,018) | \$ (180,018) |
| Accounts receivable | 4,780 | 4,975 | 4,707 | 5,147 | 4,461 | 4,691 | 4,556 | 4,887 | 4,774 | 5,274 | 4,465 | 4,497 | 4,497 |
| Less: allowance for uncollectibles | (239) | (249) | (235) | (257) | (223) | (235) | (228) | (244) | (239) | (264) | (223) | (225) | (225) |
| Accounts receivable, net | 4,541 | 4,727 | 4,472 | 4,890 | 4,238 | 4,457 | 4,328 | 4,643 | 4,535 | 5,011 | 4,242 | 4,272 | 4,272 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (125,861) | (128,294) | (133,569) | (134,323) | (142,190) | (146,194) | (151,998) | (154,576) | (159,040) | (158,883) | (167,055) | (172,745) | (172,745) |
| Total assets | \$ (125,861) | \$ (128,294) | \$ (133,569) | \$ (134,323) | \$ (142,190) | \$ (146,194) | \$ (151,998) | \$ (154,576) | \$ (159,040) | \$ (158,883) | \$ (167,055) | \$ (172,745) | \$ (172,745) |
| Liabilities and equity | | | | | | | | | | | | | |
| Accounts payable | \$ 12,179 | \$ 12,676 | \$ 11,993 | \$ 13,114 | \$ 11,364 | \$ 11,953 | \$ 11,607 | \$ 12,452 | \$ 12,162 | \$ 13,437 | \$ 11,377 | \$ 11,457 | \$ 11,457 |
| Accrued salaries and wages | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 | 7,223 |
| Sales tax payable | 878 | 914 | 865 | 946 | 820 | 862 | 837 | 898 | 877 | 969 | 820 | 826 | 826 |
| Total current liabilities | 20,280 | 20,813 | 20,081 | 21,283 | 19,407 | 20,038 | 19,667 | 20,573 | 20,262 | 21,630 | 19,421 | 19,507 | 19,507 |
| Total equity | (146,141) | (149,108) | (153,650) | (155,606) | (161,597) | (166,232) | (171,665) | (175,149) | (179,302) | (180,513) | (186,476) | (192,252) | (192,252) |
| Total liabilities and equity | \$ (125,861) | \$ (128,294) | \$ (133,569) | \$ (134,323) | \$ (142,190) | \$ (146,194) | \$ (151,998) | \$ (154,576) | \$ (159,040) | \$ (158,883) | \$ (167,055) | \$ (172,745) | \$ (172,745) |

The College of Veterinary Medicine
 Full-Service Mixed Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice
5 Year Financial Projections
Balance Sheet

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Assets | | | | | | | |
| Cash | \$ (167,352) | \$ (162,490) | \$ (170,862) | \$ (179,676) | \$ (179,676) | \$ (160,450) | \$ (143,847) |
| Accounts receivable | 5,614 | 5,398 | 5,355 | 5,368 | 5,368 | 6,636 | 6,951 |
| Less: allowance for uncollectibles | (281) | (270) | (268) | (268) | (268) | (332) | (348) |
| Accounts receivable, net | 5,334 | 5,128 | 5,088 | 5,100 | 5,100 | 6,304 | 6,603 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (159,018) | (154,362) | (162,775) | (171,576) | (171,576) | (151,146) | (134,244) |
| Total assets | \$ (159,018) | \$ (154,362) | \$ (162,775) | \$ (171,576) | \$ (171,576) | \$ (151,146) | \$ (134,244) |
| Liabilities and equity | | | | | | | |
| Accounts payable | \$ 14,304 | \$ 13,753 | \$ 13,644 | \$ 13,677 | \$ 13,677 | \$ 16,907 | \$ 17,709 |
| Accrued salaries and wages | 6,701 | 6,701 | 7,494 | 7,494 | 7,494 | 8,429 | 8,640 |
| Sales tax payable | 3,094 | 2,975 | 2,952 | 2,959 | 2,959 | 14,630 | 15,324 |
| Total current liabilities | 24,099 | 23,429 | 24,090 | 24,131 | 24,131 | 39,966 | 41,673 |
| Total equity | (183,117) | (177,791) | (186,865) | (195,707) | (195,707) | (191,113) | (175,916) |
| Total liabilities and equity | \$ (159,018) | \$ (154,362) | \$ (162,775) | \$ (171,576) | \$ (171,576) | \$ (151,146) | \$ (134,244) |

The College of Veterinary Medicine
Full-Service Mixed Animal Veterinary Practice
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Jackson County Veterinary Practice
5 Year Financial Projections
Statement of Operations

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| Revenue | | | | | | | | | | | | | |
| Professional fees | \$ 5,757 | \$ 8,578 | \$ 11,834 | \$ 13,521 | \$ 13,956 | \$ 14,392 | \$ 15,759 | \$ 16,777 | \$ 18,260 | \$ 19,394 | \$ 20,179 | \$ 21,866 | \$ 180,275 |
| Laboratory fees | 811 | 1,209 | 1,667 | 1,905 | 1,966 | 2,028 | 2,220 | 2,364 | 2,573 | 2,732 | 2,843 | 3,081 | 25,398 |
| Drug fees | 4,259 | 6,345 | 8,754 | 10,001 | 10,324 | 10,646 | 11,657 | 12,410 | 13,507 | 14,346 | 14,927 | 16,174 | 133,352 |
| Other fees | 908 | 1,353 | 1,867 | 2,133 | 2,201 | 2,270 | 2,486 | 2,646 | 2,880 | 3,059 | 3,183 | 3,449 | 28,435 |
| Total revenue | 11,736 | 17,485 | 24,122 | 27,560 | 28,448 | 29,336 | 32,122 | 34,197 | 37,221 | 39,532 | 41,132 | 44,570 | 367,460 |
| Operating expenses: | | | | | | | | | | | | | |
| Compensation | 25,922 | 25,922 | 25,922 | 25,922 | 25,922 | 25,922 | 28,288 | 28,288 | 28,288 | 28,288 | 28,288 | 28,288 | 325,258 |
| Benefits | 7,771 | 7,771 | 7,771 | 7,771 | 7,771 | 7,771 | 8,795 | 8,795 | 8,795 | 8,795 | 8,795 | 8,795 | 99,396 |
| Cost of drugs | 2,706 | 4,031 | 5,562 | 6,354 | 6,559 | 6,764 | 7,407 | 7,885 | 8,582 | 9,115 | 9,484 | 10,277 | 84,726 |
| Supplies expense | 558 | 832 | 1,147 | 1,311 | 1,353 | 1,395 | 1,528 | 1,627 | 1,770 | 1,880 | 1,956 | 2,120 | 17,478 |
| Postage expense | 55 | 81 | 112 | 128 | 133 | 137 | 150 | 159 | 173 | 184 | 192 | 208 | 1,713 |
| Utilities expense | 228 | 340 | 469 | 535 | 553 | 570 | 624 | 664 | 723 | 768 | 799 | 866 | 7,137 |
| Building repairs & maintenance | 134 | 200 | 276 | 316 | 326 | 336 | 368 | 392 | 426 | 453 | 471 | 510 | 4,208 |
| Lab services expense | 267 | 398 | 549 | 627 | 647 | 668 | 731 | 778 | 847 | 900 | 936 | 1,014 | 8,363 |
| Other purchased expenses | 393 | 585 | 807 | 922 | 952 | 981 | 1,074 | 1,144 | 1,245 | 1,322 | 1,376 | 1,491 | 12,291 |
| Misc expense | 123 | 183 | 252 | 288 | 297 | 306 | 335 | 357 | 389 | 413 | 429 | 465 | 3,836 |
| Equipment purchases | 520 | 775 | 1,069 | 1,221 | 1,260 | 1,300 | 1,423 | 1,515 | 1,649 | 1,751 | 1,822 | 1,975 | 16,279 |
| University overhead | 467 | 696 | 960 | 1,097 | 1,133 | 1,168 | 1,279 | 1,361 | 1,482 | 1,574 | 1,637 | 1,774 | 14,628 |
| Exp transfer | (610) | (909) | (1,254) | (1,433) | (1,479) | (1,525) | (1,670) | (1,778) | (1,935) | (2,056) | (2,139) | (2,318) | (19,108) |
| Total operating expenses | 38,533 | 40,904 | 43,641 | 45,059 | 45,425 | 45,792 | 50,331 | 51,187 | 52,434 | 53,387 | 54,047 | 55,465 | 576,206 |
| Operating income | (26,797) | (23,419) | (19,519) | (17,499) | (16,978) | (16,456) | (18,209) | (16,990) | (15,213) | (13,855) | (12,915) | (10,895) | (208,746) |
| Other income (expense): | | | | | | | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| General funds - teaching support | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 66,719 |
| Total other income (expense) | 5,560 | 5,560 | 5,560 | 5,560 | 5,560 | 66,719 |
| Net income | \$ (21,237) | \$ (17,859) | \$ (13,959) | \$ (11,940) | \$ (11,418) | \$ (10,896) | \$ (12,649) | \$ (11,430) | \$ (9,654) | \$ (8,295) | \$ (7,355) | \$ (5,335) | \$ (142,027) |

The College of Veterinary Medicine
Full-Service Mixed Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice
5 Year Financial Projections
Statement of Operations

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|-------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Revenue | | | | | | | | | | | | | |
| Professional fees | \$ 23,451 | \$ 24,409 | \$ 23,094 | \$ 25,253 | \$ 21,884 | \$ 23,016 | \$ 22,350 | \$ 23,977 | \$ 23,419 | \$ 25,875 | \$ 21,908 | \$ 22,063 | \$ 280,699 |
| Laboratory fees | 3,304 | 3,439 | 3,254 | 3,558 | 3,083 | 3,243 | 3,149 | 3,378 | 3,299 | 3,645 | 3,086 | 3,108 | 39,547 |
| Drug fees | 17,347 | 18,056 | 17,083 | 18,680 | 16,188 | 17,025 | 16,532 | 17,736 | 17,323 | 19,140 | 16,205 | 16,320 | 207,636 |
| Other fees | 3,699 | 3,850 | 3,643 | 3,983 | 3,452 | 3,630 | 3,525 | 3,782 | 3,694 | 4,081 | 3,455 | 3,480 | 44,275 |
| Total revenue | 47,802 | 49,754 | 47,072 | 51,474 | 44,606 | 46,915 | 45,556 | 48,873 | 47,735 | 52,742 | 44,655 | 44,971 | 572,157 |
| Operating expenses: | | | | | | | | | | | | | |
| Compensation | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 28,893 | 346,720 |
| Benefits | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 9,006 | 108,073 |
| Cost of drugs | 11,022 | 11,472 | 10,854 | 11,869 | 10,285 | 10,817 | 10,504 | 11,269 | 11,006 | 12,161 | 10,296 | 10,369 | 131,923 |
| Supplies expense | 2,274 | 2,366 | 2,239 | 2,448 | 2,122 | 2,231 | 2,167 | 2,325 | 2,270 | 2,509 | 2,124 | 2,139 | 27,214 |
| Postage expense | 223 | 232 | 219 | 240 | 208 | 219 | 212 | 228 | 222 | 246 | 208 | 210 | 2,667 |
| Utilities expense | 928 | 966 | 914 | 1,000 | 866 | 911 | 885 | 949 | 927 | 1,024 | 867 | 873 | 11,113 |
| Building repairs & maintenance | 547 | 570 | 539 | 589 | 511 | 537 | 522 | 560 | 547 | 604 | 511 | 515 | 6,552 |
| Lab services expense | 1,088 | 1,132 | 1,071 | 1,172 | 1,015 | 1,068 | 1,037 | 1,112 | 1,086 | 1,200 | 1,016 | 1,024 | 13,022 |
| Other purchased expenses | 1,599 | 1,664 | 1,575 | 1,722 | 1,492 | 1,569 | 1,524 | 1,635 | 1,597 | 1,764 | 1,494 | 1,504 | 19,138 |
| Misc expense | 499 | 519 | 491 | 537 | 466 | 490 | 476 | 510 | 498 | 551 | 466 | 469 | 5,973 |
| Equipment purchases | 2,118 | 2,204 | 2,085 | 2,280 | 1,976 | 2,078 | 2,018 | 2,165 | 2,115 | 2,337 | 1,978 | 1,992 | 25,348 |
| University overhead | 1,903 | 1,981 | 1,874 | 2,049 | 1,776 | 1,868 | 1,814 | 1,946 | 1,900 | 2,100 | 1,778 | 1,790 | 22,777 |
| Exp transfer | (2,486) | (2,587) | (2,448) | (2,677) | (2,320) | (2,440) | (2,369) | (2,541) | (2,482) | (2,743) | (2,322) | (2,339) | (29,752) |
| Total operating expenses | 57,614 | 58,419 | 57,313 | 59,129 | 56,296 | 57,249 | 56,688 | 58,056 | 57,587 | 59,652 | 56,316 | 56,447 | 690,768 |
| Operating income | (9,813) | (8,666) | (10,241) | (7,655) | (11,690) | (10,334) | (11,132) | (9,183) | (9,852) | (6,910) | (11,662) | (11,476) | (118,612) |
| Other income (expense): | | | | | | | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| General funds - teaching support | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 5,699 | 68,387 |
| Total other income (expense) | 5,699 | 68,387 |
| Net income | \$ (4,114) | \$ (2,967) | \$ (4,542) | \$ (1,956) | \$ (5,991) | \$ (4,635) | \$ (5,433) | \$ (3,484) | \$ (4,153) | \$ (1,211) | \$ (5,963) | \$ (5,777) | \$ (50,225) |

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Jackson County Veterinary Practice
5 Year Financial Projections
Statement of Operations

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|-------------------------------------|-----------------|-----------------|-------------------|-------------------|-------------------|-----------------|------------------|
| Revenue | | | | | | | |
| Professional fees | \$ 82,630 | \$ 79,449 | \$ 78,820 | \$ 79,013 | \$ 319,913 | \$ 390,683 | \$ 409,207 |
| Laboratory fees | 11,641 | 11,193 | 11,105 | 11,132 | 45,071 | 55,042 | 57,652 |
| Drug fees | 61,123 | 58,770 | 58,304 | 58,447 | 236,643 | 288,993 | 302,695 |
| Other fees | 13,033 | 12,532 | 12,432 | 12,463 | 50,460 | 61,622 | 64,544 |
| Total revenue | 168,428 | 161,944 | 160,660 | 161,055 | 652,086 | 796,341 | 834,098 |
| Operating expenses: | | | | | | | |
| Compensation | 80,409 | 80,409 | 89,931 | 89,931 | 340,680 | 404,596 | 414,711 |
| Benefits | 26,943 | 26,943 | 31,066 | 31,066 | 116,017 | 130,563 | 133,828 |
| Cost of drugs | 38,835 | 37,340 | 37,044 | 37,135 | 150,353 | 183,614 | 192,320 |
| Supplies expense | 8,011 | 7,703 | 7,642 | 7,660 | 31,016 | 37,877 | 39,673 |
| Postage expense | 785 | 755 | 749 | 751 | 3,039 | 3,712 | 3,888 |
| Utilities expense | 3,271 | 3,145 | 3,120 | 3,128 | 12,665 | 15,467 | 16,200 |
| Building repairs & maintenance | 1,929 | 1,855 | 1,840 | 1,844 | 7,467 | 9,119 | 9,552 |
| Lab services expense | 3,833 | 3,686 | 3,656 | 3,665 | 14,841 | 18,124 | 18,983 |
| Other purchased expenses | 5,634 | 5,417 | 5,374 | 5,387 | 21,812 | 26,637 | 27,900 |
| Misc expense | 1,758 | 1,691 | 1,677 | 1,681 | 6,807 | 8,313 | 8,707 |
| Equipment purchases | 7,462 | 7,175 | 7,118 | 7,135 | 28,889 | 35,280 | 36,953 |
| University overhead | 6,705 | 6,447 | 6,396 | 6,412 | 25,959 | 31,702 | 33,205 |
| Exp transfer | (8,758) | (8,421) | (8,354) | (8,375) | (33,908) | (41,410) | (43,373) |
| Total operating expenses | 176,816 | 174,142 | 187,258 | 187,421 | 725,637 | 863,595 | 892,546 |
| Operating income | (8,389) | (12,198) | (26,598) | (26,366) | (73,551) | (67,255) | (58,449) |
| Other income (expense): | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - |
| General funds - teaching support | 17,524 | 17,524 | 17,524 | 17,524 | 70,096 | 71,849 | 73,645 |
| Total other income (expense) | 17,524 | 17,524 | 17,524 | 17,524 | 70,096 | 71,849 | 73,645 |
| Net income | \$ 9,136 | \$ 5,326 | \$ (9,074) | \$ (8,842) | \$ (3,455) | \$ 4,594 | \$ 15,196 |

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Statement of Cash Flow

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Net income (loss) from operations | \$ (21,237) | \$ (17,859) | \$ (13,959) | \$ (11,940) | \$ (11,418) | \$ (10,896) | \$ (12,649) | \$ (11,430) | \$ (9,654) | \$ (8,295) | \$ (7,355) | \$ (5,335) | \$ (142,027) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | | | | | | | |
| Accounts receivable | (1,115) | (546) | (631) | (327) | (84) | (84) | (265) | (197) | (287) | (220) | (152) | (327) | (4,234) |
| Prepaid expenses | (3,000) | - | - | - | - | - | - | - | - | - | - | - | (3,000) |
| Increase (decrease) in operating liabilities: | | | | | | | | | | | | | |
| Accounts payable | 2,990 | 1,465 | 1,691 | 876 | 226 | 226 | 710 | 529 | 770 | 589 | 408 | 876 | 11,355 |
| Accrued salaries and wages | 6,480 | - | - | - | - | - | 592 | - | - | - | - | - | 7,072 |
| Sales tax payable | 216 | 106 | 122 | 63 | 16 | 16 | 51 | 38 | 56 | 42 | 29 | 63 | 819 |
| Total adjustments | 5,571 | 1,024 | 1,182 | 612 | 158 | 158 | 1,088 | 370 | 539 | 412 | 285 | 612 | 12,012 |
| Net cash provided by (used in) operating activities | (15,666) | (16,835) | (12,777) | (11,327) | (11,259) | (10,737) | (11,561) | (11,061) | (9,115) | (7,883) | (7,070) | (4,723) | (130,015) |
| Cash used in investing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Beginning cash balance | - | (15,666) | (32,501) | (45,278) | (56,605) | (67,865) | (78,602) | (90,163) | (101,224) | (110,339) | (118,222) | (125,292) | - |
| Ending cash balance | \$ (15,666) | \$ (32,501) | \$ (45,278) | \$ (56,605) | \$ (67,865) | \$ (78,602) | \$ (90,163) | \$ (101,224) | \$ (110,339) | \$ (118,222) | \$ (125,292) | \$ (130,015) | \$ (130,015) |

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5 Year Financial Projections
Statement of Cash Flow

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Net income (loss) from operations | \$ (4,114) | \$ (2,967) | \$ (4,542) | \$ (1,956) | \$ (5,991) | \$ (4,635) | \$ (5,433) | \$ (3,484) | \$ (4,153) | \$ (1,211) | \$ (5,963) | \$ (5,777) | \$ (50,225) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | | | | | | | |
| Accounts receivable | (307) | (185) | 255 | (418) | 652 | (219) | 129 | (315) | 108 | (476) | 768 | (30) | (38) |
| Prepaid expenses | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | | | | | | | | | |
| Accounts payable | 823 | 497 | (683) | 1,122 | (1,750) | 588 | (346) | 845 | (290) | 1,276 | (2,060) | 81 | 102 |
| Accrued salaries and wages | 151 | - | - | - | - | - | - | - | - | - | - | - | 151 |
| Sales tax payable | 59 | 36 | (49) | 81 | (126) | 42 | (25) | 61 | (21) | 92 | (149) | 6 | 7 |
| Total adjustments | 727 | 348 | (478) | 784 | (1,224) | 411 | (242) | 591 | (203) | 892 | (1,441) | 56 | 223 |
| Net cash provided by (used in) operating activities | (3,387) | (2,619) | (5,020) | (1,172) | (7,215) | (4,224) | (5,675) | (2,893) | (4,355) | (319) | (7,403) | (5,720) | (50,002) |
| Cash used in investing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Beginning cash balance | (130,015) | (133,402) | (136,021) | (141,041) | (142,213) | (149,427) | (153,651) | (159,326) | (162,219) | (166,575) | (166,894) | (174,297) | (130,015) |
| Ending cash balance | \$ (133,402) | \$ (136,021) | \$ (141,041) | \$ (142,213) | \$ (149,427) | \$ (153,651) | \$ (159,326) | \$ (162,219) | \$ (166,575) | \$ (166,894) | \$ (174,297) | \$ (180,018) | \$ (180,018) |

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Jackson County Veterinary Practice
5 Year Financial Projections
Statement of Cash Flow

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Net income (loss) from operations | \$ 9,136 | \$ 5,326 | \$ (9,074) | \$ (8,842) | \$ (3,455) | \$ 4,594 | \$ 15,196 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | |
| Accounts receivable | (1,061) | 205 | 41 | (12) | (828) | (1,204) | (299) |
| Prepaid expenses | - | - | - | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | | | |
| Accounts payable | 2,846 | (551) | (109) | 33 | 2,220 | 3,230 | 802 |
| Accrued salaries and wages | (523) | - | 794 | - | 271 | 935 | 211 |
| Sales tax payable | 2,268 | (119) | (24) | 7 | 2,133 | 11,671 | 694 |
| Total adjustments | 3,530 | (464) | 702 | 28 | 3,796 | 14,632 | 1,407 |
| Net cash provided by (used in) operating activities | 12,666 | 4,861 | (8,372) | (8,814) | 341 | 19,226 | 16,603 |
| Cash used in investing activities | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - |
| Beginning cash balance | (180,018) | (167,352) | (162,490) | (170,862) | (180,018) | (179,676) | (160,450) |
| Ending cash balance | \$ (167,352) | \$ (162,490) | \$ (170,862) | \$ (179,676) | \$ (179,676) | \$ (160,450) | \$ (143,847) |

Appendix B: Assumptions used in Financial Projections

Balance Sheet Assumptions:

1. Accounts receivable – Assumes 90% of services are paid at POS and 10% are billed.
2. Allowance for uncollectible accounts – Assumes 5% of the current periods A/R balance will be uncollectible. Assumes a high rate of collection given that most accounts are with businesses (i.e. producers).
3. Accounts payable - Assumes 60% of non-compensation related operating expenses are paid within 30 days of expense.
4. Accrued salaries and wages - Professional staff are monthly - no accrual necessary. Non-professional staff represents 45% of total monthly payroll. Assumes an average of 25% of compensation (excluding benefits) will be paid in subsequent month due to overlap of pay periods.
5. Sales Tax payable - Assumed 75% of pharmacy sales are subject to Jackson county sales tax – 7.0%.

Statement of Operations Assumptions:

1. Revenue – Cattle, Large Farm Market - Cattle market for FY2014 - FY2018 was estimated using the 2007 Census Data from the Dept. of Agriculture for Jackson and each of the 9 surrounding counties. Utilization of a herd management program by large farms assumes the following adoption rate: 8 farms in FY2014, 12 farms in 2015, 23 farms in 2016, 26 farms in 2017 and 27 farms in 2018. Herd management programs assume \$25/head, based on the average herd size for each county (per 2007 Census Data).
2. Revenue – Cattle, Small Farm Market - Assumed none of the smaller (i.e. farms with < 100 head of cattle) would adopt a herd management program. Assumed that 50% of these farmers would utilize a veterinary in a given year (most have learned to do work themselves). Cattle market for FY2014 - FY2018 was estimated using the 2007 Census Data from the Dept. of Agriculture for Jackson and each of the 9 surrounding counties. Market share was estimated based on the number of competing animal and mixed animal vets in each county. Est. # of farms and cattle head/farm based on 2007 Census Data. Average fee/visit is based on 5 year historical data from OSU CVM Medical Center - average fees/visit is \$1,716.00. Lowered amount to \$400 based on economics (cost of service vs. value of the cow) and input from vets/producers.
3. Revenue – Equine - Assumed that 50% of horse owners would utilize a veterinary in a given year. Number of horses for FY2014 - FY2018 was estimated using data provided by The OSU CVM for Jackson and each of the 9 surrounding counties. Market size was estimated using the Average fee/visit

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data from OSU CVM Medical Center and 50% owner utilization. Average fee/visit is based on 5 year historical data from OSU CVM Medical Center - average fees/visit is \$1,665. Lowered amount to \$500 based on economics (cost of service vs. value of the cow) and input from vets/producers. Market share was estimated based on the number of competing vets in each county.

4. Revenue – Companion Animal - Assumed that 20% of companion animal owners would utilize a veterinary in a given year. Number of CA's for FY2014 - FY2018 was estimated using data provided by The OSU CVM for Jackson and each of the 9 surrounding counties. Market size was estimated using the Average fee/visit data from OSU CVM Medical Center and 20% owner utilization. Average fee/visit is based on 5 year historical data from OSU CVM Medical Center - average fees/visit is \$501. Lowered amount to \$300 to be conservative. Market share estimated based number of competing vets in each county.
5. Revenue – Seasonal fluctuations and distribution to revenue type - After calculating annual revenue, a seasonal fluctuation factor was given using historical revenue fluctuations from the Marysville Large Animal Hospital financial data for the previous 5 years. Allocation to revenue type (i.e. Professional fees, drug charges, lab charges, other) were made based on historical 5 year averages of the Marysville Large Animal Hospital.
6. Compensation - See staffing tab for input and detailed assumptions. Beginning July 2013, staffing includes 6.0 FTE's. Assumes Assistant Professor - Clinical (2 FTE's) and Resident DVM (1FTE), Veterinary Technician (1 FTE), Veterinary Assistant (1 FTE), and administrative staff (1FTE). Applied a 2.5% rate of inflation per year. Headcount additions are as follows: Jan 2014 - 1 Veterinary Assistant, Jan. 2016 - 1 Veterinary Technician, July 2017 - 1 Resident DVM.
7. Benefits - Professional staff - 29%, Interns at 8.9%, Veterinary Technicians, Veterinary Associates and Admin staff at 43.3%.
8. Cost of drugs - Using five year history of Marysville Large Animal Hospital (FY2007 through FY2011 - (July - April 2011)), calculated average margin of cost of drugs. Applied margin to revenue from sale of drugs.
9. All other operating expense - Calculated amount as 5.2% of sales based on historical % of sales for each operating expense item from the Marysville Large Animal Hospital - FY2007 through FY2011 (July - April 2011).
10. General funds – teaching support - Assumes 30% of comp and benefits for Assistant Professor will be paid from General funds. 30% of Asst. Professor's time will be teaching and in labs.

Appendix C: Summary of Process used for Business Plan Development

The Business Plan was developed through a process that utilized a variety of people and resources. The CVM engaged John Schroepfer, Principal of CFO Partners, LLC to assist with development of the Business Plan. Mr. Schroepfer has extensive experience with developing business plans for start-up companies in the healthcare industry. He has served as the Chief Financial Officer for both private and public healthcare companies and also for Battelle in corporate development. The CVM provided Mr. Schroepfer with resources to support the development of the business plan including statistical data related to farm and pet animals and veterinarians in the 29 Appalachian counties of Ohio. Most of the economic and market data for the 10 Appalachian counties were taken from reports by the US Dept. of Agriculture, 2007 Census.

The CVM provided contact information for seven veterinarians practicing in rural communities of Ohio and two livestock producers in the Jackson County area. The veterinarians contacted to provide practice recommendations were:

1. Dr. Craig Miesse (rural mixed-animal practice in Mercer County)
2. Dr. Scott Pendleton (mixed-animal practice in Harrison County – Appalachian region)
3. Dr. Doug Wiley (mixed-animal practice in Columbiana County – Appalachian region)
4. Dr. Jon Ellis (equine and farm animal practice in Greene County)
5. Dr. Angie Dahse (primarily equine and farm animal practice in Gallia County – Appalachian region)
6. Dr. Harold Kemp (rural large animal practice in Belmont County – Appalachian region)
7. Dr. Valerie Anderson (rural primarily mixed animal practice in Jackson County – Appalachian region)

Each of the veterinarians worked in established mixed animal practices or large animal practices in rural communities of Ohio. Veterinarians and producers were contacted prior to preparing the business plan. The veterinary practitioners provided valuable insight into the unique aspects of a successful rural veterinary practice and provided specific suggestions regarding development of a sustainable practice in the Appalachian region of Ohio. Their recommendations are the basis for the practice concepts included in the business plan.

The producers contacted to provide suggestions for the business plan were:

1. Jim Phillips – beef cattle, herd size - 24 producing cows

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2. Dale Neal – beef cattle, herd size approximately 20 to 25

Producers were engaged to test key aspects and assumptions of the business plan. Concepts from early drafts were discussed and modified based on feedback received during discussions with producers.

The CVM also provided historical data for the large animal practice in Marysville, Ohio which supported the revenue and expense projections of the proposed satellite facility in Jackson County.



Tab C - *Sustainable Rural Veterinary Practice providing full-service preventive, production, routine and emergency veterinary services for farm animals*

**The Ohio State University
College of Veterinary Medicine
Veterinary Medical Center**

Sustainable Rural Veterinary Practice in Jackson, Ohio

*Providing full-service preventive, production,
routine and emergency veterinary services for
farm animals*

Business Plan April 11, 2012

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Executive Summary

In the summer of 2010, The Ohio State University's College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. When farmers and producers in this region need veterinary assistance for their animals their options for experienced veterinary care for large animals are limited. The College of Veterinary Medicine ("CVM") was asked to consider establishing a satellite rural veterinary practice and clinic in the Appalachian region of Ohio to serve these communities and citizens. The Jackson Agricultural Research Station, an existing facility operated by the Ohio Agricultural Research and Development Center (OARDC), has been identified as one possible location for a satellite veterinary clinic.

A farm animal veterinary practice established by CVM, located in the Jackson Agriculture Research Center should leverage its excellent education and research reputation with farm animal owners in the region. The practice will be staffed by faculty and staff veterinarians with experience and knowledge of large animal medical, surgical, preventive and production medicine issues. Clients will include dairy farmers, cattle and swine producers, and camelid owners.

Given the apparent lack of available and affordable veterinary care in this region, many producers have learned to make herd health decisions based on information they learn from farm journals or discussions with other producers. Producers are skeptical of the economic benefits a large animal veterinary can provide. They may not be informed about appropriate medical treatment alternatives suitable for the condition of their specific herd. If producers are educated about new veterinary drugs and techniques available that provide a clear economic benefit, producers may be more likely to use the services of the Jackson County satellite facility.

Like most other service providers, veterinarians must develop a bond of trust with the clients they serve. Engaging food producers with seminars or other educational programs with content that is relevant to livestock producers is one way to build trust and develop confidence in the information and services the veterinarian provides.

Effective use of financial concepts in the practice at the satellite facility will be as critical to its success as providing quality care. The pricing model for all services of the facility should reflect the superior quality and value of the services delivered. Two pricing models will be developed. The first model will provide financial incentives to clients to regularly utilize veterinary services through a scheduled program. The second model for livestock producers will reflect higher pricing based upon a combination of time and procedures performed.

The Jackson County facility will organizationally and operationally operate as a service unit under the Ohio State University's College of Veterinary Medicine's, Veterinary Medical Center. Faculty from the Veterinary Medical Center will have day-to-day

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operating responsibility and will be supported by registered veterinary technicians, veterinary assistants and a small administrative staff. The Director of the Veterinary Medical Center and the Associate Dean of Clinical and Outreach Programs will provide overall administrative oversight for this satellite facility and its operation.

Substantial renovations would be required to the Jackson County facility in order to provide the services of a full-service farm animal veterinary practice. The costs of renovating the facility are estimated to be \$2.0 million. An engineering and architectural study will be necessary to more accurately identify the costs associated with the renovations. The financial projections indicate that revenue generated from the farm animal practice will not be sufficient to cover operating expenses until the practices third full year of operations. The projections show the operations would require an external source of capital of approximately \$175,000 during the first three years to support its operating expenditures. It should be noted that the date used in these financial projections for beginning operations (i.e. July 2013) was selected only for the purposes of presentation and not as an objective in and of itself. If the CVM determines to proceed with establishing a practice, the actual date will be subject to funding and many other variables and, as a result, the actual opening date will likely be different.

In order to facilitate the next steps toward establishing a sustainable veterinary practice in this Appalachian region of southern Ohio, it is recommended that CVM engage several large producers in discussions to try and understand their reluctance to utilize veterinarian services in the region and to understand how these obstacles might be overcome by a veterinary practice established by the CVM. By doing this, the CVM would gain valuable information on the business issues and risks this practice would face. In addition, the CVM might also be able to modify its delivery and/or service offering to address these issues and risks. The CVM might also conclude that it will not be able to overcome the issues and risks identified in these discussions and decide that a practice in this region is not a suitable solution at all.

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Project Description – Jackson County Veterinary Practice

In the summer of 2010, The Ohio State University's College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. After the meeting, broader discussions were held with other producers, veterinarians, businesses and community and civic leaders in Appalachian Ohio. From these discussions, the College of Veterinary Medicine was asked to consider establishing a satellite veterinary practice and clinic in the Appalachian region of Ohio to serve these communities.

The Need – Veterinary Medicine in Appalachian Ohio

Of the 88 counties in Ohio, 29 have been designated as part of the Appalachian Region of eastern and southern Ohio, known as Appalachian Ohio. These counties are located south of the diagonal line which runs from the southwest to northeast portion of the State. Known for its scenic, mountainous ranges, Appalachian Ohio is also recognized for its high poverty rates. Close to one-half of the counties in Appalachian Ohio have between 22% and 29% of all persons living in poverty, compared to the State average of 10.3%.

These rural communities are vital to Ohio's way of life, but face challenges regarding economic development, agriculture, education, health and more, not found in most other communities in the state. Much of the veterinary profession's impact is felt in Ohio's rural-based agricultural sector, and is responsible, for among other things, assuring an abundant, relatively inexpensive and safe food supply for Ohio citizens. Most farms in Appalachian Ohio are small family farms, where beef, cattle, hogs, sheep and goats are raised. Few veterinarians in this area choose to service food animals and as a result, many of these farms in Appalachian Ohio are significantly underserved by the veterinary profession. Studies have been performed to try and better understand the reasons why so few veterinarians choose to practice in rural communities and the results suggest that the requirements of emergency duty, insufficient time off, compensation, practice atmosphere and family concerns are all factors.

Jackson County is located in the southern Ohio area of Appalachian Ohio. Producers of food animals in Jackson and surrounding counties have limited access to routine or emergency veterinary care for their livestock. According to the Ohio Veterinary Medical Association's database of veterinarians, there are 33 veterinarians in Jackson and the six surrounding counties in this region. Only four of these veterinarians are considered food animal veterinarians and another ten are considered mixed animal veterinarians. Most veterinarians in these counties have developed companion animal practices with few remaining that are willing or interested in providing even limited services to food animals.

When farmers and producers in this region need veterinary assistance, the limited options include trying to access a local veterinarian or trying to get by without one. If a

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veterinarian agrees to help the farmer or producer, these practitioners could travel to the farm to provide services, refer the client to another practice, request the owner to transport the animal to their practice/clinic, or refer the client to the Ohio State College of Veterinary Medicine's Veterinary Medical Center (a 90+ mile drive). Regardless of the option selected, food producers in Jackson and its surrounding counties can be accurately characterized as underserved by the veterinary profession. The potential consequences are serious. Farmers and producers depend on the veterinary profession to help sustain their livelihoods, and Ohioans depend on healthy farm animals for a safe food supply.

Jackson County Facility

One possible location for a satellite veterinary clinic is the existing facilities at the Jackson Agricultural Research Station in Jackson County. The facility is located approximately 82 miles south of The Ohio State University campus in the city of Jackson near the intersection of State Routes 32 and 93 and is operated by the Ohio Agricultural Research and Development Center (OARDC). Located on 495 acres, the Jackson Agricultural Research Station has been a primary site for reproductive management and production management research in beef cattle for more than three decades. The Station has served as a key source for animals used in research designed to increase reproductive efficiency, test groundbreaking cattle production technologies, and develop value-added products from beef cattle.



The Station's reproductive management studies have helped set estrus-synchronization standards used by industry in Ohio, the United States, and around the world – including the Select Synch, CO-Synch, and Hybrid-Synch programs. The Jackson Station is also recognized as the key site for research to determine the proper use of technology from the Center for Inherited Disease Research at the Johns Hopkins University for increasing conception rates in beef cattle. Researchers and personnel at the Jackson Station work to match feed resources to beef cow milk production, which helps optimize calf nutrition, health, and development while making beef operations more efficient. Additionally, research at the Jackson Station in forage management systems has contributed to implementing successful grazing approaches used by producers today. The Station conducts forage studies using both small, replicated plots and large pasture acreage. Both are critical to the economy of Ohio's Appalachian counties.

In addition to research, the Jackson Station engages in outreach activities and works with various community organizations. The role of the Station's Advisory Committee is crucial in this regard, as it contributes to planning and keeping in direct contact with local clientele and stakeholders. Facilities and other resources at the Jackson Station give OARDC scientists the ability to obtain highly competitive federal grants and

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industry funding – supporting research and development activities that directly impact the economy of southern Ohio.

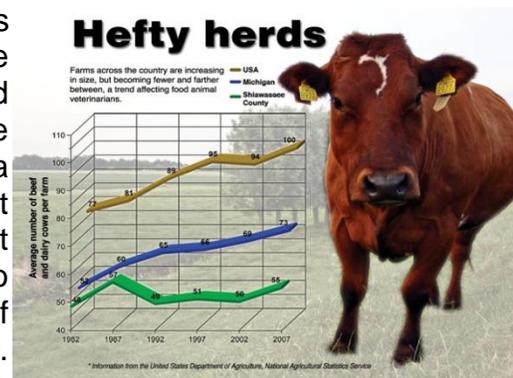
The Jackson Agricultural Research Station was established in 1968, when OARDC signed a 40-year lease for 334 acres belonging to the former Jackson County Home Farm. The size of the Station was expanded through the purchase of an additional 158 acres by the state of Ohio. The lease with Jackson County was renewed in 2008. The Jackson County OSU Extension office is housed next door to the station office, providing a great opportunity for collaborative research and demonstrations. The facility is located approximately 82 miles south of The Ohio State University campus in the city of Jackson, approximately 2 miles from the intersection of State Routes 32 and 35. Although the facility would require structural modifications, its location and its excellent reputation with local livestock producers make it an attractive site for a veterinary practice in this region.



Market Overview

Ohio is a leading food exporter, ranking 13th among all states and exporting more than \$2.6 billion in agricultural products in 2009. Ohio exports a wide range of agricultural products from processed food and food ingredients to livestock and their genetics. According to the Ohio Department of Development, Ohio is home to more than 77,000 farms and 45,000 of these have some type and level of animal production system. Ohio flourishes because of the strong agricultural industry, which employs one in six Ohioans. The food and agriculture industries provide more than \$79 billion to the state's economy, making agriculture a critical industry to the State of Ohio. Ohio's beef industry, the 16th largest in the United States by number of beef cattle operations, has an annual value of \$1.3 billion, generating nearly \$745 million in total production impact for the Buckeye state. Ohio is a world leader in producing milk, cheese and eggs. Nationally, Ohio ranks 1st in Swiss cheese production, 2nd in egg production, 5th in dairy manufacturing plants, 7th in the number of chickens sold, 9th in hog production and cheese production and 11th in milk production. According to the Ohio Alpaca Breeders Association, Ohio leads the nation with the largest number of alpaca farms and the greatest number of alpacas. Ohio is also a leader in terms of crop production. Between 40 to 50% of grain production is used for animal feed. Livestock genetics is another important aspect to the productivity of Ohio's agricultural industry.

The long-term sustainability of a veterinarian is dependent upon his or her ability to generate income sufficient to maintain the equipment and facilities required to provide quality veterinary care while paying back student loans, establishing a residence and providing the quality of life they want for themselves and their families. The average debt load for a veterinary graduate in 2009 increased to approximately \$130,000 with about one-third of graduates having a debt of more than \$150,000. Starting salaries have failed to keep pace with the increased tuition and debt load; the starting salary of new graduates in 2009 was \$64,826 regardless of the career area they chose.



A farm animal veterinary practice established by CVM, located in the Jackson Agriculture Research Center should leverage its excellent education and research reputation with large livestock producers in the region. A core group of producers willing to quickly engage the services of the new practice to provide ongoing herd management services, including vaccination and de-worming programs, reproduction programs, and replacement rearing programs, will be an important step toward developing a successful and sustainable practice in the region.

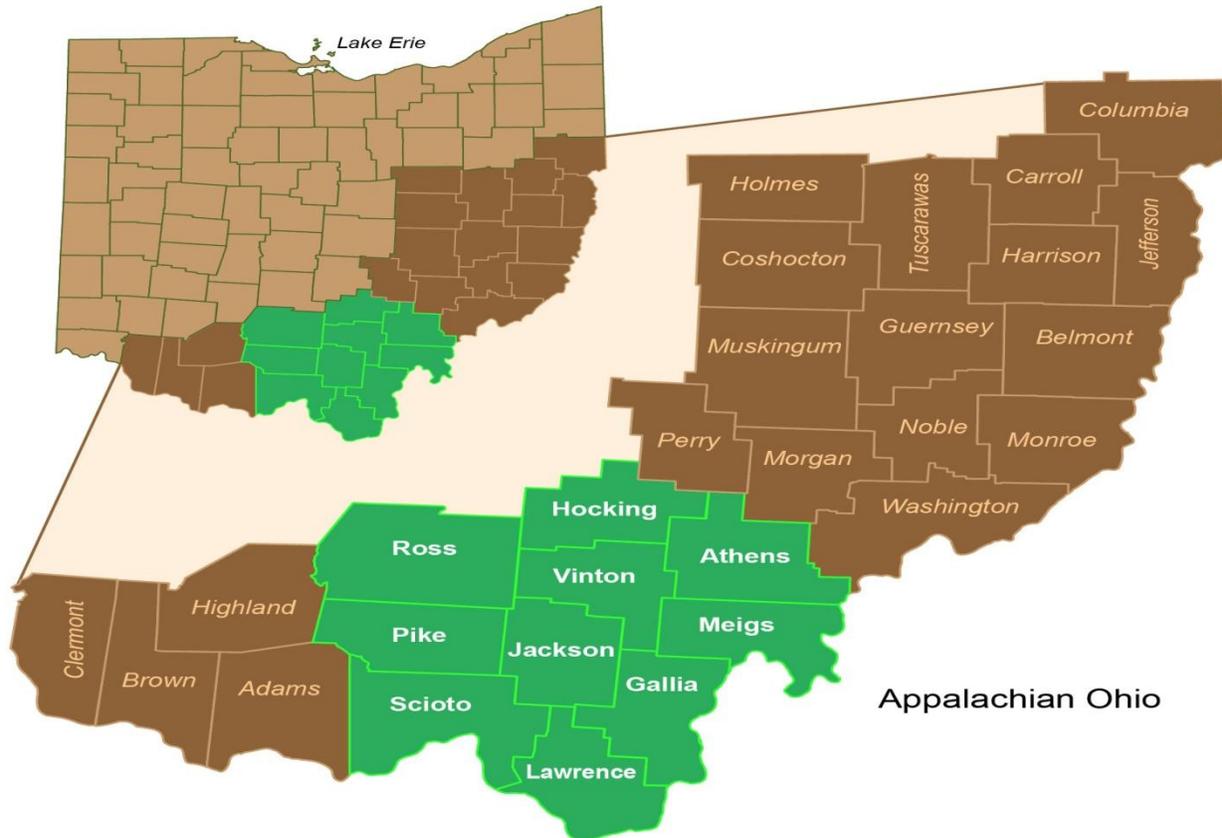
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Geographic Market Area

Distance and drive time is a primary consideration when clients consider their options for veterinary care. Potential clients of the veterinary practice at the Jackson facility are large animal farmers (beef and dairy cattle, hogs, sheep and goats) who reside in Jackson and surrounding counties. County seats of the six contiguous counties (Gallia, Lawrence, Pike, Ross, Scioto and Vinton) are all within a one-hour drive from the proposed satellite facility (20 to 49 miles). County seats of three additional counties nearby (Athens, Hocking and Meigs) are also within a one hour drive (41 to 44 miles) and could be serviced from the facility.

All ten counties are considered part of Appalachian Ohio.

| Travel Time to Surrounding County Seats | | | |
|---|-------------|----------|----------|
| County | County Seat | Distance | Time |
| Gallia | Gallipolis | 30 miles | 40 mins. |
| Lawrence | Ironton | 41 miles | 53 mins. |
| Pike | Waverly | 28 miles | 35 mins. |
| Ross | Chillicothe | 33 miles | 41 mins. |
| Scioto | Portsmouth | 49 miles | 56 mins. |
| Vinton | McArthur | 20 miles | 30 mins |
| Athens | Athens | 41 miles | 47 mins. |
| Hocking | Logan | 44 miles | 59 mins. |
| Meigs | Pomeroy | 41 miles | 57 mins. |



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Economy in Appalachian Ohio

Rural communities are vital to Ohio’s economy and way of life. However, these communities face challenges in terms of economic development, agriculture, education and healthcare. The Appalachian Regional Commission (ARC) is a regional economic development agency that represents a partnership of federal, state, and local government. The ARC uses an index-based county economic classification system to identify the economic status of Appalachian Counties (Attainment, Competitive, Transitional, At-Risk, and Distressed). Index values are based upon comparisons of county and national data for three-year average unemployment rates, per capita market income, and poverty rates. Jackson and three neighboring counties (Gallia, Lawrence and Scioto), are considered economically “at-risk” according to this classification system. Four additional nearby counties (Athens, Meigs, Pike and Vinton), are considered “distressed” according to this classification system.

Economic Data for Jackson and 9 Surrounding Counties

| County | Population | Rural/Urban or Mixed | County Economic Status ⁽¹⁾ | 2009 Unemployment Rate ⁽²⁾ | Index Value Rank | Quartile (1 is the best) ⁽¹⁾ |
|----------|------------|-------------------------|--|---|---|--|
| | | | | | (of 3,110 counties in U.S., 1 is the best) ⁽¹⁾ | |
| Jackson | 33,225 | Rural | At-Risk | 7.9 | 2,644 | 4 |
| Gallia | 30,934 | Rural | At-Risk | 6.3 | 2,421 | 4 |
| Lawrence | 62,450 | Mixed | At-Risk | 5.3 | 2,482 | 4 |
| Pike | 28,709 | Rural | Distressed | 9.4 | 2,857 | 4 |
| Ross | 78,064 | Mixed | Transitional | 7.0 | 2,055 | 3 |
| Scioto | 79,499 | Mixed | At-Risk | 7.7 | 2,742 | 4 |
| Vinton | 13,435 | Rural | Distressed | 8.3 | 2,914 | 4 |
| Athens | 64,757 | Mixed | Distressed | 6.2 | 2,844 | 4 |
| Hocking | 29,380 | Rural | Transitional | 6.7 | 2,221 | 3 |
| Meigs | 23,770 | Rural | Distressed | 9.1 | 2,910 | 4 |

⁽¹⁾ Appalachian Regional Commission, March 2010.

⁽²⁾ "Ohio County Profiles", a publication by the Policy Research and Strategic Planning Office (A State Affiliate of the US Census Bureau) of the Ohio Department of Development.

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Market Analysis

Analysis of farm and livestock data for this 10-county region from the 2007 Census by the US Department of Agriculture provides insight into financial opportunities and challenges of a farm animal veterinary practice in this region. According to census data, product sales from cattle, calves, milk and other dairy products in this 10 county area were approximately \$52.9 million. The average value of livestock products sold in each of these 10 counties is \$5.3 million with a range of \$0.7 million in Vinton County and \$9.9 million in Scioto County. Although the livestock market is small compared with other counties in Ohio, the data suggests that the serviceable veterinary market in this region may be large enough for an additional practice focused on servicing the livestock and large animal owners and producers in these 10 counties.

Farm Income Ranking for Jackson and 9 Surrounding Counties

| County | # of Farms (Crops and Livestock) ⁽¹⁾ | # of Farms with Livestock ⁽²⁾ | Market Value of Livestock Products Sold (\$ 000's) ⁽¹⁾ | Avg. Product Sales per Farm with Livestock |
|----------------|---|--|---|--|
| Jackson | 462 | 280 | \$5,126 | \$18,307 |
| Gallia | 993 | 700 | \$9,539 | \$13,627 |
| Lawrence | 649 | 443 | \$2,821 | \$6,368 |
| Pike | 538 | 262 | \$3,489 | \$13,317 |
| Ross | 1,009 | 374 | \$8,457 | \$22,612 |
| Scioto | 755 | 448 | \$9,897 | \$22,092 |
| Vinton | 250 | 123 | \$715 | \$5,813 |
| Athens | 585 | 358 | \$4,965 | \$13,869 |
| Hocking | 387 | 219 | \$1,258 | \$5,744 |
| Meigs | 551 | 302 | \$6,672 | \$22,093 |
| Total | 6,179 | 3,509 | \$52,939 | |
| Average | 618 | 351 | \$5,294 | \$15,087 |

⁽¹⁾ US Department of Agriculture, National Agriculture Statistics Service, 2007 Census of Agriculture.

⁽²⁾ Data from the US Department of Agriculture, Table 45 - 2007 Census of Agriculture.

As the following table indicates, the region is made up of a significant number of small farm operations. According to the US Department of Agriculture's 2007 Census of Agriculture, over 92% of all farms (crop and livestock farms) in this region have annual sales of less than \$50,000, compared to 65% of farms in the 10 most successful farming counties of Ohio. Given the lack of farm income in these households, it's not surprising that the majority of these farmers pursues other occupations to supplement their farm income and don't consider farming to be their primary occupation. These smaller farms with livestock would not be considered a consistent serviceable unit. The analysis also shows that 465 farms in this 10-county region have farm sales receipts greater than \$50,000 per year and may present an opportunity for veterinary service.

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Farm Size (Crop and Livestock) by Sales ⁽¹⁾

| County | Less than \$10,000 | \$10,000 to \$49,999 | \$50,000 to \$99,999 | \$100,000 to \$249,999 | \$250,000 to \$499,999 | \$500,000 or more |
|-------------------|--------------------|----------------------|----------------------|------------------------|------------------------|-------------------|
| Jackson | 330 | 93 | 23 | 9 | 6 | 1 |
| Gallia | 802 | 147 | 27 | 7 | 7 | 3 |
| Lawrence | 568 | 67 | 9 | 2 | 3 | 0 |
| Pike | 419 | 72 | 25 | 15 | 3 | 4 |
| Ross | 707 | 141 | 57 | 54 | 24 | 26 |
| Scioto | 587 | 121 | 17 | 16 | 11 | 3 |
| Vinton | 211 | 30 | 5 | 1 | 0 | 3 |
| Athens | 467 | 88 | 14 | 9 | 4 | 3 |
| Hocking | 314 | 57 | 9 | 5 | 1 | 1 |
| Meigs | 389 | 104 | 29 | 13 | 6 | 10 |
| Total | 4794 | 920 | 215 | 131 | 65 | 54 |
| % of total | 77.6% | 14.9% | 3.5% | 2.1% | 1.1% | 0.9% |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, 2007 Census

In order to establish a sustainable veterinary farm-animal practice, the practice will need a core group of larger food producers that will consistently utilize the services of the practice throughout the year. Establishment of herd health management strategies and preventative medicine programs (such as vaccination and parasite control programs, reproductive programs) and monitoring the effects of such programs will be an important service offered by this practice and one way to engage producers on a consistent basis. Although owners of smaller farms might utilize the services of a veterinarian for emergencies, they will try to get by without incurring additional cost of a veterinary and address health issues of their livestock (including dispensing drugs and vaccines) on their own. If veterinary services that offer healthcare and livestock management are available and producers utilize the services, these producers should develop the capacity to manage larger numbers of animals with associated increases in income. It will be imperative to build relationships with the larger food producers and engage these producers to utilize a minimal amount of veterinary services each year.



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The following table shows there are 149 producers that meet the criteria (i.e. farms with greater than 100 head of cattle) of a serviceable client in this 10 county region.

Size of Cattle Herds ⁽¹⁾

| County | Farms with 100 to 199 head | Farms with 200 to 499 head | Farms with >500 head | Total Farms with > 100 head | Inventory of Cattle on Farms with > 100 head |
|--------------|-------------------------------|-------------------------------|-------------------------|--------------------------------|--|
| Jackson | 14 | 14 | 0 | 28 | 5,997 |
| Gallia | 7 | 13 | 2 | 22 | 3,235 ⁽²⁾ |
| Lawrence | 6 | 1 | 0 | 7 | 0 ⁽²⁾ |
| Pike | 5 | 4 | 0 | 9 | 2,833 |
| Ross | 29 | 8 | 2 | 39 | 6,597 ⁽²⁾ |
| Scioto | 9 | 3 | 1 | 13 | 1,172 ⁽²⁾ |
| Vinton | 2 | 0 | 0 | 2 | 0 ⁽²⁾ |
| Athens | 7 | 6 | 0 | 13 | 2,847 |
| Hocking | 2 | 0 | 0 | 2 | 0 ⁽²⁾ |
| Meigs | 7 | 5 | 2 | 14 | 2,619 ⁽²⁾ |
| Total | 88 | 54 | 7 | 149 | |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, Table 11, 2007 Census

⁽²⁾ Not all respondents to census provided data related to inventory quantities in these counties.

Herd health management strategies and preventive medicine programs depend upon the types of animals and the objectives of the producers. Dairy programs can often be profitable due to the income generated through consistent herd checks required throughout the year. However, the data presented in the following table suggests that there are few dairy cattle farmers and far more beef cattle farmers in the region. Beef herds tend to require more seasonal veterinary care than dairy herds and requirements from a veterinarian are more intense during the spring and fall seasons, but less throughout the remainder of the year. As a result, beef producers are less likely to utilize an annual preventive medicine program, but might consider a seasonal program in the spring and fall designed to meet their objectives. The analysis of the market data available suggests that the greatest opportunity to establish a farm animal practice in Jackson County will be with beef cattle producers that have herds of greater than 100 head of cattle.

Given the lack of available veterinary care in this region and financial pressures farmers are facing, most producers make decisions regarding vaccinations and basic herd health management issues themselves and are reluctant to consult with a veterinarian because of the cost. Producers from the Jackson County area and veterinarians that have served cattle farmers in rural communities suggest that most producers are skeptical of the economic benefits a veterinarian can provide to them. Many make decisions based on information they learn from farm journals or from discussions with other producers. They may not be informed about appropriate alternatives suitable for the condition of their specific herd. If producers are educated about new veterinary

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drugs and techniques available that provide a clear economic benefit, producers will be more likely to use the services of the Jackson County satellite facility. Utilizing the expertise of reproductive medicine specialists at the College (theriogenology) to provide advanced reproductive technologies and services, including but not limited to artificial insemination, embryo transfer, and assisted-reproductive techniques to improve reproductive efficiency and/or to improve the herd genetics are examples of expertise the College can provide and convince producers of the financial value a veterinary can provide to their operations. Likewise, utilizing other services and expertise in soil and crop sciences, pasture-management, and nutrition among others will be important to enhance production and economic return for livestock producers in this area.

Livestock Farms ⁽¹⁾

| County | Beef cattle | Cattle | Dairy cattle | Hog and pig | Poultry and | Sheep and | Animal |
|--------------|--------------|------------|--------------|-------------|-------------|--------------|-------------|
| | ranching and | | and milk | | egg | | Aquaculture |
| | farming | Feedlots | production | farming | production | goat farming | and other |
| | | | | | | | animal |
| Jackson | 187 | 10 | 11 | 2 | 6 | 21 | 43 |
| Gallia | 474 | 19 | 12 | 36 | 21 | 34 | 104 |
| Lawrence | 290 | 10 | 8 | 6 | 15 | 32 | 82 |
| Pike | 165 | 6 | 11 | 12 | 15 | 8 | 45 |
| Ross | 216 | 31 | 6 | 13 | 19 | 22 | 67 |
| Scioto | 289 | 11 | 4 | 14 | 22 | 19 | 89 |
| Vinton | 77 | 0 | 3 | 5 | 3 | 8 | 27 |
| Athens | 196 | 16 | 16 | 4 | 21 | 22 | 83 |
| Hocking | 109 | 14 | 0 | 5 | 19 | 28 | 44 |
| Meigs | 197 | 11 | 30 | 6 | 9 | 11 | 38 |
| Total | 2,200 | 128 | 101 | 103 | 150 | 205 | 622 |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, Table 45, 2007 Census



Marketing and Promotion

Like most service providers, veterinarians must develop a bond of trust with the clients they serve. Producers are under significant financial pressure and are constantly considering the most efficient way to operate their business. Establishing health programs with producers will require that the practitioners to develop communication and trust with the producers in the community. In order to effectively implement and monitor health programs with producers, producers will have to be convinced that the economic benefits of such programs outweigh the costs. Engaging food producers with educational seminars or other educational programs is one way to build trust and develop confidence in the information and services the veterinarian provides. Regular electronic newsletters, promotional e-mail and other materials with content that is relevant to livestock producers is another way of creating awareness and confidence in the value veterinarians can provide to their operations.

Pricing Strategy

Effective use of financial concepts in the practice at the satellite facility will be as critical to its success as providing quality care. Studies reveal that veterinarians who understand and become experts in utilizing various pricing strategies to increase profitability have considerably more financial success than those that don't understand and utilize this tool. A 2011 report by Bayer Health Care's Animal Health Division and the National Commission on Veterinary Economic Issues examines decreasing client visits and the resulting loss of revenue at veterinary hospitals nationwide. Although this study involved only companion animal practices, the insight and business practices recommended, can be useful for farm animal practices as well. The Bayer Veterinary Care Usage Study reveals that 62 percent of practices do not use financial concepts to manage their business and that the practices that do employ a range of financial concepts, such as pricing strategies, are two-thirds more profitable.

The pricing model for all services of the facility should reflect the superior quality and value of the services delivered. Client's expectations of veterinary services and pricing of these services in this region will vary. Although competitors in this region are few, the pricing model should remain consistent and should not undermine the quality and value of services by undercutting competitors in the region. Payment options can be offered to those using the services on a regular basis.

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Operating Plan

The College of Veterinary Medicine farm animal practice located in Jackson, Ohio, will be a unique veterinary practice providing full-service routine in-hospital or on-farm, medical and surgical services for animal owners in Jackson and surrounding counties. Serving as a satellite of the Ohio State College of Veterinary Medicine's Veterinary Medical Center, the practice will be staffed by faculty and staff veterinarians with experience and knowledge of large animal medical, surgical, preventive and production medicine issues. Clients will include cattle and swine producers, dairy farmers, camelid clients and small ruminant herd owners.

Full-Service Farm Animal Practice

The practice in Jackson will be a full-service farm animal veterinary practice. It is anticipated that service revenue from emergency and surgical services will be required in order to engage with farmers and develop their confidence in the value veterinary professionals can provide to their business.

The veterinarians at Ohio State's Jackson satellite facility will have clinical experience with food animal veterinary care. As OSU faculty, they base all treatment decisions and protocols on the latest scientific research and best practices in the field. They also have access to faculty in the College of Veterinary Medicine, OSU Extension, Department of Animal Sciences, and the Ohio Agricultural Research and Development Center, on a fee-for-service basis, allowing them to draw on the knowledge of the many experts within The Ohio State University system to optimize preventive, diagnostic, therapeutic, and production medicine programs for livestock animals.

Veterinarians have been entrusted to protect the livelihood of farmers, both by caring for their animals and by safeguarding the human food they produce. The College of Veterinary Medicine at The Ohio State University is committed to having its veterinary students work within an on-farm ambulatory practice, giving them hands-on experience in large and small-scale livestock operations. As part of a fourth-year rotation, Ohio State veterinary students will work under the supervision of the Jackson faculty and staff veterinarians and assist them as members of part of a high-performing and cohesive team.



Veterinary Services Offered

The Ohio State University's Jackson County satellite facility will offer veterinary services to owners of farm animals, including beef and dairy cattle, swine, sheep, goats and camelids. It will be a unique veterinary practice providing comprehensive medical and surgical services for large animal farm owners. Services will include herd health management strategy as well as preventive and production medicine programs. The ambulatory clinic will be a full-service farm animal veterinary practice providing services for individual animals, customized herd-based programs and emergency services for food and fiber animals. Along with full medical and surgical services, the OSU Jackson County satellite facility offers year-round, 24-hour in-house and ambulatory emergency coverage. Individual animal care, ultrasound, endoscopic and radiology exams will also be provided. Routine surgeries, exams and other procedures are usually performed on the farm, but in some cases, animals will be transported to and cared for in our clinic building.

Vaccination and De-worming Programs

Preventing infectious disease outbreaks requires a comprehensive herd approach. Veterinarians traveling to the farm gain an appreciation of the management scheme on each producer's facility. This information, in combination with individual animal skills is critical to preparation of real world, customized herd health program for each farm. The vaccination and parasite mitigation programs developed reflect specific concerns on each farm and encompass critical preventive and production management events, such as reproductive programs (cow and bull fertility and health), calf health (scours and respiratory disease prevention), and internal and external parasite control. Development of vaccine protocols are based upon the producers' pre-breeding, pregnancy and calving system. Only a comprehensive and integrated herd health and production medicine program can provide protection against the financial losses associated with an outbreak of infectious diseases.

Herd-Based Reproduction Programs



Reproductive performance is a major factor affecting the production and economic efficiency of cattle operations whether in milk, replacement animals or calves for fattening. Today, fewer animals are expected to achieve ever-higher levels of production. Reproductive failure is the main reason for replacement in beef and dairy herds. Therefore efficacious and convenient reproduction management is central to the concerns of every cattle operation. A major

and realistic goal of every cow/calf operator and dairy producer should be to raise reproductive performance every year. Reproductive performance can be improved by

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the following: 1) properly identifying animals; 2) keeping records that enable determination of important herd indices, such as percent calf crop, pregnancy rate, length of calving season, culling rates, calf morbidity and mortality, breeding efficiency of bulls, and performance and production information; 3) meeting the nutritional requirements of various classes of livestock in the herd, emphasizing nutritional needs and cost efficiencies; 4) establishing a breeding program for heifer replacements and cows; 5) practicing sire selection and reproductive management, including selected use of advanced reproductive technologies such as artificial insemination, embryo transfer, assisted-reproductive techniques and other ways of improving herd genetics; 6) adopting an immunization program for the cow/calf herd, bulls, and calves; 7) evaluating reproductive failure and abortions; 8) providing adequate facilities; and 9) ensuring that the calf is well cared for at birth and receives adequate colostrum. A sound management program designed to reduce the risk of reproductive failure and improve cattle welfare and farm profitability could have a significant economic impact on producers in this region.

Emergency Services

If a farm animal should become injured or suddenly develop an acute life threatening disease, he or she will need prompt emergency care. Calving difficulty is common and a major cause of death loss in cow-calf herds. The satellite facilities emergency and critical care services will operate 24/7/365, and include veterinarians with expertise to treat these and other emergency healthcare concerns unique to the farm community.

Additional Ambulatory and In-House Clinical Services Offered

Additional ambulatory and clinical services will include the following:

- Full-service medicine and general surgery
- Diagnosis, treatment and prevention of individual animal disease
- Herd performance evaluation and consultation
- Record analysis (DHIA, CTAP , DC 305)
- Ration evaluation
- Nutritional consultation
- Replacement rearing programs
- In-house laboratory support
- Castration, dehorning and routine production procedures
- Breeding soundness examination
- Pre-purchase and insurance exams

Description of Business Practices

Providing a consistent and reliable amount of veterinary care services is critical to developing a sustainable practice in any region. Business practices identified in this business plan are therefore focused on developing a base of clients who have a consistent, significant and recurring need for veterinary services. For food producers, proactive veterinary medical care that includes herd management preventive medicine

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practices will improve both the quality of food produced and efficiency of the producers operations, resulting in greater financial returns. For veterinarians, it will reduce the number of emergency calls they make and significantly improve their quality of life.

Engaging the Livestock Producer Community

Beef and other food producers in this area of Appalachian Ohio have learned to handle nutrition and other herd health issues on their own, primarily out of financial necessity. It will be important to the success of the practice to actively engage with as many food producers of the region as possible to develop relationships and earn their trust. Programs designed to provide information about relevant issues can be used as a tool to deliver new herd management concepts, introduce



new technology or provide an objective professional medical opinion on issues that could have a significant financial impact on the producers' operations. Educational programs and seminars should also be developed to engage the veterinary and producer communities in this area. Programs should be developed that offer practical, farm based training, delivered by veterinarians and industry experts that are focused on improving local producer's livestock and business performance. Feedlot owners and other organizations that could benefit should be solicited to financially support the efforts of these programs. Communication and education programs are not anticipated to generate quick, short-term financial results and therefore, it will be important for the practitioners and staff members to engage producers early with these programs.

Emergency Medical Care

According to practitioners in rural communities, providing emergency veterinary medical care 24 hours a day and 365 days out of the year is another way of developing relationships and trust with producers in the area which leads to opportunities to provide other veterinary services. When a farmer calls a veterinarian during the late hours of the evening or during a holiday to help with calving or other type of emergency, it presents a unique opportunity for veterinarians. Helping the producer out of a difficult situation by providing care to their livestock provides an opportunity to build a relationship and develop trust with the producer. It also provides an opportunity to discuss sound breeding techniques or other herd management issues and strategies that might prevent costly medical emergencies in the future benefiting both the producer and the veterinary practice.

Herd Health Management and Preventive Medicine



It pays to have a good working relationship with a veterinarian to assist in herd health management strategy and preventative medicine, rather than just relying on a veterinarian for emergencies. The veterinarian can answer questions and help prevent problems, often increasing a producer's profit margin. There are several advantages for the producer when arranging a veterinarian to be a consultant in the operation. The veterinarian can help the producer look over the entire

operation in terms of herd health, find any weak areas and identify places for improvement. Consulting on use of new vaccines and matching vaccines with a production or health maintenance program can improve financial results for producers. The veterinarian may also connect the producer with other professionals such as a nutritionist, agronomist or reproductive specialist. Unless the animals are adequately fed, nothing the veterinarian can do or suggest will work well to sustain reproductive performance and milk production.

Fee Structure – Two Plans

The pricing model for all services of the facility should reflect the superior quality and value of the services delivered. The pricing model can include financial incentives for food producers who utilize the veterinary staff on a regularly scheduled basis to develop herd management programs for their operations. Understanding that not every livestock producer will choose to use the veterinarian in this way, two pricing models can be developed. The first model will provide preferred pricing and other incentives to clients that commit to utilize veterinary services through a scheduled program outlined in a service agreement. In addition to reduced fees for services, clients enrolled using this pricing model are provided priority service privileges 24 hours a day, 365 days a year. The program helps create predictable workflow and financial stability for the veterinary practice.

Features of the scheduled preferred pricing program include:

- Herd management program fees based on the type and size of the producers' herds and significant events anticipated during the year (e.g. breeding, pregnancy-checking, calving and winter feeding). The objective of herd management programs is to improve the overall profitability of the producer by increasing production and lowering operational costs. The pricing plan provides producers with a predictable cost for veterinary services for their herd inventory.
- Preferred after-hours response for emergencies.
- Exclusive educational meetings for clients participating in the program.
- Monthly billing and additional benefits for prepaid packages.

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Not all producers will decide to participate in a preferred pricing program. The second fee structure is for these clients. Services will be provided to these clients at rates that are consistent with the local rates of other veterinarians with a modest premium. When veterinarians are called for emergency services, it is sometimes the only opportunity to discuss options with the producer for better care for their herd. Fees for responding to emergency calls will reflect a premium and provide incentive to consider the scheduled preferred pricing program. Additional features of the second fee structure include:

- Procedural fees based on published rates.
- Reduced fees for those that use the practice's services consistently.
- Compliance with a strict travel policy – policy for billing travel time to farms.
- Hourly billing for emergency calls and for farm visits. Incentivize owners to have the animal(s) ready (caught and restrained) to be examined when they arrive.
- Payment will be expected at the time of service.

Superior Service and State-of-the-Art Technology

Superior professional, friendly service using state-of-the-art knowledge and technology will be a core business principle of the practice. Staff will be trained to manage difficult clients and certain situations that occur frequently with animal owners. In addition, staff members will be trained to utilize “state of the art” information and technology in the facility, and to communicate their advantages.

Organizational Structure - Personnel



The Jackson County facility will organizationally and operationally operate as a service unit under the Ohio State University's College of Veterinary Medicine's, Veterinary Medical Center. Faculty from the Veterinary Medical Center will have day-to-day operating responsibility and will be supported by Registered Veterinary Technicians, Veterinary Assistants and a small administrative staff. The Director of the Veterinary Medical Center and the Associate Dean of Clinical and Outreach Programs will provide overall administrative oversight for this satellite facility and its operation. Following is a list of staff positions that would be required based on anticipated levels of service provided at the Jackson County satellite facility:

- Licensed Veterinarians – two veterinarians upon opening the facility.
- Veterinary Residents – one veterinary resident added in the second year of operations.
- Veterinary Technicians – one veterinary technician upon opening the facility.
- Veterinary Assistants – one veterinary assistant upon opening the facility.
- Administrative staff – one administrative staff added in the third year of operations.

Financial Summary

Jackson County Facility Capital Improvements

The Jackson Agricultural Research Station has been a primary site for reproductive management and production management research in beef cattle for more than three decades. Substantial renovations and additions would be required to deliver the services of a full-service farm animal practice. The facility would require several modifications, including but not limited to the following:



- A complete bull and cattle handling facility, requiring a portable alley and chute and sorting tub,
- Electrical, sanitary water and drain upgrades,
- Outside modifications to allow producers truck and trailer access and loading and unloading facilities for their animals, and
- Additional fencing to prevent animals from inadvertently exiting the premises and obtaining access to the adjacent roads.

An engineering and architectural study will be necessary to more accurately identify the costs associated with the renovations. However, two points of reference provide a basis for estimating a range of costs that would be necessary.

The construction costs of the Marysville Large Animal facility, including installation of utilities, driveway and parking improvements, building improvements and fees for architectural fees, were approximately \$2.0 million. Based on a site visit to the proposed facility in March 2011 and preliminary discussions with equipment providers, the renovations required in the facility include portable alley, sorting tub and chute for cattle, equipment for minor surgeries, (C-section, breeding soundness examinations, pregnancy examinations and other general practice procedures to producers). Costs for practice vehicles and adding living quarters for students are also included. A more detailed study of the requirements of the facility will be required to more accurately identify the modifications needed and equipment required and to estimate the costs of the project. However, based on these points of reference the facility improvements are currently estimated to require external sources of capital of approximately \$2.0 million.

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Financial Projections

The following financial projections have been prepared for the proposed satellite facility discussed in this business plan. The assumptions used for preparing the projections are presented in Appendix B. The projections indicate that revenue generated from the farm animal segment of the veterinary service market in this region would not be sufficient to cover operating expenses until its third year of operations. The projections show the operations would require an external source of capital of approximately \$175,000 during the first three years to cover start-up and operating expenditures.



Balance Sheet 5-Year Projections

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Balance Sheet

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Assets | | | | | |
| Cash | \$ (107,145) | \$ (171,389) | \$ (168,611) | \$ (135,605) | \$ (61,919) |
| Accounts receivable | 3,170 | 4,000 | 3,635 | 4,759 | 5,570 |
| Less: allowance for uncollectibles | (159) | (200) | (182) | (238) | (278) |
| Accounts receivable, net | 3,012 | 3,800 | 3,453 | 4,521 | 5,291 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (101,133) | (164,589) | (162,158) | (128,084) | (53,627) |
| Facility and new equipment cost | - | - | - | - | - |
| Total assets | \$ (101,133) | \$ (164,589) | \$ (162,158) | \$ (128,084) | \$ (53,627) |
| Liabilities and equity | | | | | |
| Accounts payable | \$ 8,383 | \$ 10,576 | \$ 9,612 | \$ 12,583 | \$ 14,728 |
| Accrued salaries and wages | 1,928 | 2,383 | 2,411 | 2,332 | 2,390 |
| Sales tax payable | 604 | 762 | 2,078 | 10,880 | 12,734 |
| Total current liabilities | 10,915 | 13,722 | 14,100 | 25,796 | 29,853 |
| Total long-term liabilities | - | - | - | - | - |
| Total equity | (112,048) | (178,311) | (176,258) | (153,880) | (83,480) |
| Total liabilities and equity | \$ (101,133) | \$ (164,589) | \$ (162,158) | \$ (128,084) | \$ (53,627) |

The College of Veterinary Medicine
 Full-Service Farm Animal Veterinary Practice
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Statement of Operations 5-Year Projections

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Operations

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|-------------------------------------|---------------------|--------------------|-----------------|------------------|------------------|
| Revenue | | | | | |
| Professional fees | \$ 111,099 | \$ 178,396 | \$ 243,952 | \$ 280,166 | \$ 327,914 |
| Laboratory fees | 15,652 | 25,133 | 34,369 | 39,471 | 46,198 |
| Drug fees | 82,181 | 131,961 | 180,454 | 207,242 | 242,561 |
| Other fees | 17,524 | 28,138 | 38,478 | 44,191 | 51,722 |
| Total revenue | 226,457 | 363,629 | 497,253 | 571,070 | 668,395 |
| Operating expenses: | | | | | |
| Compensation | 231,380 | 261,565 | 266,841 | 279,843 | 286,839 |
| Benefits | 75,878 | 79,946 | 84,406 | 94,993 | 97,368 |
| Cost of drugs | 55,854 | 89,687 | 122,644 | 140,851 | 164,855 |
| Supplies expense | 10,771 | 17,296 | 23,651 | 27,162 | 31,791 |
| Postage expense | 1,056 | 1,695 | 2,318 | 2,662 | 3,115 |
| Utilities expense | 4,398 | 7,063 | 9,658 | 11,092 | 12,982 |
| Building repairs & maintenance | 2,593 | 4,164 | 5,694 | 6,540 | 7,654 |
| Lab services expense | 5,154 | 8,276 | 11,317 | 12,997 | 15,212 |
| Other purchased expenses | 7,575 | 12,163 | 16,633 | 19,102 | 22,357 |
| Misc expense | 2,364 | 3,796 | 5,191 | 5,961 | 6,977 |
| Equipment purchases | 10,033 | 16,110 | 22,030 | 25,300 | 29,612 |
| University overhead | 9,015 | 14,476 | 19,796 | 22,734 | 26,609 |
| Exp transfer | (11,776) | (18,909) | (25,857) | (29,696) | (34,757) |
| Total operating expenses | 404,295 | 497,326 | 564,321 | 619,540 | 670,615 |
| Operating income | (177,838) | (133,697) | (67,068) | (48,470) | (2,220) |
| Other income (expense): | | | | | |
| Other income (expense) | - | - | - | - | - |
| General funds - teaching support | 65,790 | 67,435 | 69,121 | 70,849 | 72,620 |
| Total other income (expense) | 65,790 | 67,435 | 69,121 | 70,849 | 72,620 |
| Net income | \$ (112,048) | \$ (66,262) | \$ 2,053 | \$ 22,378 | \$ 70,400 |

The College of Veterinary Medicine
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 April 11, 2012

Statement of Cash Flow 5-Year Projections

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Cash Flow

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|--|---------------------|---------------------|---------------------|---------------------|--------------------|
| Net income | \$ (112,048) | \$ (66,262) | \$ 2,053 | \$ 22,378 | \$ 70,400 |
| Adjustments to reconcile net income to net cash provided by operating (Increase) decrease in operating assets: | | | | | |
| Accounts receivable | (3,012) | (788) | 347 | (1,068) | (770) |
| Prepaid expenses | (3,000) | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | |
| Accounts payable | 8,383 | 2,193 | (965) | 2,971 | 2,145 |
| Accrued salaries and wages | 1,928 | 455 | 28 | (79) | 58 |
| Sales tax payable | 604 | 158 | 1,316 | 8,802 | 1,854 |
| Total adjustments | 4,903 | 2,018 | 725 | 10,628 | 3,287 |
| Net cash provided by (used in) | (107,145) | (64,244) | 2,778 | 33,006 | 73,686 |
| Cash used in investing activities | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - |
| Beginning cash balance | - | (107,145) | (171,389) | (168,611) | (135,605) |
| Ending cash balance | \$ (107,145) | \$ (171,389) | \$ (168,611) | \$ (135,605) | \$ (61,919) |

Appendices

Appendix A: Detailed Financial Projections

Jackson County Veterinary Practice - Full Service Farm Animals 5 Year Financial Projections Balance Sheet

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|
| Assets | | | | | | | | | | | | | |
| Cash | \$ (16,892) | \$ (32,057) | \$ (45,929) | \$ (57,646) | \$ (67,422) | \$ (76,977) | \$ (86,746) | \$ (96,514) | \$ (101,120) | \$ (102,704) | \$ (105,355) | \$ (107,145) | \$ (107,145) |
| Accounts receivable | 566 | 793 | 1,019 | 1,359 | 1,698 | 1,812 | 1,812 | 1,812 | 2,491 | 3,057 | 3,057 | 3,170 | 3,170 |
| Less: allowance for uncollectibles | (28) | (40) | (51) | (68) | (85) | (91) | (91) | (91) | (125) | (153) | (153) | (159) | (159) |
| Accounts receivable, net | 538 | 753 | 968 | 1,291 | 1,614 | 1,721 | 1,721 | 1,721 | 2,366 | 2,904 | 2,904 | 3,012 | 3,012 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (13,354) | (28,304) | (41,961) | (53,355) | (62,808) | (72,256) | (82,025) | (91,793) | (95,754) | (96,800) | (99,450) | (101,133) | (101,133) |
| Total assets | \$ (13,354) | \$ (28,304) | \$ (41,961) | \$ (53,355) | \$ (62,808) | \$ (72,256) | \$ (82,025) | \$ (91,793) | \$ (95,754) | \$ (96,800) | \$ (99,450) | \$ (101,133) | \$ (101,133) |
| Liabilities and equity | | | | | | | | | | | | | |
| Accounts payable | \$ 1,497 | \$ 2,096 | \$ 2,695 | \$ 3,593 | \$ 4,491 | \$ 4,790 | \$ 4,790 | \$ 4,790 | \$ 6,587 | \$ 8,084 | \$ 8,084 | \$ 8,383 | \$ 8,383 |
| Accrued salaries and wages | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 | 1,928 |
| Sales tax payable | 108 | 151 | 194 | 259 | 324 | 345 | 345 | 345 | 475 | 582 | 582 | 604 | 604 |
| Total current liabilities | 3,533 | 4,175 | 4,817 | 5,780 | 6,743 | 7,064 | 7,064 | 7,064 | 8,989 | 10,594 | 10,594 | 10,915 | 10,915 |
| Total equity | (16,887) | (32,479) | (46,778) | (59,135) | (69,551) | (79,320) | (89,088) | (98,857) | (104,743) | (107,394) | (110,045) | (112,048) | (112,048) |
| Total liabilities and equity | \$ (13,354) | \$ (28,304) | \$ (41,961) | \$ (53,355) | \$ (62,808) | \$ (72,256) | \$ (82,025) | \$ (91,793) | \$ (95,754) | \$ (96,800) | \$ (99,450) | \$ (101,133) | \$ (101,133) |

The College of Veterinary Medicine
Full-Service Farm Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Balance Sheet

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Assets | | | | | | | | | | | | | |
| Cash | \$ (108,826) | \$ (109,366) | \$ (111,631) | \$ (116,317) | \$ (123,081) | \$ (131,232) | \$ (140,818) | \$ (152,016) | \$ (159,588) | \$ (165,253) | \$ (170,222) | \$ (171,389) | \$ (171,389) |
| Accounts receivable | 3,273 | 3,454 | 3,273 | 2,909 | 2,545 | 2,273 | 2,545 | 2,454 | 2,909 | 3,273 | 3,454 | 4,000 | 4,000 |
| Less: allowance for uncollectibles | (164) | (173) | (164) | (145) | (127) | (114) | (127) | (123) | (145) | (164) | (173) | (200) | (200) |
| Accounts receivable, net | 3,109 | 3,282 | 3,109 | 2,764 | 2,418 | 2,159 | 2,418 | 2,332 | 2,764 | 3,109 | 3,282 | 3,800 | 3,800 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (102,717) | (103,085) | (105,522) | (110,553) | (117,662) | (126,072) | (135,400) | (146,684) | (153,824) | (159,144) | (163,941) | (164,589) | (164,589) |
| Total assets | \$ (102,717) | \$ (103,085) | \$ (105,522) | \$ (110,553) | (117,662) | \$ (126,072) | \$ (135,400) | \$ (146,684) | \$ (153,824) | \$ (159,144) | \$ (163,941) | \$ (164,589) | \$ (164,589) |
| Liabilities and equity | | | | | | | | | | | | | |
| Accounts payable | \$ 8,653 | \$ 9,134 | \$ 8,653 | \$ 7,692 | \$ 6,730 | \$ 6,009 | \$ 6,730 | \$ 6,490 | \$ 7,692 | \$ 8,653 | \$ 9,134 | \$ 10,576 | \$ 10,576 |
| Accrued salaries and wages | 1,976 | 1,976 | 1,976 | 1,976 | 1,976 | 1,976 | 2,383 | 2,383 | 2,383 | 2,383 | 2,383 | 2,383 | 2,383 |
| Sales tax payable | 624 | 658 | 624 | 554 | 485 | 433 | 485 | 468 | 554 | 624 | 658 | 762 | 762 |
| Total current liabilities | 11,253 | 11,769 | 11,253 | 10,223 | 9,192 | 8,419 | 9,598 | 9,341 | 10,629 | 11,660 | 12,175 | 13,722 | 13,722 |
| Total equity | (113,970) | (114,853) | (116,775) | (120,776) | (126,854) | (134,491) | (144,998) | (156,025) | (164,454) | (170,804) | (176,116) | (178,311) | (178,311) |
| Total liabilities and equity | \$ (102,717) | \$ (103,085) | \$ (105,522) | \$ (110,553) | (117,662) | \$ (126,072) | \$ (135,400) | \$ (146,684) | \$ (153,824) | \$ (159,144) | \$ (163,941) | \$ (164,589) | \$ (164,589) |

The College of Veterinary Medicine
 Full-Service Farm Animal Veterinary Practice
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Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Balance Sheet

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Assets | | | | | | | |
| Cash | \$ (139,227) | \$ (146,397) | \$ (152,661) | \$ (168,611) | \$ (168,611) | \$ (135,605) | \$ (61,919) |
| Accounts receivable | 5,552 | 3,774 | 3,613 | 3,635 | 3,635 | 4,759 | 5,570 |
| Less: allowance for uncollectibles | (278) | (189) | (181) | (182) | (182) | (238) | (278) |
| Accounts receivable, net | 5,275 | 3,586 | 3,433 | 3,453 | 3,453 | 4,521 | 5,291 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (130,952) | (139,812) | (146,229) | (162,158) | (162,158) | (128,084) | (53,627) |
| Total assets | \$ (130,952) | \$ (139,812) | \$ (146,229) | \$ (162,158) | \$ (162,158) | \$ (128,084) | \$ (53,627) |
| Liabilities and equity | | | | | | | |
| Accounts payable | \$ 14,681 | \$ 9,980 | \$ 9,554 | \$ 9,612 | \$ 9,612 | \$ 12,583 | \$ 14,728 |
| Accrued salaries and wages | 2,161 | 2,161 | 2,161 | 2,411 | 2,411 | 2,332 | 2,390 |
| Sales tax payable | 3,174 | 2,157 | 2,065 | 2,078 | 2,078 | 10,880 | 12,734 |
| Total current liabilities | 20,016 | 14,298 | 13,781 | 14,100 | 14,100 | 25,796 | 29,853 |
| Total equity | (150,968) | (154,110) | (160,010) | (176,258) | (176,258) | (153,880) | (83,480) |
| Total liabilities and equity | \$ (130,952) | \$ (139,812) | \$ (146,229) | \$ (162,158) | \$ (162,158) | \$ (128,084) | \$ (53,627) |

The College of Veterinary Medicine
Full-Service Farm Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Operations

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| Revenue | | | | | | | | | | | | | |
| Professional fees | \$ 2,777 | \$ 3,888 | \$ 4,999 | \$ 6,666 | \$ 8,332 | \$ 8,888 | \$ 8,888 | \$ 8,888 | \$ 12,221 | \$ 14,998 | \$ 14,998 | \$ 15,554 | \$ 111,099 |
| Laboratory fees | 391 | 548 | 704 | 939 | 1,174 | 1,252 | 1,252 | 1,252 | 1,722 | 2,113 | 2,113 | 2,191 | 15,652 |
| Drug fees | 2,055 | 2,876 | 3,698 | 4,931 | 6,164 | 6,575 | 6,575 | 6,575 | 9,040 | 11,094 | 11,094 | 11,505 | 82,181 |
| Other fees | 438 | 613 | 789 | 1,051 | 1,314 | 1,402 | 1,402 | 1,402 | 1,928 | 2,366 | 2,366 | 2,453 | 17,524 |
| Total revenue | 5,661 | 7,926 | 10,191 | 13,587 | 16,984 | 18,117 | 18,117 | 18,117 | 24,910 | 30,572 | 30,572 | 31,704 | 226,457 |
| Operating expenses: | | | | | | | | | | | | | |
| Compensation | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 | 231,380 |
| Benefits | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 6,323 | 75,878 |
| Cost of drugs | 1,396 | 1,955 | 2,513 | 3,351 | 4,189 | 4,468 | 4,468 | 4,468 | 6,144 | 7,540 | 7,540 | 7,820 | 55,854 |
| Supplies expense | 269 | 377 | 485 | 646 | 808 | 862 | 862 | 862 | 1,185 | 1,454 | 1,454 | 1,508 | 10,771 |
| Postage expense | 26 | 37 | 47 | 63 | 79 | 84 | 84 | 84 | 116 | 142 | 142 | 148 | 1,056 |
| Utilities expense | 110 | 154 | 198 | 264 | 330 | 352 | 352 | 352 | 484 | 594 | 594 | 616 | 4,398 |
| Building repairs & maintenance | 65 | 91 | 117 | 156 | 194 | 207 | 207 | 207 | 285 | 350 | 350 | 363 | 2,593 |
| Lab services expense | 129 | 180 | 232 | 309 | 387 | 412 | 412 | 412 | 567 | 696 | 696 | 722 | 5,154 |
| Other purchased expenses | 189 | 265 | 341 | 454 | 568 | 606 | 606 | 606 | 833 | 1,023 | 1,023 | 1,060 | 7,575 |
| Misc expense | 59 | 83 | 106 | 142 | 177 | 189 | 189 | 189 | 260 | 319 | 319 | 331 | 2,364 |
| Equipment purchases | 251 | 351 | 451 | 602 | 752 | 803 | 803 | 803 | 1,104 | 1,354 | 1,354 | 1,405 | 10,033 |
| University overhead | 225 | 316 | 406 | 541 | 676 | 721 | 721 | 721 | 992 | 1,217 | 1,217 | 1,262 | 9,015 |
| Exp transfer | (294) | (412) | (530) | (707) | (883) | (942) | (942) | (942) | (1,295) | (1,590) | (1,590) | (1,649) | (11,776) |
| Total operating expenses | 28,031 | 29,001 | 29,971 | 31,427 | 32,883 | 33,368 | 33,368 | 33,368 | 36,279 | 38,705 | 38,705 | 39,190 | 404,295 |
| Operating income | (22,369) | (21,075) | (19,781) | (17,840) | (15,898) | (15,251) | (15,251) | (15,251) | (11,369) | (8,133) | (8,133) | (7,486) | (177,838) |
| Other income (expense): | | | | | | | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| General funds - teaching support | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 65,790 |
| Total other income (expense) | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 65,790 |
| Net income | \$ (16,887) | \$ (15,593) | \$ (14,298) | \$ (12,357) | \$ (10,416) | \$ (9,769) | \$ (9,769) | \$ (9,769) | \$ (5,886) | \$ (2,651) | \$ (2,651) | \$ (2,004) | \$ (112,048) |

The College of Veterinary Medicine
Full-Service Farm Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Operations

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|-------------------------------------|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Revenue | | | | | | | | | | | | | |
| Professional fees | \$ 16,056 | \$ 16,948 | \$ 16,056 | \$ 14,272 | \$ 12,488 | \$ 11,150 | \$ 12,488 | \$ 12,042 | \$ 14,272 | \$ 16,056 | \$ 16,948 | \$ 19,624 | \$ 178,396 |
| Laboratory fees | 2,262 | 2,388 | 2,262 | 2,011 | 1,759 | 1,571 | 1,759 | 1,697 | 2,011 | 2,262 | 2,388 | 2,765 | 25,133 |
| Drug fees | 11,877 | 12,536 | 11,877 | 10,557 | 9,237 | 8,248 | 9,237 | 8,907 | 10,557 | 11,877 | 12,536 | 14,516 | 131,961 |
| Other fees | 2,532 | 2,673 | 2,532 | 2,251 | 1,970 | 1,759 | 1,970 | 1,899 | 2,251 | 2,532 | 2,673 | 3,095 | 28,138 |
| Total revenue | 32,727 | 34,545 | 32,727 | 29,090 | 25,454 | 22,727 | 25,454 | 24,545 | 29,090 | 32,727 | 34,545 | 39,999 | 363,629 |
| Operating expenses: | | | | | | | | | | | | | |
| Compensation | 19,764 | 19,764 | 19,764 | 19,764 | 19,764 | 19,764 | 23,830 | 23,830 | 23,830 | 23,830 | 23,830 | 23,830 | 261,565 |
| Benefits | 6,481 | 6,481 | 6,481 | 6,481 | 6,481 | 6,481 | 6,843 | 6,843 | 6,843 | 6,843 | 6,843 | 6,843 | 79,946 |
| Cost of drugs | 8,072 | 8,520 | 8,072 | 7,175 | 6,278 | 5,605 | 6,278 | 6,054 | 7,175 | 8,072 | 8,520 | 9,866 | 89,687 |
| Supplies expense | 1,557 | 1,643 | 1,557 | 1,384 | 1,211 | 1,081 | 1,211 | 1,167 | 1,384 | 1,557 | 1,643 | 1,903 | 17,296 |
| Postage expense | 153 | 161 | 153 | 136 | 119 | 106 | 119 | 114 | 136 | 153 | 161 | 186 | 1,695 |
| Utilities expense | 636 | 671 | 636 | 565 | 494 | 441 | 494 | 477 | 565 | 636 | 671 | 777 | 7,063 |
| Building repairs & maintenance | 375 | 396 | 375 | 333 | 291 | 260 | 291 | 281 | 333 | 375 | 396 | 458 | 4,164 |
| Lab services expense | 745 | 786 | 745 | 662 | 579 | 517 | 579 | 559 | 662 | 745 | 786 | 910 | 8,276 |
| Other purchased expenses | 1,095 | 1,155 | 1,095 | 973 | 851 | 760 | 851 | 821 | 973 | 1,095 | 1,155 | 1,338 | 12,163 |
| Misc expense | 342 | 361 | 342 | 304 | 266 | 237 | 266 | 256 | 304 | 342 | 361 | 418 | 3,796 |
| Equipment purchases | 1,450 | 1,530 | 1,450 | 1,289 | 1,128 | 1,007 | 1,128 | 1,087 | 1,289 | 1,450 | 1,530 | 1,772 | 16,110 |
| University overhead | 1,303 | 1,375 | 1,303 | 1,158 | 1,013 | 905 | 1,013 | 977 | 1,158 | 1,303 | 1,375 | 1,592 | 14,476 |
| Exp transfer | (1,702) | (1,796) | (1,702) | (1,513) | (1,324) | (1,182) | (1,324) | (1,276) | (1,513) | (1,702) | (1,796) | (2,080) | (18,909) |
| Total operating expenses | 40,268 | 41,047 | 40,268 | 38,710 | 37,152 | 35,983 | 41,581 | 41,191 | 43,139 | 44,697 | 45,476 | 47,813 | 497,326 |
| Operating income | (7,542) | (6,503) | (7,542) | (9,620) | (11,698) | (13,257) | (16,127) | (16,646) | (14,048) | (11,970) | (10,931) | (7,814) | (133,697) |
| Other income (expense): | | | | | | | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| General funds - teaching support | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 67,435 |
| Total other income (expense) | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 67,435 |
| Net income | \$ (1,922) | \$ (883) | \$ (1,922) | \$ (4,000) | \$ (6,078) | \$ (7,637) | \$ (10,507) | \$ (11,027) | \$ (8,429) | \$ (6,351) | \$ (5,312) | \$ (2,194) | \$ (66,262) |

The College of Veterinary Medicine
 Full-Service Farm Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Operations

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|-------------------------------------|------------------|-------------------|-------------------|--------------------|-------------------------|------------------|------------------|
| Revenue | | | | | | | |
| Professional fees | \$ 81,718 | \$ 55,550 | \$ 53,182 | \$ 53,501 | \$ 243,952 | \$ 280,166 | \$ 327,914 |
| Laboratory fees | 11,513 | 7,826 | 7,493 | 7,538 | 34,369 | 39,471 | 46,198 |
| Drug fees | 60,448 | 41,091 | 39,339 | 39,576 | 180,454 | 207,242 | 242,561 |
| Other fees | 12,889 | 8,762 | 8,388 | 8,439 | 38,478 | 44,191 | 51,722 |
| Total revenue | 166,569 | 113,228 | 108,403 | 109,053 | 497,253 | 571,070 | 668,395 |
| Operating expenses: | | | | | | | |
| Compensation | 64,840 | 64,840 | 64,840 | 72,321 | 266,841 | 279,843 | 286,839 |
| Benefits | 20,292 | 20,292 | 20,292 | 23,531 | 84,406 | 94,993 | 97,368 |
| Cost of drugs | 41,083 | 27,927 | 26,737 | 26,897 | 122,644 | 140,851 | 164,855 |
| Supplies expense | 7,923 | 5,386 | 5,156 | 5,187 | 23,651 | 27,162 | 31,791 |
| Postage expense | 776 | 528 | 505 | 508 | 2,318 | 2,662 | 3,115 |
| Utilities expense | 3,235 | 2,199 | 2,105 | 2,118 | 9,658 | 11,092 | 12,982 |
| Building repairs & maintenance | 1,907 | 1,297 | 1,241 | 1,249 | 5,694 | 6,540 | 7,654 |
| Lab services expense | 3,791 | 2,577 | 2,467 | 2,482 | 11,317 | 12,997 | 15,212 |
| Other purchased expenses | 5,572 | 3,787 | 3,626 | 3,648 | 16,633 | 19,102 | 22,357 |
| Misc expense | 1,739 | 1,182 | 1,132 | 1,138 | 5,191 | 5,961 | 6,977 |
| Equipment purchases | 7,379 | 5,016 | 4,803 | 4,831 | 22,030 | 25,300 | 29,612 |
| University overhead | 6,631 | 4,508 | 4,315 | 4,341 | 19,796 | 22,734 | 26,609 |
| Exp transfer | (8,662) | (5,888) | (5,637) | (5,671) | (25,857) | (29,696) | (34,757) |
| Total operating expenses | 156,507 | 133,650 | 131,582 | 142,582 | 564,321 | 619,540 | 670,615 |
| Operating income | 10,062 | (20,422) | (23,180) | (33,528) | (67,068) | (48,470) | (2,220) |
| Other income (expense): | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - |
| General funds - teaching support | 17,280 | 17,280 | 17,280 | 17,280 | 69,121 | 70,849 | 72,620 |
| Total other income (expense) | 17,280 | 17,280 | 17,280 | 17,280 | 69,121 | 70,849 | 72,620 |
| Net income | \$ 27,342 | \$ (3,142) | \$ (5,900) | \$ (16,248) | \$ 2,053 | \$ 22,378 | \$ 70,400 |

The College of Veterinary Medicine
Full-Service Farm Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Cash Flow

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Net income (loss) from operations | \$ (16,887) | \$ (15,593) | \$ (14,298) | \$ (12,357) | \$ (10,416) | \$ (9,769) | \$ (9,769) | \$ (9,769) | \$ (5,886) | \$ (2,651) | \$ (2,651) | \$ (2,004) | \$ (112,048) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | | | | | | | |
| Accounts receivable | (538) | (215) | (215) | (323) | (323) | (108) | - | - | (645) | (538) | - | (108) | (3,012) |
| Prepaid expenses | (3,000) | - | - | - | - | - | - | - | - | - | - | - | (3,000) |
| Increase (decrease) in operating liabilities: | | | | | | | | | | | | | |
| Accounts payable | 1,497 | 599 | 599 | 898 | 898 | 299 | - | - | 1,796 | 1,497 | - | 299 | 8,383 |
| Accrued salaries and wages | 1,928 | - | - | - | - | - | - | - | - | - | - | - | 1,928 |
| Sales tax payable | 108 | 43 | 43 | 65 | 65 | 22 | - | - | 129 | 108 | - | 22 | 604 |
| Total adjustments | (5) | 427 | 427 | 640 | 640 | 213 | - | - | 1,280 | 1,067 | - | 213 | 4,903 |
| Net cash provided by (used in) operating activities | (16,892) | (15,166) | (13,872) | (11,717) | (9,776) | (9,555) | (9,769) | (9,769) | (4,606) | (1,584) | (2,651) | (1,790) | (107,145) |
| Cash used in investing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Beginning cash balance | - | (16,892) | (32,057) | (45,929) | (57,646) | (67,422) | (76,977) | (86,746) | (96,514) | (101,120) | (102,704) | (105,355) | - |
| Ending cash balance | \$ (16,892) | \$ (32,057) | \$ (45,929) | \$ (57,646) | \$ (67,422) | \$ (76,977) | \$ (86,746) | \$ (96,514) | \$ (101,120) | \$ (102,704) | \$ (105,355) | \$ (107,145) | \$ (107,145) |

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Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Cash Flow

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Net income (loss) from operations | \$ (1,922) | \$ (883) | \$ (1,922) | \$ (4,000) | \$ (6,078) | \$ (7,637) | \$ (10,507) | \$ (11,027) | \$ (8,429) | \$ (6,351) | \$ (5,312) | \$ (2,194) | \$ (66,262) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | | | | | | | |
| Accounts receivable | (97) | (173) | 173 | 345 | 345 | 259 | (259) | 86 | (432) | (345) | (173) | (518) | (788) |
| Prepaid expenses | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | | | | | | | | | |
| Accounts payable | 270 | 481 | (481) | (961) | (961) | (721) | 721 | (240) | 1,202 | 961 | 481 | 1,442 | 2,193 |
| Accrued salaries and wages | 48 | - | - | - | - | - | 407 | - | - | - | - | - | 455 |
| Sales tax payable | 19 | 35 | (35) | (69) | (69) | (52) | 52 | (17) | 87 | 69 | 35 | 104 | 158 |
| Total adjustments | 241 | 343 | (343) | (685) | (685) | (514) | 921 | (171) | 857 | 685 | 343 | 1,028 | 2,018 |
| Net cash provided by (used in) operating activities | (1,681) | (540) | (2,265) | (4,686) | (6,764) | (8,151) | (9,586) | (11,198) | (7,572) | (5,665) | (4,969) | (1,166) | (64,244) |
| Cash used in investing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Beginning cash balance | (107,145) | (108,826) | (109,366) | (111,631) | (116,317) | (123,081) | (131,232) | (140,818) | (152,016) | (159,588) | (165,253) | (170,222) | (107,145) |
| Ending cash balance | \$ (108,826) | \$ (109,366) | \$ (111,631) | \$ (116,317) | \$ (123,081) | \$ (131,232) | \$ (140,818) | \$ (152,016) | \$ (159,588) | \$ (165,253) | \$ (170,222) | \$ (171,389) | \$ (171,389) |

The College of Veterinary Medicine
 Full-Service Farm Animal Veterinary Practice
 April 11, 2012

Jackson County Veterinary Practice - Full Service Farm Animals
5 Year Financial Projections
Statement of Cash Flow

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Net income (loss) from operations | \$ 27,342 | \$ (3,142) | \$ (5,900) | \$ (16,248) | \$ 2,053 | \$ 22,378 | \$ 70,400 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | |
| Accounts receivable | (1,475) | 1,689 | 153 | (21) | 347 | (1,068) | (770) |
| Prepaid expenses | - | - | - | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | | | |
| Accounts payable | 4,105 | (4,701) | (425) | 57 | (965) | 2,971 | 2,145 |
| Accrued salaries and wages | (222) | - | - | 249 | 28 | (79) | 58 |
| Sales tax payable | 2,411 | (1,016) | (92) | 12 | 1,316 | 8,802 | 1,854 |
| Total adjustments | 4,820 | (4,029) | (364) | 299 | 725 | 10,628 | 3,287 |
| Net cash provided by (used in) operating activities | 32,162 | (7,170) | (6,264) | (15,949) | 2,778 | 33,006 | 73,686 |
| Cash used in investing activities | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - |
| Beginning cash balance | (171,389) | (139,227) | (146,397) | (152,661) | (171,389) | (168,611) | (135,605) |
| Ending cash balance | \$ (139,227) | \$ (146,397) | \$ (152,661) | \$ (168,611) | \$ (168,611) | \$ (135,605) | \$ (61,919) |

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Appendix B: Assumptions used in Financial Projections

Balance Sheet Assumptions:

1. Accounts receivable – Assumes 90% of services are paid at POS and 10% are billed. (Billing clients using herd management programs.)
2. Allowance for uncollectible accounts – Assumes 5% of the current period A/R balance will be uncollectible. Assumes a high rate of collection given that most accounts are with producers.
3. Accounts payable - Assumes 60% of non-compensation related operating expenses are paid within 30 days of expense.
4. Accrued salaries and wages - Professional staff are monthly - no accrual necessary. Non-professional staff represents 30% of total monthly payroll. Assumes an average of 10% of compensation (excluding benefits) will be paid in subsequent month due to overlap of pay periods.
5. Sales Tax payable - Assumed 75% of pharmacy sales are subject to Jackson county sales tax - 7.0%.

Statement of Operations Assumptions:

1. Revenue – Cattle, Large Farm Market - Cattle market for FY2014 - FY2018 was estimated using the 2007 Census Data from the Dept. of Agriculture for Jackson and each of the 9 surrounding counties. Utilization of a herd management program by large farms assumes the following adoption rate: 15 farms in FY2014, 30 farms in 2015, 45 farms in 2016, 50 farms in 2017 and 60 farms in 2018. Herd management programs assume \$35/head, based on the average herd size for each county (per 2007 Census Data).
2. Revenue – Cattle, Small Farm Market - Assumed none of the smaller (i.e. farms with < 100 head of cattle) would adopt a herd management program. Assumed that 65% of these farmers would utilize a veterinary in a given year. Cattle market for FY2014 - FY2018 was estimated using the 2007 Census Data from the Dept. of Agriculture for Jackson and each of the 9 surrounding counties. Market share was estimated based on the number of competing animal and mixed animal vets in each county. Est. # of farms and cattle head/farm based on 2007 Census Data. Average fee/visit is based on 5 year historical data from OSU CVM Medical Center - average fees/visit is \$1,716.00. Lowered amount to \$400 based on economics (cost of service vs. value of the cow) and input from vets/producers.
3. Revenue – Seasonal fluctuations and distribution to revenue type - After calculating annual revenue, allocation in FY2014 and FY2015 was based on classic revenue ramp-up of a start-up business. In FY2016 through FY2018, seasonal fluctuation factor was given using historical revenue fluctuations

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- from the Marysville Large Animal Hospital financial data for the previous 5 years. Allocation to revenue type (i.e. Professional fees, drug charges, lab charges, other) were made based on historical 5 year averages of the Marysville Large Animal Hospital.
4. Compensation - See staffing tab for input and detailed assumptions. Beginning July 2013, staffing includes 4.0 FTE's. Assumes Assistant Professor - Clinical (2 FTE's), Veterinary Technician (1 FTE's) and Veterinary Assistant (1 FTE's). Headcount additions include 1 FTE Resident DVM in January 2015 and 1 FTE Administrative staff in July 2016. Applied a 2.5% rate of inflation per year.
 5. Benefits - Professional staff at 29%, Interns at 8.9%, Veterinary Technicians, Veterinary Associates and Admin staff at 43.3%.
 6. Cost of drugs - Using five year history of Marysville Large Animal Hospital (FY2007 through FY2011 - (July - April 2011)), calculated average margin of cost of drugs. Applied margin to revenue from sale of drugs.
 7. All other operating expense - Calculated amount as 5.2% of sales based on historical % of sales for each operating expense item from the Marysville Large Animal Hospital - FY2007 through FY2011 (July - April 2011).
 8. General funds – teaching support - Assumes 30% of comp and benefits for Assistant Professor will be paid from General funds. 30% of Asst. Professor's time will be teaching and in labs.



Appendix C: Summary of Process used for Business Plan Development

The Business Plan was developed through a process that utilized a variety of people and resources. The CVM engaged John Schroeffer, Principal of CFO Partners, LLC to assist with development of the Business Plan. Mr. Schroeffer has extensive experience with developing business plans for start-up companies in the healthcare industry. He has served as the Chief Financial Officer for both private and public healthcare companies and also for Battelle in corporate development. The CVM provided Mr. Schroeffer with resources to support the development of the business plan including statistical data related to farm and pet animals and veterinarians in the 29 Appalachian counties of Ohio. Most of the economic and market data for the 10 Appalachian counties were taken from reports by the US Dept. of Agriculture, 2007 Census.

The CVM provided contact information for seven veterinarians practicing in rural communities of Ohio and two livestock producers in the Jackson County area. The veterinarians contacted to provide practice recommendations were:

1. Dr. Craig Miesse (rural mixed-animal practice in Mercer County)
2. Dr. Scott Pendleton (mixed-animal practice in Harrison County – Appalachian region)
3. Dr. Doug Wiley (mixed-animal practice in Columbiana County – Appalachian region)
4. Dr. Jon Ellis (equine and farm animal practice in Greene County)
5. Dr. Angie Dahse (primarily equine and farm animal practice in Gallia County – Appalachian region)
6. Dr. Harold Kemp (rural large animal practice in Belmont County – Appalachian region)
7. Dr. Valerie Anderson (rural primarily mixed animal practice in Jackson County – Appalachian region)

Each of the veterinarians had established mixed animal practices or large animal practices in rural communities of Ohio. Veterinarians and producers were contacted prior to preparing the business plan. The veterinarian practitioners provided valuable insight into the unique aspects of a successful rural veterinary practice and provided specific suggestions regarding development of a sustainable practice in the Appalachian region of Ohio. Their recommendations are the basis for the practice concepts included in the business plan.

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The producers contacted to provide suggestions for the business plan were:

1. Jim Phillips – beef cattle, herd size - 24 producing cows
2. Dale Neal – beef cattle, herd size approximately 20 to 25

Producers were engaged to test key aspects and assumptions of the business plan. Concepts from early drafts were discussed and modified based on feedback received during discussions with producers.

The CVM also provided historical data for the large animal practice in Marysville which supported the revenue and expense projections of the proposed satellite facility in Jackson County.



Tab D – *Sustainable Rural Veterinary Practice providing limited-service preventive, production, routine and emergency veterinary services for farm animals*

**The Ohio State University
College of Veterinary Medicine
Veterinary Medical Center**

Sustainable Rural Veterinary Practice in Jackson, Ohio

*Providing limited-service preventive,
production, routine and emergency veterinary
services for farm animals*

Business Plan April 11, 2012

The College of Veterinary Medicine
Limited-Service Farm Animal Veterinary Practice
April 11, 2012

Executive Summary

In the summer of 2010, The Ohio State University's College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. When farmers and producers in this region need veterinary assistance for their animals their options for experienced veterinary care for large animals are limited. The College of Veterinary Medicine ("CVM") was asked to consider establishing a satellite rural veterinary practice and clinic in the Appalachian region of Ohio to serve these communities and citizens. The Jackson Agricultural Research Station, an existing facility operated by the Ohio Agricultural Research and Development Center (OARDC), has been identified as one possible location for a satellite veterinary clinic.

A farm animal veterinary practice established by CVM, located in the Jackson Agriculture Research Center should leverage its excellent education and research reputation with farm animal owners in the region. The practice will be staffed by faculty and staff veterinarians with experience and knowledge of large animal medical, surgical, preventive and production medicine issues. Clients will include dairy farmers, cattle and swine producers, and camelid owners.

Given the apparent lack of available and affordable veterinary care in this region, many producers have learned to make herd health decisions based on information they learn from farm journals or discussions with other producers. Producers are skeptical of the economic benefits a large animal veterinary can provide. They may not be informed about appropriate medical treatment alternatives suitable for the condition of their specific herd. If producers are educated about new veterinary drugs and techniques available that provide a clear economic benefit, producers may be more likely to use the services of the Jackson County satellite facility.

Like most other service providers, veterinarians must develop a bond of trust with the clients they serve. Engaging food producers with seminars or other educational programs with content that is relevant to livestock producers is one way to build trust and develop confidence in the information and services the veterinarian provides.

Effective use of financial concepts in the practice at the satellite facility will be as critical to its success as providing quality care. The pricing model for all services of the facility should reflect the superior quality and value of the services delivered. Two pricing models will be developed. The first model will provide financial incentives to clients to regularly utilize veterinary services through a scheduled program. The second model for livestock producers will reflect higher pricing based upon a combination of time and procedures performed.

The Jackson County facility will organizationally and operationally operate as a service unit under the Ohio State University's College of Veterinary Medicine's, Veterinary Medical Center. Faculty from the Veterinary Medical Center will have day-to-day

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operating responsibility and will be supported by registered veterinary technicians, and eventually veterinary assistants and a small administrative staff. The Director of the Veterinary Medical Center and the Associate Dean of Clinical and Outreach Programs will provide overall administrative oversight for this satellite facility and its operation.

Limited renovations and additions would be required to deliver the services of a limited service farm animal practice. The improvements and the estimated cost of veterinary practice equipment are estimated to be \$150,000. A more detailed study of the equipment and facility requirements of the practice will be required. The projections indicate that the practice would not generate sufficient revenue to cover its operating expenses until fiscal year 2016. The practice will require an external source of capital of approximately \$125,000 during its first three years to cover start-up and operating expenditures. It should be noted that the date used in these financial projections for beginning operations (i.e. July 2013) was selected only for the purposes of presentation and not as an objective in and of itself. If the CVM determines to proceed with establishing a practice, the actual date will be subject to funding and many other variables and, as a result, the actual opening date will likely be different.

In order to facilitate the next steps toward establishing a sustainable veterinary practice in this Appalachian region of southern Ohio, it is recommended that CVM engage several large producers in discussions to try and understand their reluctance to utilize veterinarian services in the region and to understand how these obstacles might be overcome by a veterinary practice established by the CVM. By doing this, the CVM would gain valuable information on the business issues and risks this practice would face. In addition, the CVM might also be able to modify its delivery and/or service offering to address these issues and risks. The CVM might also conclude that it will not be able to overcome the issues and risks identified in these discussions and decide that a practice in this region is not a suitable solution at all.



The College of Veterinary Medicine
Limited-Service Farm Animal Veterinary Practice
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Project Description – Jackson County Veterinary Practice

In the summer of 2010, The Ohio State University's College of Veterinary Medicine was approached by livestock producers in southeast Ohio seeking improved, expanded veterinary care in their region of the state. After the meeting, broader discussions were held with other producers, veterinarians, businesses and community and civic leaders in Appalachian Ohio. From these discussions, the College of Veterinary Medicine was asked to consider establishing a satellite veterinary practice and clinic in the Appalachian region of Ohio to serve these communities and citizens.

The Need – Veterinary Medicine in Appalachian Ohio

Of the 88 counties in Ohio, 29 have been designated as part of the Appalachian Region of eastern and southern Ohio, known as Appalachian Ohio. These counties are located south of the diagonal line which runs from the southwest to northeast portion of the State. Known for its scenic, mountainous ranges, Appalachian Ohio is also recognized for its high poverty rates. Close to one-half of the counties in Appalachian Ohio have between 22% and 29% of all persons living in poverty, compared to the State average of 10.3%.

These rural communities are vital to Ohio's way of life, but face challenges regarding economic development, agriculture, education, health and more, not found in most other communities in the state. Much of the veterinary profession's impact is felt in Ohio's rural-based agricultural sector, and is responsible, for among other things, assuring an abundant, relatively inexpensive and safe food supply for Ohio citizens. Most farms in Appalachian Ohio are small family farms, where beef, cattle, hogs, sheep and goats are raised. Few veterinarians in this area choose to service food animals and as a result, many of these farms in Appalachian Ohio are significantly underserved by the veterinary profession. Studies have been performed to try and better understand the reasons why so few veterinarians choose to practice in rural communities and the results suggest that the requirements of emergency duty, insufficient time off, compensation, practice atmosphere and family concerns are all factors.

Jackson County is located in the southern Ohio area of Appalachian Ohio. Producers of food animals in Jackson and surrounding counties have limited access to routine or emergency veterinary care for their livestock. According to the Ohio Veterinary Medical Association's database of veterinarians, there are 33 veterinarians in Jackson and the six surrounding counties in this region. Only four of these veterinarians are considered food animal veterinarians and another ten are considered mixed animal veterinarians. Most veterinarians in these counties have developed companion animal practices with a few remaining that are willing or interested in providing even limited services to food animals.

When farmers and producers in this region need veterinary assistance, the limited options include trying to access a local veterinarian or trying to get by without one. If a

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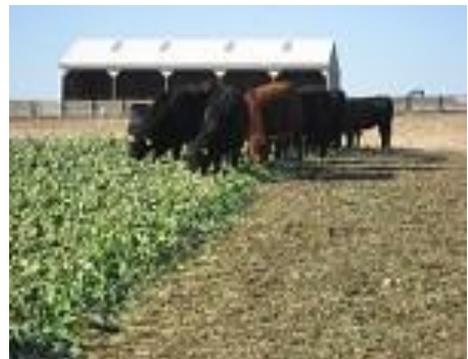
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veterinarian agrees to help the farmer or producer, these practitioners could travel to the farm to provide services, refer the client to another practice, request the owner to transport the animal to their practice/clinic, or refer the client to the Ohio State College of Veterinary Medicine's Veterinary Medical Center (a 90+ mile drive). Regardless of the option selected, food producers in Jackson and its surrounding counties can be accurately characterized as underserved by the veterinary profession. The potential consequences are serious. Farmers and producers depend on the veterinary profession to help sustain their livelihoods, and Ohioans depend on healthy farm animals for a safe food supply.

Jackson County Facility

One possible location for a satellite veterinary clinic is the existing facilities at the Jackson Agricultural Research Station in Jackson County. The facility is located approximately 82 miles south of The Ohio State University campus in the city of Jackson near the intersection of State Routes 32 and 93 and is operated by the Ohio Agricultural Research and Development Center (OARDC). Located on 495 acres, the Jackson Agricultural Research Station has been a primary site for reproductive management and production management research in beef cattle for more than three decades. The Station has served as a key source for animals used in research designed to increase reproductive efficiency, test groundbreaking cattle production technologies, and develop value-added products from beef cattle.



The Station's reproductive management studies have helped set estrus-synchronization standards used by industry in Ohio, the United States, and around the world – including the Select Synch, CO-Synch, and Hybrid-Synch programs. The Jackson Station is also recognized as the key site for research to determine the proper use of technology from the Center for Inherited Disease Research at the Johns Hopkins University for increasing conception rates in beef cattle. Researchers and personnel at the Jackson Station work to match feed resources to beef cow milk production, which helps optimize calf nutrition, health, and development while making beef operations more efficient. Additionally, research at the Jackson Station in forage management systems has contributed to implementing successful grazing approaches used by producers today. The Station conducts forage studies using both small, replicated plots and large pasture acreage. Both are critical to the economy of Ohio's Appalachian counties.

In addition to research, the Jackson Station engages in outreach activities and works with various community organizations. The role of the Station's Advisory Committee is crucial in this regard, as it contributes to planning and keeping in direct contact with local clientele and stakeholders. Facilities and other resources at the Jackson Station give OARDC scientists the ability to obtain highly competitive federal grants and

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industry funding – supporting research and development activities that directly impact the economy of southern Ohio.

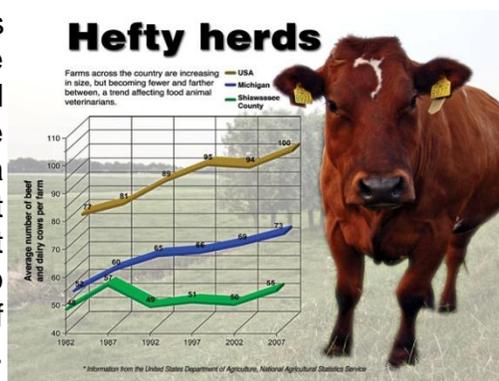
The Jackson Agricultural Research Station was established in 1968, when OARDC signed a 40-year lease for 334 acres belonging to the former Jackson County Home Farm. The size of the Station was expanded through the purchase of an additional 158 acres by the state of Ohio. The lease with Jackson County was renewed in 2008. The Jackson County OSU Extension office is housed next door to the station office, providing a great opportunity for collaborative research and demonstrations. The facility is located approximately 82 miles south of The Ohio State University campus in the city of Jackson, approximately 2 miles from the intersection of State Routes 32 and 35. Although the facility would require structural modifications, its location and its excellent reputation with local livestock producers make it an attractive site for a veterinary practice in this region.



Market Overview

Ohio is a leading food exporter, ranking 13th among all states and exporting more than \$2.6 billion in agricultural products in 2009. Ohio exports a wide range of agricultural products from processed food and food ingredients to livestock and their genetics. According to the Ohio Department of Development, Ohio is home to more than 77,000 farms and 45,000 of these have some type and level of animal production system. Ohio flourishes because of the strong agricultural industry, which employs one in six Ohioans. The food and agriculture industries provide more than \$79 billion to the state's economy, making agriculture a critical industry to the State of Ohio. Ohio's beef industry, the 16th largest in the United States by number of beef cattle operations, has an annual value of \$1.3 billion, generating nearly \$745 million in total production impact for the Buckeye state. Ohio one of the leading producers of milk, cheese and eggs. Nationally, Ohio ranks 1st in Swiss cheese production, 2nd in egg production, 5th in dairy manufacturing plants, 7th in the number chickens sold, 9th in hog production and cheese production and 11th in milk production. According to the Ohio Alpaca Breeders Association, Ohio leads the nation with the largest number of alpaca farms and the greatest number of alpacas. Ohio is also a leader in terms of crop production. Between 40 to 50% of grain production is used for animal feed. Livestock genetics is another important aspect to the productivity of Ohio's agricultural industry.

The long-term sustainability of a veterinarian is dependent upon his or her ability to generate income sufficient to maintain the equipment and facilities required to provide quality veterinary care while paying back student loans, establishing a residence and providing the quality of life they want for themselves and their families. The average debt load for a veterinary graduate in 2009 increased to approximately \$130,000 with about one-third of graduates having a debt of more than \$150,000. Starting salaries have failed to keep pace with the increased tuition and debt load; the starting salary of new graduates in 2009 was \$64,826 regardless of the career area they chose.



A farm animal veterinary practice established by CVM, located in the Jackson Agriculture Research Center should leverage its excellent education and research reputation with large livestock producers in the region. A core group of producers willing to quickly engage the services of the new practice to provide ongoing herd management services, including vaccination and de-worming programs, reproduction programs, and replacement rearing programs, will be an important step toward developing a successful and sustainable practice in the region.

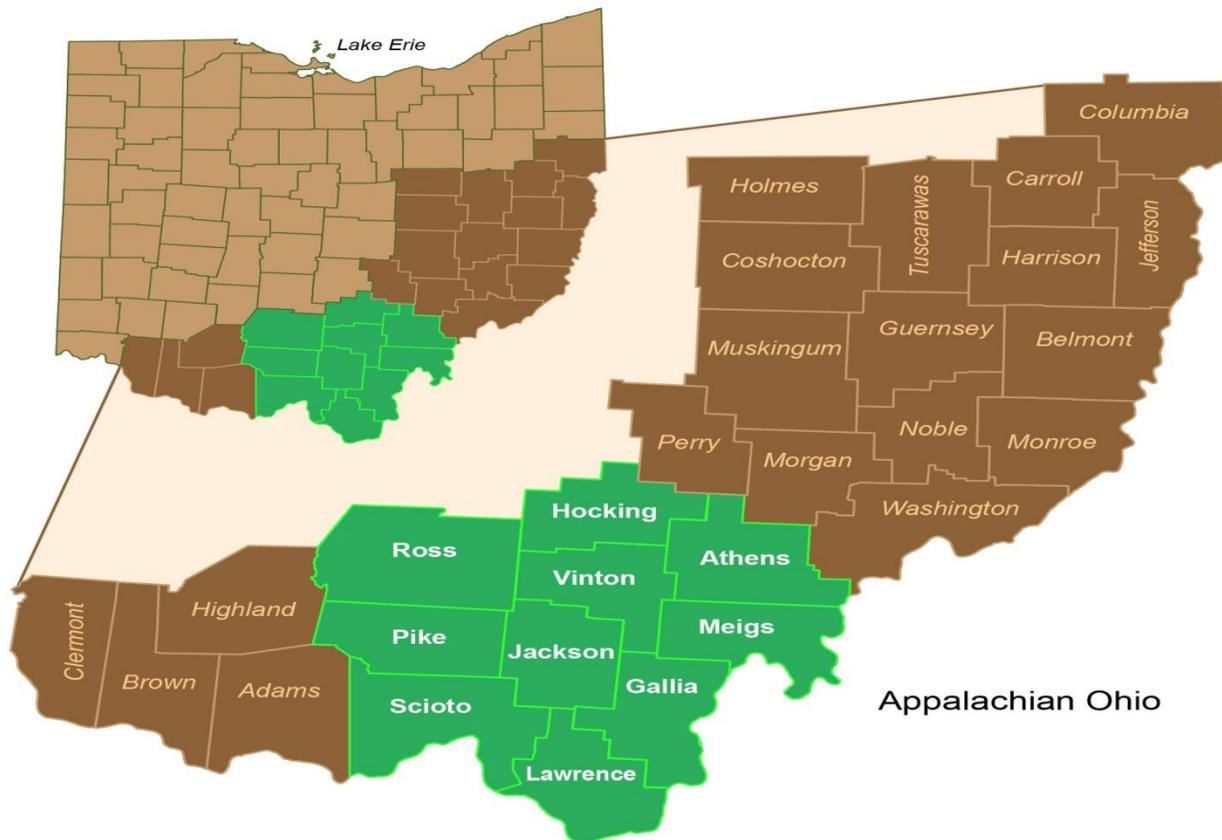
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Geographic Market Area

Distance and drive time is a primary consideration when clients consider their options for veterinary care. Potential clients of the veterinary practice at the Jackson facility are large animal farmers (beef and dairy cattle, hogs, sheep and goats) who reside in Jackson and surrounding counties. County seats of the six contiguous counties (Gallia, Lawrence, Pike, Ross, Scioto and Vinton) are all within a one-hour drive from the proposed satellite facility (20 to 49 miles). County seats of three additional counties nearby (Athens, Hocking and Meigs) are also within a one hour drive (41 to 44 miles) and could be serviced from the facility.

All ten counties are considered part of Appalachian Ohio.

| Travel Time to Surrounding County Seats | | | |
|---|-------------|----------|----------|
| County | County Seat | Distance | Time |
| Gallia | Gallipolis | 30 miles | 40 mins. |
| Lawrence | Ironton | 41 miles | 53 mins. |
| Pike | Waverly | 28 miles | 35 mins. |
| Ross | Chillicothe | 33 miles | 41 mins. |
| Scioto | Portsmouth | 49 miles | 56 mins. |
| Vinton | McArthur | 20 miles | 30 mins |
| Athens | Athens | 41 miles | 47 mins. |
| Hocking | Logan | 44 miles | 59 mins. |
| Meigs | Pomeroy | 41 miles | 57 mins. |



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Economy in Appalachian Ohio

Rural communities are vital to Ohio’s economy and way of life. However, these communities face challenges in terms of economic development, agriculture, education and healthcare. The Appalachian Regional Commission (ARC) is a regional economic development agency that represents a partnership of federal, state, and local government. The ARC uses an index-based county economic classification system to identify the economic status of Appalachian Counties (Attainment, Competitive, Transitional, At-Risk, and Distressed). Index values are based upon comparisons of county and national data for three-year average unemployment rates, per capita market income, and poverty rates. Jackson and three neighboring counties (Gallia, Lawrence and Scioto), are considered economically “at-risk” according to this classification system. Four additional nearby counties (Athens, Meigs, Pike and Vinton), are considered “distressed” according to this classification system.

Economic Data for Jackson and 9 Surrounding Counties

| County | Population | Rural/Urban or Mixed | County Economic Status ⁽¹⁾ | 2009 | Index Value Rank | Quartile (1 is the best) ⁽¹⁾ |
|----------|------------|-------------------------|--|-------------------------------------|---|--|
| | | | | Unemployment Rate ⁽²⁾ | in U.S., 1 is the best) ⁽¹⁾ | |
| Jackson | 33,225 | Rural | At-Risk | 7.9 | 2,644 | 4 |
| Gallia | 30,934 | Rural | At-Risk | 6.3 | 2,421 | 4 |
| Lawrence | 62,450 | Mixed | At-Risk | 5.3 | 2,482 | 4 |
| Pike | 28,709 | Rural | Distressed | 9.4 | 2,857 | 4 |
| Ross | 78,064 | Mixed | Transitional | 7.0 | 2,055 | 3 |
| Scioto | 79,499 | Mixed | At-Risk | 7.7 | 2,742 | 4 |
| Vinton | 13,435 | Rural | Distressed | 8.3 | 2,914 | 4 |
| Athens | 64,757 | Mixed | Distressed | 6.2 | 2,844 | 4 |
| Hocking | 29,380 | Rural | Transitional | 6.7 | 2,221 | 3 |
| Meigs | 23,770 | Rural | Distressed | 9.1 | 2,910 | 4 |

⁽¹⁾ Appalachian Regional Commission, March 2010.

⁽²⁾ "Ohio County Profiles", a publication by the Policy Research and Strategic Planning Office (A State Affiliate of the US Census Bureau) of the Ohio Department of Development.

Market Analysis

Analysis of farm and livestock data for this 10-county region from the 2007 Census by the US Department of Agriculture provides insight into financial opportunities and challenges of a farm animal veterinary practice in this region. According to census data, product sales from cattle, calves, milk and other dairy products in this 10- county area were approximately \$52.9 million. The average value of livestock products sold in each of these 10 counties is \$5.3 million with a range of \$0.7 million in Vinton County and \$9.9 million in Scioto County. Although the livestock market is small compared with other counties in Ohio, the data suggests that the serviceable veterinary market in this region may be large enough for an additional practice focused on servicing the livestock and large animal owners and producers in these 10 counties.

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Farm Income Ranking for Jackson and 9 Surrounding Counties

| County | # of Farms (Crops and Livestock) ⁽¹⁾ | # of Farms with Livestock ⁽²⁾ | Market Value of Livestock Products Sold (\$ 000's) ⁽¹⁾ | Avg. Product Sales per Farm with Livestock |
|----------------|--|---|---|--|
| Jackson | 462 | 280 | \$5,126 | \$18,307 |
| Gallia | 993 | 700 | \$9,539 | \$13,627 |
| Lawrence | 649 | 443 | \$2,821 | \$6,368 |
| Pike | 538 | 262 | \$3,489 | \$13,317 |
| Ross | 1,009 | 374 | \$8,457 | \$22,612 |
| Scioto | 755 | 448 | \$9,897 | \$22,092 |
| Vinton | 250 | 123 | \$715 | \$5,813 |
| Athens | 585 | 358 | \$4,965 | \$13,869 |
| Hocking | 387 | 219 | \$1,258 | \$5,744 |
| Meigs | 551 | 302 | \$6,672 | \$22,093 |
| Total | 6,179 | 3,509 | \$52,939 | |
| Average | 618 | 351 | \$5,294 | \$15,087 |

⁽¹⁾ US Department of Agriculture, National Agriculture Statistics Service, 2007 Census of Agriculture.

⁽²⁾ Data from the US Department of Agriculture, Table 45 - 2007 Census of Agriculture.

As the following table indicates, the region is made up of a significant number of small farm operations. According to the US Department of Agriculture's 2007 Census of Agriculture, over 92% of all farms (crop and livestock farms) in this region have annual sales of less than \$50,000, compared to 65% of farms in the 10 most successful farming counties of Ohio. Given the lack of farm income in these households, it's not surprising that the majority of these farmers pursues other occupations to supplement their farm income and don't consider farming to be their primary occupation. These smaller farms with livestock would not be considered a consistent serviceable unit. The analysis also shows that 465 farms in this 10-county region have farm sales receipts greater than \$50,000 per year and may present an opportunity for veterinary service.

Farm Size (Crop and Livestock) by Sales ⁽¹⁾

| County | Less than \$10,000 | \$10,000 to \$49,999 | \$50,000 to \$99,999 | \$100,000 to \$249,999 | \$250,000 to \$499,999 | \$500,000 or more |
|-------------------|-----------------------|-------------------------|-------------------------|---------------------------|---------------------------|----------------------|
| Jackson | 330 | 93 | 23 | 9 | 6 | 1 |
| Gallia | 802 | 147 | 27 | 7 | 7 | 3 |
| Lawrence | 568 | 67 | 9 | 2 | 3 | 0 |
| Pike | 419 | 72 | 25 | 15 | 3 | 4 |
| Ross | 707 | 141 | 57 | 54 | 24 | 26 |
| Scioto | 587 | 121 | 17 | 16 | 11 | 3 |
| Vinton | 211 | 30 | 5 | 1 | 0 | 3 |
| Athens | 467 | 88 | 14 | 9 | 4 | 3 |
| Hocking | 314 | 57 | 9 | 5 | 1 | 1 |
| Meigs | 389 | 104 | 29 | 13 | 6 | 10 |
| Total | 4794 | 920 | 215 | 131 | 65 | 54 |
| % of total | 77.6% | 14.9% | 3.5% | 2.1% | 1.1% | 0.9% |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, 2007 Census

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Establishing a sustainable veterinary farm-animal practice will require a core group of large food producers that consistently utilize the services of the practice throughout the year. Establishing herd health management strategies and preventative medicine programs (such as vaccination and parasite control programs, reproduction programs) and monitoring the effects of such programs will be an important service offered by the practice and one way to engage producers on a consistent basis. Although owners of smaller farms might utilize the services of a veterinarian for emergencies, they will try to get by without incurring additional cost of a veterinary and address health issues of their livestock (including dispensing drugs and vaccines) on their own. If veterinary services that offer healthcare and livestock management are available and producers utilize the services, these producers should develop the capacity to manage larger numbers of animals with associated increases in income. It will be imperative to build relationships with food producers and engage these producers to utilize a minimal amount of veterinary services each year.

The following table shows there are 149 producers that meet the criteria (i.e. farms with greater than 100 head of cattle) of a serviceable client in this 10 county region.

Size of Cattle Herds ⁽¹⁾

| County | Farms with 100 to 199 head | Farms with 200 to 499 head | Farms with >500 head | Total Farms with > 100 head | Inventory of Cattle on Farms with > 100 head |
|--------------|-------------------------------|-------------------------------|-------------------------|--------------------------------|--|
| Jackson | 14 | 14 | 0 | 28 | 5,997 |
| Gallia | 7 | 13 | 2 | 22 | 3,235 ⁽²⁾ |
| Lawrence | 6 | 1 | 0 | 7 | 0 ⁽²⁾ |
| Pike | 5 | 4 | 0 | 9 | 2,833 |
| Ross | 29 | 8 | 2 | 39 | 6,597 ⁽²⁾ |
| Scioto | 9 | 3 | 1 | 13 | 1,172 ⁽²⁾ |
| Vinton | 2 | 0 | 0 | 2 | 0 ⁽²⁾ |
| Athens | 7 | 6 | 0 | 13 | 2,847 |
| Hocking | 2 | 0 | 0 | 2 | 0 ⁽²⁾ |
| Meigs | 7 | 5 | 2 | 14 | 2,619 ⁽²⁾ |
| Total | 88 | 54 | 7 | 149 | |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, Table 11, 2007 Census

⁽²⁾ Not all respondents to census provided data related to inventory quantities in these counties.

Herd health management and preventive medicine programs depend on the type of animals and the objectives of the producers. Dairy programs can often be profitable due to the income generated through consistent herd checks required throughout the year. However, the data presented in the following table suggests that there are few dairy cattle farmers and far more beef cattle farmers in the region. Beef herds tend to require more seasonal veterinary care than dairy herds and requirements from a veterinarian are more intense during the spring and fall seasons, but less throughout the remainder of the year. As a result, beef producers may be less likely to utilize an annual

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preventive medicine program, but might consider a seasonal program in the spring and fall designed to meet their objectives. The analysis of the market data available suggests that the greatest opportunity to establish a limited-service farm animal practice in Jackson County will be with beef cattle producers that have herds of greater than 100 head of cattle.

Given the lack of veterinary care in this region and financial pressures farmers are facing, most producers make decisions regarding vaccinations and basic herd health management issues themselves and are reluctant to consult with a veterinary because of the cost. Producers from the Jackson County area and veterinarians that have served cattle farmers in rural communities suggest that most producers are skeptical of the economic benefits a veterinary can provide to them. Many make decisions based on information they learn from farm journals or from discussions with other producers. They may not be informed about appropriate alternatives suitable for the condition of their specific herd. If producers are educated about new veterinary drugs, improving nutrition and techniques available that provide a clear economic benefit, producers will be more likely to use the services of the Jackson County satellite facility. Utilizing the expertise of reproductive medicine specialists at the College (theriogenology) to provide advanced reproductive technologies and services, including but not limited to artificial insemination, embryo transfer, and assisted-reproductive techniques to improve reproductive efficiency and/or to improve the herd genetics are examples of expertise the College can provide and convince producers of the financial value a veterinary can provide to their operations. Likewise, utilizing other services and expertise in soil and crop sciences, pasture-management, and nutrition among others will be important to enhance production and economic return for livestock producers in this area.

Livestock Farms ⁽¹⁾

| County | Beef cattle ranching and farming | Cattle Feedlots | Dairy cattle and milk production | Hog and pig farming | Poultry and egg production | Sheep and goat farming | Animal Aquaculture and other animal |
|---------------|---|----------------------------|---|--------------------------------|---|-----------------------------------|--|
| Jackson | 187 | 10 | 11 | 2 | 6 | 21 | 43 |
| Gallia | 474 | 19 | 12 | 36 | 21 | 34 | 104 |
| Lawrence | 290 | 10 | 8 | 6 | 15 | 32 | 82 |
| Pike | 165 | 6 | 11 | 12 | 15 | 8 | 45 |
| Ross | 216 | 31 | 6 | 13 | 19 | 22 | 67 |
| Scioto | 289 | 11 | 4 | 14 | 22 | 19 | 89 |
| Vinton | 77 | 0 | 3 | 5 | 3 | 8 | 27 |
| Athens | 196 | 16 | 16 | 4 | 21 | 22 | 83 |
| Hocking | 109 | 14 | 0 | 5 | 19 | 28 | 44 |
| Meigs | 197 | 11 | 30 | 6 | 9 | 11 | 38 |
| Total | 2,200 | 128 | 101 | 103 | 150 | 205 | 622 |

⁽¹⁾ All data taken from the US Dept. of Agriculture, National Agriculture Statistics Service, Table 45, 2007 Census

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Marketing and Promotion

Like most service providers, veterinarians must develop a bond of trust with the clients they serve. Producers are under significant financial pressure and are constantly considering the most efficient way to operate their business. Establishing health programs with producers will require that the practitioner(s) develop communication and trust with the producers in the community. In order to effectively implement and monitor health programs with producers, producers will have to be convinced that the economic benefits of such programs outweigh the costs. Engaging food producers with educational seminars or other educational programs is one way to build trust and develop confidence in the information and services the veterinarian provides. Regular electronic newsletters, promotional e-mail and other materials with content that is relevant to livestock producers is another way of creating awareness and confidence in the value veterinarians can provide to their operations.

Pricing Strategy

Effective use of financial concepts in the practice at the satellite facility will be as critical to its success as providing quality care. Studies reveal that veterinarians who understand and become experts in utilizing various pricing strategies to increase profitability have considerably more financial success than those that don't understand and utilize this tool. A 2011 report by Bayer Health Care's Animal Health Division and the National Commission on Veterinary Economic Issues examines decreasing client visits and the resulting loss of revenue at veterinary hospitals nationwide. Although this study involved only companion animal practices, the insight and business practices recommended, can be useful for farm animal practices as well. The Bayer Veterinary Care Usage Study reveals that 62 percent of practices do not use financial concepts to manage their business and that the practices that do employ a range of financial concepts, such as pricing strategies, are two-thirds more profitable.

The pricing model for all services of the facility should reflect the superior quality and value of the services delivered. Client's expectations of veterinary services and pricing of these services in this region will vary. Although competitors in this region are few, the pricing model should remain consistent and should not undermine the quality and value of services by undercutting competitors in the region. Payment options can be offered to those using the services on a regular basis.

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Operating Plan

The College of Veterinary Medicine farm animal practice located in Jackson, Ohio, will be a unique veterinary practice providing routine in-hospital or on-farm medical services for animal owners in Jackson and surrounding counties. The practice will also provide on-farm surgical services for animal owners in this area. Serving as a satellite of the Ohio State College of Veterinary Medicine's Veterinary Medical Center, the practice will be staffed by faculty and staff veterinarians with experience and knowledge of large animal medical, surgical, preventive and production medicine issues. Clients will include cattle and swine producers, dairy farmers, camelid clients and small ruminant herd owners.

Farm Animal Practice

The practice in Jackson will be a limited-service farm animal veterinary practice. It is anticipated that service revenue from emergency and surgical services will be required in order to engage with farmers and develop their confidence in the value veterinary professionals can provide to their business.

The veterinarians at Ohio State's Jackson satellite facility will have clinical experience with food animal veterinary care. As OSU faculty, they base all treatment decisions and protocols on the latest scientific research and best practices in the field. They also have access to faculty in the College of Veterinary Medicine, OSU Extension, Department of Animal Sciences, and the Ohio Agricultural Research and Development Center, on a fee-for-service basis, allowing them to draw on the knowledge of the many experts within The Ohio State University system to optimize preventive, diagnostic, therapeutic, and production medicine programs for livestock animals.

Veterinarians have been entrusted to protect the livelihood of farmers, both by caring for their animals and by safeguarding the human food they produce. The College of Veterinary Medicine at The Ohio State University is committed to having its veterinary students work within an on-farm ambulatory practice, giving them hands-on experience in large and small-scale livestock operations. As part of a fourth-year rotation, Ohio State veterinary students will work under the supervision of the Jackson faculty and staff veterinarians and assist them as members of part of a high-performing and cohesive team.



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Veterinary Services Offered

The Ohio State University's Jackson County satellite facility will offer veterinary services to owners of farm animals, including beef and dairy cattle, swine, sheep, goats and camelids. It will be a unique veterinary practice providing limited medical and surgical services for large animal farm owners. Services will include development of herd health management strategies as well as preventive and production medicine programs. The clinic will be a limited-service farm animal veterinary practice providing services for individual animals, customized herd-based programs and emergency services for food and fiber animals. Along with medical services, the OSU Jackson County satellite facility will offer year-round, 24-hour in-house and ambulatory emergency coverage. Individual animal care, ultrasound, endoscopic and radiology exams will be provided. Routine surgeries, exams and other procedures will be performed on the farm.

Vaccination and De-worming Programs

Preventing infectious disease outbreaks requires a comprehensive herd approach. Veterinarians traveling to the farm gain an appreciation of the management scheme on each producer's facility. This information, in combination with individual animal skills is critical to preparation of real world, customized herd health program for each farm. The vaccination and parasite mitigation programs developed reflect specific concerns on each farm and encompass critical preventive and production management events, such as reproductive programs (cow and bull fertility and health), calf health (scours and respiratory disease prevention), and internal and external parasite control. Development of vaccine protocols are based upon the producers' pre-breeding, pregnancy and calving system. Only a comprehensive and integrated herd health and production medicine program can provide protection against the financial losses associated with an outbreak of infectious diseases.

Herd-Based Reproduction Programs



Reproductive performance is a major factor affecting the production and economic efficiency of cattle operations whether in milk, replacement animals or calves for fattening. Today, fewer animals are expected to achieve ever-higher levels of production. Reproductive failure is the main reason for replacement in beef and dairy herds. Therefore efficacious and convenient reproduction management is central to the concerns of every cattle operation. A major

and realistic goal of every cow/calf operator and dairy producer should be to raise reproductive performance every year. Reproductive performance can be improved by the following: 1) properly identifying animals; 2) keeping records that enable determination of important herd indices, such as percent calf crop, pregnancy rate,

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length of calving season, culling rates, calf morbidity and mortality, breeding efficiency of bulls, and performance and production information; 3) meeting the nutritional requirements of various classes of livestock in the herd, emphasizing nutritional needs and cost efficiencies; 4) establishing a breeding program for heifer replacements and cows; 5) practicing sire selection and reproductive management, including selected use of advanced reproductive technologies such as artificial insemination, embryo transfer, assisted-reproductive techniques and other ways of improving herd genetics; 6) adopting an immunization program for the cow/calf herd, bulls, and calves; 7) evaluating reproductive failure and abortions; 8) providing adequate facilities; and 9) ensuring that the calf is well cared for at birth and receives adequate colostrum. A sound management program designed to reduce the risk of reproductive failure and improve cattle welfare and farm profitability could have a significant economic impact on producers in this region.

Emergency Services

If a farm animal should become injured or suddenly develop an acute life threatening disease, he or she will need prompt emergency care. Calving difficulty is common and a major cause of death loss in cow-calf herds. The satellite facilities emergency and critical care services will operate 24/7/365, and include veterinarians with expertise to treat these and other emergency healthcare concerns unique to the farm community.

Additional Ambulatory and In-House Clinical Services Offered

Additional ambulatory and clinical services will include the following:

- Diagnosis, treatment and prevention of individual animal disease
- Herd performance evaluation and consultation
- Record analysis (DHIA, CTAP , DC 305)
- Ration evaluation
- Nutritional consultation
- Replacement rearing programs
- Castration, dehorning and routine production procedures
- Pre-purchase and insurance exams

Description of Business Practices

Providing a consistent and reliable amount of veterinary care services is critical to developing a sustainable practice in any region. Business practices identified in this business plan are therefore focused on developing a base of clients who have a consistent, significant and recurring need for veterinary services. For food producers, proactive veterinary medical care that includes herd management preventive medicine practices will improve both the quality of food produced and efficiency of the producers operations, resulting in greater financial returns. For veterinarians, it will reduce the number of emergency calls they make and significantly improve their quality of life.

Engaging the Livestock Producer Community

Beef and other food producers in this area of Appalachian Ohio have learned to handle nutrition and other herd health issues on their own, primarily out of financial necessity. It will be important to the success of the practice to actively engage with as many food producers of the region as possible to develop relationships and earn their trust. Programs designed to provide information about relevant issues can be used as a tool to deliver new herd management concepts, introduce



new technology or provide an objective professional medical opinion on issues that could have a significant financial impact on the producers' operations. Educational programs and seminars should also be developed to engage the veterinary and producer communities in this area. Programs should be developed that offer practical, farm based training, delivered by veterinarians and industry experts that are focused on improving local producer's livestock and business performance. Feedlot owners and other organizations that could benefit should be solicited to financially support the efforts of these programs. Communication and education programs are not anticipated to generate quick, short-term financial results and therefore, it will be important for the practitioners and staff members to engage producers early with these programs.

Emergency Medical Care

According to practitioners in rural communities, providing emergency veterinary medical care 24 hours a day and 365 days out of the year is another way of developing relationships and trust with producers in the area which leads to opportunities to provide other veterinary services. When a farmer calls a veterinarian during the late hours of the evening or during a holiday to help with calving or other type of emergency, it presents a unique opportunity for veterinarians. Helping the producer out of a difficult situation by providing care to their livestock provides an opportunity to build a relationship and develop trust with the producer. It also provides an opportunity to discuss sound breeding techniques or other herd management issues and strategies that might prevent costly medical emergencies in the future benefiting both the producer and the veterinary practice.



Herd Health Management and Preventive Medicine



It pays to have a good working relationship with a veterinarian to assist in herd health management strategy and preventative medicine, rather than just relying on a veterinarian for emergencies. The veterinarian can answer questions and help prevent problems, often increasing a producer's profit margin. There are several advantages for the producer when arranging a veterinarian to be a consultant in the operation. The veterinarian can help the producer look over the entire

operation in terms of herd health, find any weak areas and identify places for improvement. Consulting on use of new vaccines and matching vaccines with a production or health maintenance program can improve financial results for producers. The veterinarian may also connect the producer with other professionals such as a nutritionist, agronomist or reproductive specialist. Unless the animals are adequately fed, nothing the veterinarian can do or suggest will work well to sustain reproductive performance and milk production.

Fee Structure – Two Plans

The pricing model for all services of the facility should reflect the superior quality and value of the services delivered. The pricing model can include financial incentives for food producers who utilize the veterinary staff on a regularly scheduled basis to develop herd management programs for their operations. Understanding that not every livestock producer will choose to use the veterinarian in this way, two pricing models can be developed. The first model will provide preferred pricing and other incentives to clients that commit to utilize veterinary services through a scheduled program outlined in a service agreement. In addition to discounted fees, clients enrolled using this pricing model are provided priority service privileges 24 hours a day, 365 days a year. The program helps create predictable workflow and financial stability for the veterinary practice.

Features of the scheduled preferred pricing program include:

- Herd management program fees based on the type and size of the producers' herds and significant events anticipated during the year (e.g. breeding, pregnancy-checking, calving and winter feeding). The objective of herd management programs is to improve the overall profitability of the producer by increasing production and lowering operational costs. The pricing plan provides producers with a predictable cost for veterinary services for their herd inventory.
- Preferred after-hours response for emergencies.
- Exclusive educational meetings for clients participating in the program.
- Monthly billing and additional benefits for prepaid packages.

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Not all producers will decide to participate in a preferred pricing program. The second fee structure is for these clients. Services will be provided to these clients at rates that are consistent with the local rates of other veterinarians with a modest premium. When veterinarians are called for emergency services, it is sometimes the only opportunity to discuss options with the producer for better care of their herd. Fees for responding to emergency calls will reflect a premium and provide incentive to consider the scheduled preferred pricing program. Additional features of the second fee structure include:

- Procedural fees based on published rates.
- Reduced fees for those that use the practice's services consistently.
- Compliance with a strict travel policy – policy for billing travel time to farms.
- Hourly billing for emergency calls and for farm visits. Incentivize owners to have the animal(s) ready (caught and restrained) to be examined when they arrive.
- Payment will be expected at the time of service.

Superior Service and State-of-the-Art Technology

Superior professional, friendly service using state-of-the-art knowledge and technology will be a core business principle of the practice. Staff will be trained to manage difficult clients and certain situations that occur frequently with animal owners. In addition, staff members will be trained to utilize “state of the art” information and technology in the facility, and to communicate their advantages.

Organizational Structure - Personnel



The Jackson County facility will organizationally and operationally operate as a service unit under the Ohio State University's College of Veterinary Medicine's, Veterinary Medical Center. Faculty from the Veterinary Medical Center will have day-to-day operating responsibility and will be supported by Registered Veterinary Technicians, Veterinary Assistants and a small administrative staff. The

Director of the Veterinary Medical Center and the Associate Dean of Clinical and Outreach Programs will provide overall administrative oversight for this satellite facility and its operation. Following is a list of staff positions that would be required based on anticipated levels of service provided at the Jackson County satellite facility:

- Licensed Veterinarians – two veterinarians upon opening the facility.
- Veterinary Residents – one veterinary resident added during the second year of operations.
- Veterinary Technicians – one veterinary technician upon opening the facility.
- Veterinary Assistants – one veterinarian assistant added in the second year of operations.
- Administrative staff – one administrative staff added in the third year of operations.

Financial Summary

Jackson County Facility Capital Improvements

The Jackson Agricultural Research Station has been a primary site for reproductive management and production management research in beef cattle for more than three decades. Limited renovations and additions would be required to deliver the services of a limited service farm animal practice. In order to deliver the services described in this business plan, the capital improvements would include the following:

- Construction of a Pole Barn and additional fencing to prevent animals from inadvertently exiting the premises and
- Limited electrical, sanitary water and drain upgrades.



These improvements and the estimated cost of veterinary practice equipment including diagnostic equipment, equipment used for on-farm surgical procedures and two practice vehicles used for on-farm visits are estimated to require external sources of capital of approximately \$150,000. A more detailed study of the equipment and facility requirements of the practice will be required.



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Financial Projections

The assumptions used for preparing the projections are presented in Appendix B. The projections assume that revenue generated from the limited veterinary services in this region would be sufficient to cover operating expenses in its third year of operations. Based on the projections, the practice would require an external source of capital of approximately \$125,000 during its first three years to cover its start-up and operating expenditures. The expense projections have been prepared based on the 5 year historical (fiscal years 2007 through 2011) expense to revenue ratios from the CVM's Large Animal Hospital in Marysville.



Balance Sheet 5-Year Projections

Jackson County Veterinary Practice - Limited Service Farm Animals
5 Year Financial Projections
Balance Sheet

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|-------------------------------------|--------------------|---------------------|---------------------|--------------------|--------------------|
| Assets | | | | | |
| Cash | \$ (74,931) | \$ (118,238) | \$ (118,226) | \$ (101,425) | \$ (46,488) |
| Accounts receivable | 2,978 | 3,797 | 3,466 | 4,527 | 5,299 |
| Less: allowance for uncollectibles | (149) | (190) | (173) | (226) | (265) |
| Accounts receivable, net | 2,829 | 3,607 | 3,293 | 4,301 | 5,034 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (69,103) | (111,631) | (111,934) | (94,124) | (38,454) |
| Total assets | \$ (69,103) | \$ (111,631) | \$ (111,934) | \$ (94,124) | \$ (38,454) |
| Liabilities and equity | | | | | |
| Accounts payable | \$ 7,873 | \$ 10,039 | \$ 9,164 | \$ 11,970 | \$ 14,011 |
| Accrued salaries and wages | 1,692 | 2,383 | 2,161 | 2,332 | 2,390 |
| Sales tax payable | 567 | 723 | 1,981 | 10,350 | 12,115 |
| Total current liabilities | 10,132 | 13,146 | 13,306 | 24,651 | 28,516 |
| Total equity | (79,235) | (124,776) | (125,240) | (118,776) | (66,970) |
| Total liabilities and equity | \$ (69,103) | \$ (111,631) | \$ (111,934) | \$ (94,124) | \$ (38,454) |

The College of Veterinary Medicine
 Limited-Service Farm Animal Veterinary Practice
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Statement of Operations 5-Year Projections

Jackson County Veterinary Practice - Limited Service Farm Animals
5 Year Financial Projections
Statement of Operations

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|-------------------------------------|--------------------|--------------------|-----------------|-----------------|------------------|
| Revenue | | | | | |
| Professional fees | \$ 104,341 | \$ 169,334 | \$ 232,589 | \$ 266,505 | \$ 311,952 |
| Laboratory fees | 14,700 | 23,857 | 32,769 | 37,547 | 43,950 |
| Drug fees | 77,182 | 125,258 | 172,049 | 197,137 | 230,754 |
| Other fees | 16,458 | 26,709 | 36,686 | 42,036 | 49,204 |
| Total revenue | 212,682 | 345,158 | 474,092 | 543,224 | 635,859 |
| Operating expenses: | | | | | |
| Compensation | 202,988 | 239,738 | 259,360 | 279,843 | 286,839 |
| Benefits | 63,584 | 70,495 | 81,167 | 94,993 | 97,368 |
| Cost of drugs | 52,457 | 85,131 | 116,932 | 133,983 | 156,831 |
| Supplies expense | 10,116 | 16,417 | 22,550 | 25,838 | 30,244 |
| Postage expense | 991 | 1,609 | 2,210 | 2,532 | 2,964 |
| Utilities expense | 4,131 | 6,704 | 9,208 | 10,551 | 12,350 |
| Building repairs & maintenance | 2,436 | 3,953 | 5,429 | 6,221 | 7,282 |
| Lab services expense | 4,840 | 7,855 | 10,790 | 12,363 | 14,472 |
| Other purchased expenses | 7,114 | 11,545 | 15,858 | 18,170 | 21,269 |
| Misc expense | 2,220 | 3,603 | 4,949 | 5,671 | 6,638 |
| Equipment purchases | 9,422 | 15,291 | 21,004 | 24,066 | 28,170 |
| University overhead | 8,467 | 13,741 | 18,873 | 21,626 | 25,313 |
| Exp transfer | (11,059) | (17,948) | (24,653) | (28,248) | (33,065) |
| Total operating expenses | 357,706 | 458,134 | 543,676 | 607,608 | 656,674 |
| Operating income | (145,025) | (112,976) | (69,584) | (64,384) | (20,814) |
| Other income (expense): | | | | | |
| Other income (expense) | - | - | - | - | - |
| General funds - teaching support | 65,790 | 67,435 | 69,121 | 70,849 | 72,620 |
| Total other income (expense) | 65,790 | 67,435 | 69,121 | 70,849 | 72,620 |
| Net income | \$ (79,235) | \$ (45,542) | \$ (464) | \$ 6,464 | \$ 51,806 |

The College of Veterinary Medicine
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Statement of Cash Flow 5-Year Projections

Jackson County Veterinary Practice - Limited Service Farm Animals
5 Year Financial Projections
Statement of Cash Flow

| | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|---|--------------------|---------------------|---------------------|---------------------|--------------------|
| Net income | \$ (79,235) | \$ (45,542) | \$ (464) | \$ 6,464 | \$ 51,806 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | |
| (Increase) decrease in operating assets: | | | | | |
| Accounts receivable | (2,829) | (778) | 314 | (1,008) | (733) |
| Prepaid expenses | (3,000) | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | |
| Accounts payable | 7,873 | 2,166 | (875) | 2,806 | 2,041 |
| Accrued salaries and wages | 1,692 | 691 | (222) | 171 | 58 |
| Sales tax payable | 567 | 156 | 1,258 | 8,369 | 1,765 |
| Total adjustments | 4,303 | 2,235 | 475 | 10,337 | 3,131 |
| Net cash provided by (used in) | (74,931) | (43,306) | 12 | 16,801 | 54,937 |
| Cash used in investing activities | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - |
| Beginning cash balance | - | (74,931) | (118,238) | (118,226) | (101,425) |
| Ending cash balance | \$ (74,931) | \$ (118,238) | \$ (118,226) | \$ (101,425) | \$ (46,488) |

Appendices

Appendix A: Detailed Financial Projections

Jackson County Veterinary Practice - Limited Service Farm Animals 5 Year Financial Projections Balance Sheet

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Assets | | | | | | | | | | | | | |
| Cash | \$ (13,999) | \$ (26,076) | \$ (36,938) | \$ (45,775) | \$ (52,790) | \$ (59,598) | \$ (66,606) | \$ (73,614) | \$ (75,773) | \$ (75,094) | \$ (75,417) | \$ (74,931) | \$ (74,931) |
| Accounts receivable | 532 | 744 | 957 | 1,276 | 1,595 | 1,701 | 1,701 | 1,701 | 2,339 | 2,871 | 2,871 | 2,978 | 2,978 |
| Less: allowance for uncollectibles | (27) | (37) | (48) | (64) | (80) | (85) | (85) | (85) | (117) | (144) | (144) | (149) | (149) |
| Accounts receivable, net | 505 | 707 | 909 | 1,212 | 1,515 | 1,616 | 1,616 | 1,616 | 2,223 | 2,728 | 2,728 | 2,829 | 2,829 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (10,494) | (22,369) | (33,028) | (41,563) | (48,275) | (54,981) | (61,989) | (68,997) | (70,550) | (69,366) | (69,689) | (69,103) | (69,103) |
| Total assets | \$ (10,494) | \$ (22,369) | \$ (33,028) | \$ (41,563) | \$ (48,275) | \$ (54,981) | \$ (61,989) | \$ (68,997) | \$ (70,550) | \$ (69,366) | \$ (69,689) | \$ (69,103) | \$ (69,103) |
| Liabilities and equity | | | | | | | | | | | | | |
| Accounts payable | \$ 1,406 | \$ 1,968 | \$ 2,531 | \$ 3,374 | \$ 4,218 | \$ 4,499 | \$ 4,499 | \$ 4,499 | \$ 6,186 | \$ 7,592 | \$ 7,592 | \$ 7,873 | \$ 7,873 |
| Accrued salaries and wages | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 | 1,692 |
| Sales tax payable | 101 | 142 | 182 | 243 | 304 | 324 | 324 | 324 | 446 | 547 | 547 | 567 | 567 |
| Total current liabilities | 3,199 | 3,802 | 4,405 | 5,309 | 6,213 | 6,515 | 6,515 | 6,515 | 8,323 | 9,830 | 9,830 | 10,132 | 10,132 |
| Total equity | (13,693) | (26,171) | (37,433) | (46,872) | (54,488) | (61,496) | (68,504) | (75,512) | (78,874) | (79,197) | (79,520) | (79,235) | (79,235) |
| Total liabilities and equity | \$ (10,494) | \$ (22,369) | \$ (33,028) | \$ (41,563) | \$ (48,275) | \$ (54,981) | \$ (61,989) | \$ (68,997) | \$ (70,550) | \$ (69,366) | \$ (69,689) | \$ (69,103) | \$ (69,103) |

The College of Veterinary Medicine
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Jackson County Veterinary Practice - Limited Service Farm Animals
5 Year Financial Projections
Balance Sheet

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| Assets | | | | | | | | | | | | | |
| Cash | \$ (74,043) | \$ (72,129) | \$ (71,851) | \$ (73,871) | \$ (77,864) | \$ (83,173) | \$ (90,049) | \$ (98,476) | \$ (103,461) | \$ (109,869) | \$ (115,858) | \$ (118,238) | \$ (118,238) |
| Accounts receivable | 3,106 | 3,279 | 3,106 | 2,761 | 2,416 | 2,157 | 2,416 | 2,330 | 2,761 | 3,106 | 3,279 | 3,797 | 3,797 |
| Less: allowance for uncollectibles | (155) | (164) | (155) | (138) | (121) | (108) | (121) | (116) | (138) | (155) | (164) | (190) | (190) |
| Accounts receivable, net | 2,951 | 3,115 | 2,951 | 2,623 | 2,295 | 2,049 | 2,295 | 2,213 | 2,623 | 2,951 | 3,115 | 3,607 | 3,607 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (68,092) | (66,014) | (65,900) | (68,248) | (72,568) | (78,124) | (84,754) | (93,262) | (97,838) | (103,917) | (109,743) | (111,631) | (111,631) |
| Total assets | \$ (68,092) | \$ (66,014) | \$ (65,900) | \$ (68,248) | \$ (72,568) | \$ (78,124) | \$ (84,754) | \$ (93,262) | \$ (97,838) | \$ (103,917) | \$ (109,743) | \$ (111,631) | \$ (111,631) |
| Liabilities and equity | | | | | | | | | | | | | |
| Accounts payable | \$ 8,214 | \$ 8,670 | \$ 8,214 | \$ 7,301 | \$ 6,389 | \$ 5,704 | \$ 6,389 | \$ 6,160 | \$ 7,301 | \$ 8,214 | \$ 8,670 | \$ 10,039 | \$ 10,039 |
| Accrued salaries and wages | 1,734 | 1,734 | 1,734 | 1,734 | 1,734 | 1,734 | 2,141 | 2,141 | 2,141 | 2,383 | 2,383 | 2,383 | 2,383 |
| Sales tax payable | 592 | 625 | 592 | 526 | 460 | 411 | 460 | 444 | 526 | 592 | 625 | 723 | 723 |
| Total current liabilities | 10,540 | 11,029 | 10,540 | 9,561 | 8,583 | 7,849 | 8,989 | 8,745 | 9,968 | 11,189 | 11,678 | 13,146 | 13,146 |
| Total equity | (78,632) | (77,042) | (76,439) | (77,809) | (81,151) | (85,973) | (93,743) | (102,007) | (107,805) | (115,106) | (121,421) | (124,776) | (124,776) |
| Total liabilities and equity | \$ (68,092) | \$ (66,014) | \$ (65,900) | \$ (68,248) | \$ (72,568) | \$ (78,124) | \$ (84,754) | \$ (93,262) | \$ (97,838) | \$ (103,917) | \$ (109,743) | \$ (111,631) | \$ (111,631) |

The College of Veterinary Medicine
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Jackson County Veterinary Practice - Limited Service Farm Animals
5 Year Financial Projections
Balance Sheet

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|-------------------------------------|--------------------|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|
| Assets | | | | | | | |
| Cash | \$ (90,713) | \$ (100,710) | \$ (109,842) | \$ (118,226) | \$ (118,226) | \$ (101,425) | \$ (46,488) |
| Accounts receivable | 5,294 | 3,598 | 3,445 | 3,466 | 3,466 | 4,527 | 5,299 |
| Less: allowance for uncollectibles | (265) | (180) | (172) | (173) | (173) | (226) | (265) |
| Accounts receivable, net | 5,029 | 3,419 | 3,273 | 3,293 | 3,293 | 4,301 | 5,034 |
| Prepaid expenses | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Total current assets | (82,684) | (94,291) | (103,569) | (111,934) | (111,934) | (94,124) | (38,454) |
| Total assets | \$ (82,684) | \$ (94,291) | \$ (103,569) | \$ (111,934) | \$ (111,934) | \$ (94,124) | \$ (38,454) |
| Liabilities and equity | | | | | | | |
| Accounts payable | \$ 13,997 | \$ 9,515 | \$ 9,109 | \$ 9,164 | \$ 9,164 | \$ 11,970 | \$ 14,011 |
| Accrued salaries and wages | 2,161 | 2,161 | 2,161 | 2,161 | 2,161 | 2,332 | 2,390 |
| Sales tax payable | 3,026 | 2,057 | 1,969 | 1,981 | 1,981 | 10,350 | 12,115 |
| Total current liabilities | 19,184 | 13,733 | 13,240 | 13,306 | 13,306 | 24,651 | 28,516 |
| Total equity | (101,868) | (108,024) | (116,809) | (125,240) | (125,240) | (118,776) | (66,970) |
| Total liabilities and equity | \$ (82,684) | \$ (94,291) | \$ (103,569) | \$ (111,934) | \$ (111,934) | \$ (94,124) | \$ (38,454) |

The College of Veterinary Medicine
 Limited-Service Farm Animal Veterinary Practice
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Jackson County Veterinary Practice - Limited Service Farm Animals
5 Year Financial Projections
Statement of Operations

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|-------------------------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------|-----------------|----------------|--------------------|
| Revenue | | | | | | | | | | | | | |
| Professional fees | \$ 2,609 | \$ 3,652 | \$ 4,695 | \$ 6,260 | \$ 7,826 | \$ 8,347 | \$ 8,347 | \$ 8,347 | \$ 11,478 | \$ 14,086 | \$ 14,086 | \$ 14,608 | \$ 104,341 |
| Laboratory fees | 368 | 515 | 662 | 882 | 1,103 | 1,176 | 1,176 | 1,176 | 1,617 | 1,985 | 1,985 | 2,058 | 14,700 |
| Drug fees | 1,930 | 2,701 | 3,473 | 4,631 | 5,789 | 6,175 | 6,175 | 6,175 | 8,490 | 10,420 | 10,420 | 10,806 | 77,182 |
| Other fees | 411 | 576 | 741 | 987 | 1,234 | 1,317 | 1,317 | 1,317 | 1,810 | 2,222 | 2,222 | 2,304 | 16,458 |
| Total revenue | 5,317 | 7,444 | 9,571 | 12,761 | 15,951 | 17,015 | 17,015 | 17,015 | 23,395 | 28,712 | 28,712 | 29,775 | 212,682 |
| Operating expenses: | | | | | | | | | | | | | |
| Compensation | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 16,916 | 202,988 |
| Benefits | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 5,299 | 63,584 |
| Cost of drugs | 1,311 | 1,836 | 2,361 | 3,147 | 3,934 | 4,197 | 4,197 | 4,197 | 5,770 | 7,082 | 7,082 | 7,344 | 52,457 |
| Supplies expense | 253 | 354 | 455 | 607 | 759 | 809 | 809 | 809 | 1,113 | 1,366 | 1,366 | 1,416 | 10,116 |
| Postage expense | 25 | 35 | 45 | 59 | 74 | 79 | 79 | 79 | 109 | 134 | 134 | 139 | 991 |
| Utilities expense | 103 | 145 | 186 | 248 | 310 | 330 | 330 | 330 | 454 | 558 | 558 | 578 | 4,131 |
| Building repairs & maintenance | 61 | 85 | 110 | 146 | 183 | 195 | 195 | 195 | 268 | 329 | 329 | 341 | 2,436 |
| Lab services expense | 121 | 169 | 218 | 290 | 363 | 387 | 387 | 387 | 532 | 653 | 653 | 678 | 4,840 |
| Other purchased expenses | 178 | 249 | 320 | 427 | 534 | 569 | 569 | 569 | 783 | 960 | 960 | 996 | 7,114 |
| Misc expense | 56 | 78 | 100 | 133 | 167 | 178 | 178 | 178 | 244 | 300 | 300 | 311 | 2,220 |
| Equipment purchases | 236 | 330 | 424 | 565 | 707 | 754 | 754 | 754 | 1,036 | 1,272 | 1,272 | 1,319 | 9,422 |
| University overhead | 212 | 296 | 381 | 508 | 635 | 677 | 677 | 677 | 931 | 1,143 | 1,143 | 1,185 | 8,467 |
| Exp transfer | (276) | (387) | (498) | (664) | (829) | (885) | (885) | (885) | (1,217) | (1,493) | (1,493) | (1,548) | (11,059) |
| Total operating expenses | 24,493 | 25,404 | 26,315 | 27,682 | 29,049 | 29,505 | 29,505 | 29,505 | 32,239 | 34,517 | 34,517 | 34,973 | 357,706 |
| Operating income | (19,176) | (17,960) | (16,745) | (14,921) | (13,098) | (12,491) | (12,491) | (12,491) | (8,844) | (5,805) | (5,805) | (5,198) | (145,025) |
| Other income (expense): | | | | | | | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| General funds - teaching support | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 65,790 |
| Total other income (expense) | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 5,483 | 65,790 |
| Net income | \$ (13,693) | \$ (12,478) | \$ (11,262) | \$ (9,439) | \$ (7,616) | \$ (7,008) | \$ (7,008) | \$ (7,008) | \$ (3,362) | \$ (323) | \$ (323) | \$ 285 | \$ (79,235) |

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Jackson County Veterinary Practice - Limited Service Farm Animals
5 Year Financial Projections
Statement of Operations

| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|-------------------------------------|----------------|-----------------|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Revenue | | | | | | | | | | | | | |
| Professional fees | \$ 15,240 | \$ 16,087 | \$ 15,240 | \$ 13,547 | \$ 11,853 | \$ 10,583 | \$ 11,853 | \$ 11,430 | \$ 13,547 | \$ 15,240 | \$ 16,087 | \$ 18,627 | \$ 169,334 |
| Laboratory fees | 2,147 | 2,266 | 2,147 | 1,909 | 1,670 | 1,491 | 1,670 | 1,610 | 1,909 | 2,147 | 2,266 | 2,624 | 23,857 |
| Drug fees | 11,273 | 11,900 | 11,273 | 10,021 | 8,768 | 7,829 | 8,768 | 8,455 | 10,021 | 11,273 | 11,900 | 13,778 | 125,258 |
| Other fees | 2,404 | 2,537 | 2,404 | 2,137 | 1,870 | 1,669 | 1,870 | 1,803 | 2,137 | 2,404 | 2,537 | 2,938 | 26,709 |
| Total revenue | 31,064 | 32,790 | 31,064 | 27,613 | 24,161 | 21,572 | 24,161 | 23,298 | 27,613 | 31,064 | 32,790 | 37,967 | 345,158 |
| Operating expenses: | | | | | | | | | | | | | |
| Compensation | 17,339 | 17,339 | 17,339 | 17,339 | 17,339 | 17,339 | 21,405 | 21,405 | 21,405 | 23,830 | 23,830 | 23,830 | 239,738 |
| Benefits | 5,431 | 5,431 | 5,431 | 5,431 | 5,431 | 5,431 | 5,793 | 5,793 | 5,793 | 6,843 | 6,843 | 6,843 | 70,495 |
| Cost of drugs | 7,662 | 8,087 | 7,662 | 6,810 | 5,959 | 5,321 | 5,959 | 5,746 | 6,810 | 7,662 | 8,087 | 9,364 | 85,131 |
| Supplies expense | 1,478 | 1,560 | 1,478 | 1,313 | 1,149 | 1,026 | 1,149 | 1,108 | 1,313 | 1,478 | 1,560 | 1,806 | 16,417 |
| Postage expense | 145 | 153 | 145 | 129 | 113 | 101 | 113 | 109 | 129 | 145 | 153 | 177 | 1,609 |
| Utilities expense | 603 | 637 | 603 | 536 | 469 | 419 | 469 | 453 | 536 | 603 | 637 | 737 | 6,704 |
| Building repairs & maintenance | 356 | 376 | 356 | 316 | 277 | 247 | 277 | 267 | 316 | 356 | 376 | 435 | 3,953 |
| Lab services expense | 707 | 746 | 707 | 628 | 550 | 491 | 550 | 530 | 628 | 707 | 746 | 864 | 7,855 |
| Other purchased expenses | 1,039 | 1,097 | 1,039 | 924 | 808 | 722 | 808 | 779 | 924 | 1,039 | 1,097 | 1,270 | 11,545 |
| Misc expense | 324 | 342 | 324 | 288 | 252 | 225 | 252 | 243 | 288 | 324 | 342 | 396 | 3,603 |
| Equipment purchases | 1,376 | 1,453 | 1,376 | 1,223 | 1,070 | 956 | 1,070 | 1,032 | 1,223 | 1,376 | 1,453 | 1,682 | 15,291 |
| University overhead | 1,237 | 1,305 | 1,237 | 1,099 | 962 | 859 | 962 | 927 | 1,099 | 1,237 | 1,305 | 1,511 | 13,741 |
| Exp transfer | (1,615) | (1,705) | (1,615) | (1,436) | (1,256) | (1,122) | (1,256) | (1,212) | (1,436) | (1,615) | (1,705) | (1,974) | (17,948) |
| Total operating expenses | 36,081 | 36,820 | 36,081 | 34,602 | 33,123 | 32,013 | 37,551 | 37,182 | 39,030 | 43,985 | 44,724 | 46,943 | 458,134 |
| Operating income | (5,017) | (4,030) | (5,017) | (6,989) | (8,962) | (10,441) | (13,390) | (13,883) | (11,418) | (12,920) | (11,934) | (8,975) | (112,976) |
| Other income (expense): | | | | | | | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| General funds - teaching support | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 67,435 |
| Total other income (expense) | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 5,620 | 67,435 |
| Net income | \$ 603 | \$ 1,589 | \$ 603 | \$ (1,370) | \$ (3,342) | \$ (4,822) | \$ (7,771) | \$ (8,264) | \$ (5,798) | \$ (7,301) | \$ (6,315) | \$ (3,356) | \$ (45,542) |

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Statement of Operations

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|-------------------------------------|------------------|-------------------|-------------------|-------------------|-------------------------|-----------------|------------------|
| Revenue | | | | | | | |
| Professional fees | \$ 77,912 | \$ 52,962 | \$ 50,705 | \$ 51,009 | \$ 232,589 | \$ 266,505 | \$ 311,952 |
| Laboratory fees | 10,977 | 7,462 | 7,144 | 7,187 | 32,769 | 37,547 | 43,950 |
| Drug fees | 57,632 | 39,177 | 37,507 | 37,732 | 172,049 | 197,137 | 230,754 |
| Other fees | 12,289 | 8,354 | 7,998 | 8,046 | 36,686 | 42,036 | 49,204 |
| Total revenue | 158,810 | 107,954 | 103,353 | 103,974 | 474,092 | 543,224 | 635,859 |
| Operating expenses: | | | | | | | |
| Compensation | 64,840 | 64,840 | 64,840 | 64,840 | 259,360 | 279,843 | 286,839 |
| Benefits | 20,292 | 20,292 | 20,292 | 20,292 | 81,167 | 94,993 | 97,368 |
| Cost of drugs | 39,170 | 26,626 | 25,491 | 25,645 | 116,932 | 133,983 | 156,831 |
| Supplies expense | 7,554 | 5,135 | 4,916 | 4,945 | 22,550 | 25,838 | 30,244 |
| Postage expense | 740 | 503 | 482 | 485 | 2,210 | 2,532 | 2,964 |
| Utilities expense | 3,084 | 2,097 | 2,007 | 2,019 | 9,208 | 10,551 | 12,350 |
| Building repairs & maintenance | 1,819 | 1,236 | 1,184 | 1,191 | 5,429 | 6,221 | 7,282 |
| Lab services expense | 3,614 | 2,457 | 2,352 | 2,366 | 10,790 | 12,363 | 14,472 |
| Other purchased expenses | 5,312 | 3,611 | 3,457 | 3,478 | 15,858 | 18,170 | 21,269 |
| Misc expense | 1,658 | 1,127 | 1,079 | 1,085 | 4,949 | 5,671 | 6,638 |
| Equipment purchases | 7,036 | 4,783 | 4,579 | 4,606 | 21,004 | 24,066 | 28,170 |
| University overhead | 6,322 | 4,298 | 4,114 | 4,139 | 18,873 | 21,626 | 25,313 |
| Exp transfer | (8,258) | (5,614) | (5,374) | (5,407) | (24,653) | (28,248) | (33,065) |
| Total operating expenses | 153,182 | 131,390 | 129,419 | 129,685 | 543,676 | 607,608 | 656,674 |
| Operating income | 5,628 | (23,436) | (26,065) | (25,711) | (69,584) | (64,384) | (20,814) |
| Other income (expense): | | | | | | | |
| Other income (expense) | - | - | - | - | - | - | - |
| General funds - teaching support | 17,280 | 17,280 | 17,280 | 17,280 | 69,121 | 70,849 | 72,620 |
| Total other income (expense) | 17,280 | 17,280 | 17,280 | 17,280 | 69,121 | 70,849 | 72,620 |
| Net income | \$ 22,908 | \$ (6,156) | \$ (8,785) | \$ (8,431) | \$ (464) | \$ 6,464 | \$ 51,806 |

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Statement of Cash Flow

| | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Total FY2014 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Net income (loss) from operations | \$ (13,693) | \$ (12,478) | \$ (11,262) | \$ (9,439) | \$ (7,616) | \$ (7,008) | \$ (7,008) | \$ (7,008) | \$ (3,362) | \$ (323) | \$ (323) | 285 | \$ (79,235) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | | | | | | | |
| Accounts receivable | (505) | (202) | (202) | (303) | (303) | (101) | - | - | (606) | (505) | - | (101) | (2,829) |
| Prepaid expenses | (3,000) | - | - | - | - | - | - | - | - | - | - | - | (3,000) |
| Increase (decrease) in operating liabilities: | | | | | | | | | | | | | |
| Accounts payable | 1,406 | 562 | 562 | 844 | 844 | 281 | - | - | 1,687 | 1,406 | - | 281 | 7,873 |
| Accrued salaries and wages | 1,692 | - | - | - | - | - | - | - | - | - | - | - | 1,692 |
| Sales tax payable | 101 | 41 | 41 | 61 | 61 | 20 | - | - | 122 | 101 | - | 20 | 567 |
| Total adjustments | (306) | 401 | 401 | 601 | 601 | 200 | - | - | 1,203 | 1,002 | - | 200 | 4,303 |
| Net cash provided by (used in) operating activities: | (13,999) | (12,077) | (10,861) | (8,838) | (7,015) | (6,808) | (7,008) | (7,008) | (2,159) | 679 | (323) | 485 | (74,931) |
| Cash used in investing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Beginning cash balance | - | (13,999) | (26,076) | (36,938) | (45,775) | (52,790) | (59,598) | (66,606) | (73,614) | (75,773) | (75,094) | (75,417) | - |
| Ending cash balance | \$ (13,999) | \$ (26,076) | \$ (36,938) | \$ (45,775) | \$ (52,790) | \$ (59,598) | \$ (66,606) | \$ (73,614) | \$ (75,773) | \$ (75,094) | \$ (75,417) | \$ (74,931) | \$ (74,931) |

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| | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | Jan-15 | Feb-15 | Mar-15 | Apr-15 | May-15 | Jun-15 | Total FY2015 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Net income (loss) from operations | \$ 603 | \$ 1,589 | \$ 603 | \$ (1,370) | \$ (3,342) | \$ (4,822) | \$ (7,771) | \$ (8,264) | \$ (5,798) | \$ (7,301) | \$ (6,315) | \$ (3,356) | \$ (45,542) |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | | | | | | | |
| Accounts receivable | (122) | (164) | 164 | 328 | 328 | 246 | (246) | 82 | (410) | (328) | (164) | (492) | (778) |
| Prepaid expenses | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | | | | | | | | | |
| Accounts payable | 341 | 456 | (456) | (913) | (913) | (684) | 684 | (228) | 1,141 | 913 | 456 | 1,369 | 2,166 |
| Accrued salaries and wages | 42 | - | - | - | - | - | 407 | - | - | 243 | - | - | 691 |
| Sales tax payable | 25 | 33 | (33) | (66) | (66) | (49) | 49 | (16) | 82 | 66 | 33 | 99 | 156 |
| Total adjustments | 285 | 325 | (325) | (651) | (651) | (488) | 895 | (163) | 813 | 893 | 325 | 976 | 2,235 |
| Net cash provided by (used in) operating activities: | 888 | 1,915 | 278 | (2,020) | (3,993) | (5,309) | (6,876) | (8,426) | (4,985) | (6,408) | (5,989) | (2,380) | (43,306) |
| Cash used in investing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Beginning cash balance | (74,931) | (74,043) | (72,129) | (71,851) | (73,871) | (77,864) | (83,173) | (90,049) | (98,476) | (103,461) | (109,869) | (115,858) | (74,931) |
| Ending cash balance | \$ (74,043) | \$ (72,129) | \$ (71,851) | \$ (73,871) | \$ (77,864) | \$ (83,173) | \$ (90,049) | \$ (98,476) | \$ (103,461) | \$ (109,869) | \$ (115,858) | \$ (118,238) | \$ (118,238) |

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Statement of Cash Flow

| | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Total FY2016 | FY 2017 | FY 2018 |
|---|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Net income (loss) from operations | \$ 22,908 | \$ (6,156) | \$ (8,785) | \$ (8,431) | \$ (464) | \$ 6,464 | \$ 51,806 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | | | | |
| (Increase) decrease in operating assets: | | | | | | | |
| Accounts receivable | (1,422) | 1,610 | 146 | (20) | 314 | (1,008) | (733) |
| Prepaid expenses | - | - | - | - | - | - | - |
| Increase (decrease) in operating liabilities: | | | | | | | |
| Accounts payable | 3,958 | (4,482) | (405) | 55 | (875) | 2,806 | 2,041 |
| Accrued salaries and wages | (222) | - | - | - | (222) | 171 | 58 |
| Sales tax payable | 2,302 | (969) | (88) | 12 | 1,258 | 8,369 | 1,765 |
| Total adjustments | 4,617 | (3,841) | (347) | 47 | 475 | 10,337 | 3,131 |
| Net cash provided by (used in) operating activities: | 27,525 | (9,997) | (9,133) | (8,384) | 12 | 16,801 | 54,937 |
| Cash used in investing activities | - | - | - | - | - | - | - |
| Cash provided by financing activities | - | - | - | - | - | - | - |
| Beginning cash balance | (118,238) | (90,713) | (100,710) | (109,842) | (118,238) | (118,226) | (101,425) |
| Ending cash balance | \$ (90,713) | \$ (100,710) | \$ (109,842) | \$ (118,226) | \$ (118,226) | \$ (101,425) | \$ (46,488) |

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Appendix B: Assumptions used in Financial Projections

Balance Sheet Assumptions:

1. Accounts receivable – Assumes 90% of services are paid at POS and 10% are billed. (Billing clients using herd management programs.)
2. Allowance for uncollectible accounts – Assumes 5% of the current period A/R balance will be uncollectible. Assumes a high rate of collection given that most accounts are with producers.
3. Accounts payable - Assumes 60% of non-compensation related operating expenses are paid within 30 days of expense.
4. Accrued salaries and wages - Professional staff are monthly - no accrual necessary. Non-professional staff represents approximately 15% to 25% of total monthly payroll. Assumes an average of 10% of compensation (excluding benefits) will be paid in subsequent month due to overlap of pay periods.
5. Sales Tax payable - Assumed 75% of pharmacy sales are subject to Jackson county sales tax - 7.0%.

Statement of Operations Assumptions:

1. Revenue – Cattle, Large Farm Market - Cattle market for FY2014 - FY2018 was estimated using the 2007 Census Data from the Dept. of Agriculture for Jackson and each of the 9 surrounding counties. Utilization of a herd management program by large farms assumes the following adoption rate: 15 farms in FY2014, 30 farms in 2015, 45 farms in 2016, 50 farms in 2017 and 60 farms in 2018. Herd management programs assume \$35/head, based on the average herd size for each county (per 2007 Census Data).
2. Revenue – Cattle, Small Farm Market - Assumed none of the smaller (i.e. farms with < 100 head of cattle) would adopt a herd management program. Assumed that 65% of these farmers would utilize a veterinary in a given year. Cattle market for FY2014 - FY2018 was estimated using the 2007 Census Data from the Dept. of Agriculture for Jackson and each of the 9 surrounding counties. Market share was estimated based on the number of competing animal and mixed animal vets in each county. Est. # of farms and cattle head/farm based on 2007 Census Data. Average fee/visit is based on 5 year historical data from OSU CVM Medical Center - average fees/visit is \$1,716.00. Lowered amount to \$350 based on the limited services provided (i.e. no hospital surgical procedures performed), economics (cost of service vs. value of the cow), and input from vets/producers.
3. Revenue – Seasonal fluctuations and distribution to revenue type - After calculating annual revenue, allocation in FY2014 and FY2015 was based on

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- classic revenue ramp-up of a start-up business. In FY2016 through FY2018, seasonal fluctuation factor was given using historical revenue fluctuations from the Marysville Large Animal Hospital financial data for the previous 5 years. Allocation to revenue type (i.e. Professional fees, drug charges, lab charges, other) were made based on historical 5 year averages of the Marysville Large Animal Hospital.
4. Compensation - See staffing tab for input and detailed assumptions. Beginning July 2013, staffing includes 3.0 FTE's. Assumes 2 FTE Assistant Professor - Clinical and 1 FTE Veterinary Technician. Headcount additions include 1 FTE Resident DVM in January 2015, 1 FTE Veterinary Assistant in April 2015 and 1 FTE Administrative staff in July of 2016. Applied a 2.5% rate of inflation per year.
 5. Benefits - Professional staff at 29%, Interns at 8.9%, Veterinary Technicians, Veterinary Associates and Admin staff at 43.3%.
 6. Cost of drugs - Using five year history of Marysville Large Animal Hospital (FY2007 through FY2011 - (July - April 2011)), calculated average margin of cost of drugs. Applied margin to revenue from sale of drugs.
 7. All other operating expense - Calculated amount as 5.2% of sales based on historical % of sales for each operating expense item from the Marysville Large Animal Hospital - FY2007 through FY2011 (July - April 2011).
 8. General funds – teaching support - Assumes 30% of comp and benefits for Assistant Professor will be paid from General funds. 30% of Asst. Professor's time will be teaching and in labs.

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Appendix C: Summary of Process used for Business Plan Development

The Business Plan was developed through a process that utilized a variety of people and resources. The CVM engaged John Schroeffer, Principal of CFO Partners, LLC to assist with development of the Business Plan. Mr. Schroeffer has extensive experience with developing business plans for start-up companies in the healthcare industry. He has served as the Chief Financial Officer for both private and public healthcare companies and also for Battelle in corporate development. The CVM provided Mr. Schroeffer with resources to support the development of the business plan including statistical data related to farm and pet animals and veterinarians in the 29 Appalachian counties of Ohio. Most of the economic and market data for the 10 Appalachian counties were taken from reports by the US Dept. of Agriculture, 2007 Census.

The CVM provided contact information for seven veterinarians practicing in rural communities of Ohio and two livestock producers in the Jackson County area. The veterinarians contacted to provide practice recommendations were:

1. Dr. Craig Miesse (rural mixed-animal practice in Mercer County)
2. Dr. Scott Pendleton (mixed-animal practice in Harrison County – Appalachian region)
3. Dr. Doug Wiley (mixed-animal practice in Columbiana County – Appalachian region)
4. Dr. Jon Ellis (equine and farm animal practice in Greene County)
5. Dr. Angie Dahse (primarily equine and farm animal practice in Gallia County – Appalachian region)
6. Dr. Harold Kemp (rural large animal practice in Belmont County – Appalachian region)
7. Dr. Valerie Anderson (rural primarily mixed animal practice in Jackson County – Appalachian region)

Each of the veterinarians had established mixed animal practices or large animal practices in rural communities of Ohio. Veterinarians and producers were contacted prior to preparing the business plan. The veterinarian practitioners provided valuable insight into the unique aspects of a successful rural veterinary practice and provided specific suggestions regarding development of a sustainable practice in the Appalachian region of Ohio. Their recommendations are the basis for the practice concepts included in the business plan.

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The producers contacted to provide suggestions for the business plan were:

1. Jim Phillips – beef cattle, herd size - 24 producing cows
2. Dale Neal – beef cattle, herd size approximately 20 to 25

Producers were engaged to test key aspects and assumptions of the business plan. Concepts from early drafts were discussed and modified based on feedback received during discussions with producers.

The CVM also provided historical data for the large animal practice in Marysville which supported the revenue and expense projections of the proposed satellite facility in Jackson County.

