

# **SJR 14: State Laboratories**

An analysis of state laboratory facilities related to wildlife, livestock, agriculture, and public health



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the Legislative Economic Affairs Interim Committee  
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***Legislative  
Services  
Division***



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agriculture, and public health

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## **Overview**

Senate Joint Resolution No. 14 (Appendix A), assigned to the Economic Affairs Interim Committee, authorized an interim study of state operated laboratories that provide testing and services related to wildlife, livestock, agriculture, and public health. In light of space and budget constraints faced by some of the laboratories, SJR 14 directed that:

- existing laboratory facilities be reviewed;
- areas of potential overlap or similarity of testing procedures be identified;
- the possibility of consolidating laboratories be explored, as well as the pros and cons of doing so; and
- potential arrangements for the sharing of laboratory space be examined.

The Economic Affairs Interim Committee assigned .1 FTE, or 278 hours, to complete the SJR 14 study. Given that laboratories operated by state agencies are located in several Montana cities, and to best utilize available time and resources, the SJR 14 study has focused on the review of the following laboratories that provide testing and services related to wildlife, livestock, agriculture, and public health:

- Veterinary Diagnostic Lab, Bozeman, operated by the Department of Livestock
- Wildlife Laboratory, Bozeman, operated by the Department of Fish, Wildlife, and Parks
- Analytical Lab, Bozeman, operated by the Department of Agriculture
- Public Health Laboratory, Helena, operated by the Department of Public Health and Human Services
- Environmental Laboratory, Helena, operated by the Department of Public Health and Human Services

In the review of these laboratories, the focus of the SJR 14 study has been further refined to making recommendations for addressing the facility and funding problems faced by the Veterinary Diagnostic Lab, which prompted the writing of SJR 14.

## Background

The writing of SJR 14 was prompted by the news in April 2008 that the Veterinary Diagnostic Lab (VDL) faces the loss of its accreditation with the American Association of Veterinary Laboratory Diagnosticians, Inc. (AAVLD) due to ongoing concerns about the condition of the



Veterinary Diagnostic Lab, Bozeman.

facility and its funding. The VDL conducts testing related to livestock, wildlife, and human health, including tests for brucellosis, chronic wasting disease, and rabies and milk and egg inspections. Without accreditation, the credibility of the VDL's testing procedures is at risk, potentially impacting producers' sale and movement of livestock<sup>1</sup> and revenue for other lab functions.<sup>2</sup>

On April 21, 2008, after visiting the VDL, the AAVLD accreditation committee wrote a letter (Appendix C) to VDL Director Dr. A.W. Layton saying, "this laboratory has been provisionally accredited for many

years. Progress toward achieving full accreditation is slow. While (VDL) faculty and staff are supportive of achieving the goal of adequate facilities and a quality system, they are hampered by inadequate resources. If significant progress is not made by February 2009, accreditation of the Montana Veterinary Diagnostic Laboratory will be withdrawn."

The VDL is housed on the Montana State University Campus in a building constructed in 1961, which has been remodeled over the years. Dr. Layton says the facility lacks the space and functionality needed for the VDL to keep up with the demands of international trade, i.e., testing of cattle for brucellosis and increasingly stringent biosecurity procedures. Dr. Layton says there are few options for expansion in the existing structure, because it also houses teaching and research faculty for the MSU College of Agriculture. Thus far, the VDL has been creative in creating new laboratory space, putting testing equipment in closets and, more recently, preparing to convert Dr. Layton's office into a lab.

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<sup>1</sup>Memo from Dr. A.W. Layton, Director of the Veterinary Diagnostic Lab, to the Economic Affairs Interim Committee, December 8, 2009. (Appendix B)

<sup>2</sup>Phone conversation with Barbara Powers, AAVLD accreditation committee member, September 30, 2009.



Concern about the VDL's long term funding situation -- the ratio of testing and livestock per capita fees to general fund allocation -- has also been raised in the context of providing a more adequate facility and maintaining a high level of testing and services.

After receiving the April 2008 letter from the AAVLD, then-Board of Livestock member Becky Weed wrote a memo (Appendix D) to Dr. Layton and Christian MacKay, executive officer of the Department of Livestock, regarding the initiation of a lab planning discussion with the Board of Livestock. In her memo, Weed stated that a recent visit by the Governor's Office of Budget and Program Planning to the VDL was "informative for all, but it confirmed our sense that making a case for assistance from the General Fund is much more compelling to the Budget Office if it (sic) done in the context of specific, clearly justified demands, coupled with a solid rationale for a multi-year outlook for the lab."

Dr. Layton says that the SJR 14 study was requested in response to the situation and as a way to show the AAVLD that the VDL was attempting to address the organization's concerns and stipulations for maintaining accreditation. On July 17, 2009, the AAVLD accreditation committee again wrote to Dr. Layton, informing him that it had extended the VDL's provisional accreditation until December 31, 2010. In the letter (Appendix E), the committee requested a report from Dr. Layton on the SJR 14 study, as well as an update on the VDL's budget and personnel, at the committee's meeting in October 2010.

## Existing Facilities

State laboratories involved in the SJR 14 study were asked to submit inventories of facility space, equipment, personnel, and salaries, as well as provide "wish lists", examples of current coordination efforts with other state laboratories, and suggestions for additional coordination. Inventories were submitted by the Veterinary Diagnostic, Wildlife, Analytical, Environmental, and Public Health Labs. (Appendix F)

### Site Visits

Legislative staff visited each of the five laboratories, as well as lab space used by the MSU Department of Veterinary Molecular Biology, to compare and contrast facilities, equipment, mission, and operations. The difference between them is marked, though opportunities for possible consolidation and continued coordination/cooperation emerged. The greatest opportunity for consolidation appears to exist between the VDL and the Wildlife Lab due to some similarities in mission and existing cooperative agreements. As such, much of the following analysis focuses on those two facilities.

### Veterinary Diagnostic Lab - Department of Livestock

The VDL conducts testing for livestock, wildlife, and human health, including tests for brucellosis, chronic wasting disease, avian influenza, and rabies, and milk and egg inspections. The total number of tests has increased dramatically in recent years, largely due to increased testing of cattle for brucellosis. In 2005, the VDL conducted 35,832 livestock tests compared to 183,299 in 2009. The number of wildlife tests more than doubled in that same time period. (Appendix G)

A site visit on August 19, 2009 revealed an aged facility that presents daily challenges to work efficiency, especially in the face of increasing workload. The physical infrastructure appears severely lacking, though Dr. Layton says the laboratory has great equipment.

Quarters for lab personnel and equipment are cramped. Closets are used for lab space. The facility's heating and cooling systems are largely inadequate for the laboratory's sensitive equipment. In the Virology Lab, for example, there is no cooling system in a room that houses several freezers with compressors that generate a lot of heat. The door to that room has been removed (pictured right), so that the air conditioning unit in the wall across the lab (pictured left) can blow cool air into the room. The building also has exterior walls made almost entirely of windows that Dr. Layton says use up valuable space and make regulating indoor temperatures difficult.

Biosecurity is also a concern. Inadequate space and a poorly designed floor plan require



A/C Unit



Freezer room

personnel to transport potentially infectious agents throughout the facility during testing processes. And, the VDL lacks an in-house Biosecurity Level-3 (BSL-3) space.

BSL-3 provides a high level of containment for work with infectious agents, complete with its own air handling and exhaust systems and specific decontamination and security procedures, to prevent the transmission of pathogens. The VDL has access to a BSL-3 lab, built and operated by MSU next door. However, that facility lacks the equipment the VDL needs. To use it, the VDL would have to move its equipment into the BSL-3 area. But, once the testing was complete, BSL-3 decontamination protocols would prevent the VDL from removing its equipment. This makes use of this BSL-3 space palatable only in an extreme emergency.

The usefulness of a BSL-3 lab isn't limited to emergencies, if it and the proper equipment are available. The Public Health Lab operated by DPHHS conducts all of its tuberculosis testing in a BSL-3 lab in Helena. Meanwhile, Colorado State University's Veterinary Diagnostic Laboratory routinely conducts testing for brucellosis, anthrax, foot and mouth disease, avian and swine influenza, tularemia, and Q fever in its BSL-3 facility. Lab Director Barbara Powers says this is to ensure that no pathogen escapes.

Colorado just completed construction of a new veterinary diagnostic lab, including 2,000 square feet of BSL-3 space, in response to its own poor accreditation review by the AAVLD several years ago. Director Powers is a member of the AAVLD accreditation committee and visited Montana's VDL in November 2007. Powers says Montana's VDL is in much the same condition that Colorado's had been: an aging facility that can't adequately provide for the safety of its personnel or its specimens, which threatens the accuracy of its diagnostics.<sup>3</sup>

Beyond biosecurity, the VDL has additional infrastructure issues.

- The electrical system is inadequate. The Milk Lab, for instance, trips breakers when it uses certain equipment at the same time. There is also a lack of electrical outlets and backup power. During an outage, the facility has two small generators for critical equipment, but otherwise keeps extension cords on hand in the various labs.
- In the necropsy area, the hoist system for carcass transport doesn't extend outside; personnel must manually lift and remove a carcass from the vehicle dropping it off.
- The MSU long range campus development plan envisions demolishing the building that houses the VDL in the next 10 to 25 years.

By area, other concerns at the VDL include:

- Receiving area:
  - not enough space for handling of incoming samples; extra storage needed;
  - area is not isolated, samples must be brought through reception leaving possibility of contamination of reception area;
  - exhaust hood is improperly designed, doesn't enclose fumes, and is unusable;
  - counter tops are wooden and porous, possible sanitation hazard;

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<sup>3</sup>Phone conversation, September 30, 2009.

- the ceiling leaks;
- Necropsy room:
  - the incinerator is 13 years old and the firebrick inside needs regular maintenance, when current repairman retires, Dr. Layton is unsure who will have the skills to continue;
  - there is no facility to hold a live animal overnight;
  - existing cattle chute is unused and could be converted to more storage space or a small in-house BSL-3 facility;
  - ceiling in tissue sample preparation area leaks;
- Bacteriology Lab:
  - no insulation in outer wall;
  - closet has been converted into additional lab space;
- Histology Lab:
  - ongoing difficulty with fumes and air handling;
- Milk Lab:
  - as FDA increases testing requirements, more space is needed;
  - a biosecurity cabinet has a gap between the bottom of the cabinet and the counter on which it sits, potentially allowing fumes, etc to escape;
- Facility-wide:
  - all ADA requirements are not met; an ADA compliant bathroom was recently added;
  - more office space is needed.

Asbestos also is a consideration throughout the facility. Worn and cracked asbestos floor tiles in the main hallway have been replaced. However, in the Media Prep Room, where testing kits are prepared, asbestos tiles were removed, but never replaced (pictured left). Wood cabinets in the same room are aged and peeling (pictured right).



## **Wildlife Laboratory - Department of Fish, Wildlife, and Parks**

The Wildlife Laboratory administers the state wildlife health monitoring and epidemiology programs. This includes evaluation and aging of furbearer species and targeted disease surveillance among several species, i.e., chronic wasting disease, brucellosis, and avian influenza. The Wildlife Lab also supports large wildlife capture operations, investigations into human-wildlife conflicts, and other investigations/services as needed.

The Wildlife Lab is located across the street from the VDL (see map, Appendix H) but is a much smaller facility, consisting of office space, a necropsy room, walk-in cooler/freezer, a small cabinet-sized pharmacy located in a closet, storage, and a room housing a centrifuge, blood collection containers, and a deep freeze.

As part of the disease monitoring program, staff prepare and mail thousands of testing kits to hunters to collect blood samples from elk, moose, and other animals. The resulting samples are then sent to the VDL for analysis, as the Wildlife Lab doesn't have the equipment to do so itself.



Necropsy room, Wildlife Lab.

The Wildlife Lab uses its necropsy room extensively in wildlife-related investigations. Neil Anderson, director of the Wildlife Lab, says FWP conducts 90% of its own necropsies, including those related to poaching cases. The other 10% are sent to the VDL. (The Wildlife Lab also uses the incinerator at the VDL for carcass disposal.)

Of particular concern, Director Anderson says that while his lab has the potential to see the same kind of pathogens the VDL handles, the Wildlife Lab lacks any type of biosecurity. Anderson says his lab conducts necropsies on animals that have

died from unknown causes and occasionally comes across pathogens that may be human health concerns (possibly anthrax, plague, and others). The lab is open to regional staff and the public, and because of inadequate work space, Anderson says necropsies are conducted in an area where staff, work-study students, and the public could be exposed to these pathogens.

Besides his concerns about biosecurity, Director Anderson outlined what he perceives as the facility's short- and long-term needs in the Wildlife Laboratory Inventory included in Appendix F.

A legislative staff site visit on August 19, 2009 revealed that the Wildlife Lab, built in 1988 behind the regional FWP office building, is aging and running out of room for staff, equipment, and storage. The lab's main room doubles as a mailing area/break room and houses microscopes and a freezer for specimens.

The following facility concerns were observed by legislative staff during the site visit:

- Front office:
  - the foundation has settled under this corner of the building, resulting in cracks in three walls;
- Necropsy room:
  - exhaust hood is not enclosed -- pulls air, including potential pathogens, across staff as they work;
  - hoist doesn't extend fully into the walk-in deep freeze, requiring staff to manually carry carcasses, including grizzlies;
  - the walk-in deep freeze and cooler are a regional facility, meaning they store carcasses from a large geographic region; space is at a premium.

### **Analytical Lab - Department of Agriculture**

The Analytical Lab shares a facility and equipment with the MSU Agriculture Experiment Station on the MSU campus, providing testing for a fee to researchers, ranchers, the public, and other parties. The Analytical Lab analyzes pesticide residues in surface and ground water, soil, vegetation, animal tissue, and clothing, and verifies product ingredients in pesticides, animal feed, and fertilizer. These tests are conducted for state and national regulatory agencies.

A site visit on August 19, 2009 found that space is at a premium at this facility, i.e., closets have been converted for lab space. However, Director Heidi Hicke says the building -- a remodeled 1952 structure -- meets all of the lab's analytical and staffing needs. Hicke says the building is the right size, in the right location, and has been invested in heavily over the years to meet the needs of expanding analytical requirements -- including the addition of air-conditioning in all working rooms and specialized venting and electricity. Hicke says the Analytical Lab is not seeking, nor does it need, to move to another location.



Analytical Lab, Bozeman.

The long-term future of the building is in question, however. MSU College of Agriculture Dean Jeff Jacobsen says that the university's long range campus development plan (Appendix I) envisions moving the Analytical Lab and Agriculture Experiment Station from their current location to a new, yet to be constructed facility and yet to be determined location, in the next 10 years.



Feed samples, Analytical Lab



Feed and fertilizer sample prep and analysis lab

## Department of Public Health and Human Services Laboratories

The Department of Public Health and Human Services operates two labs in the Cogswell Building in Helena, the Environmental Lab on the first floor and the Public Health Lab on the second floor.

The Environmental Lab provides a host of services related to public health, many involving water safety, including testing public water supplies for compliance with EPA standards and checking private well samples for the presence of nitrates and metals such as arsenic, lead, and copper. The Environmental Lab also houses organics and chemical terrorism labs that can test for the presence of cyanide, gasoline, and pesticides in water and blood samples.

The Public Health Lab provides testing for newborn screening and food safety, including salmonella, and many infectious agents, such as tuberculosis, influenza, parasites, West Nile, HIV, hepatitis, and sexually transmitted diseases. In its BSL-3 facility, the Public Health Lab can also conduct tularemia, anthrax, and brucellosis testing, as needed. The VDL sends positive anthrax samples here for confirmation testing. DPHHS, meanwhile, has agreements with the VDL and Analytical Labs to use their facilities and equipment in Bozeman if the DPHHS labs are incapacitated by an emergency.



Inside the BSL-3 room at the Public Health Lab.

Both the Environmental and Public Health Labs have undergone renovations since 2003, largely to modernize the facilities, improve air handling and temperature controls, and to add the BSL-3 area. The final stage of construction was to be finished in August 2009, but was still being completed in February 2010.

The labs' director, Anne Weber, says the labs are in good shape after the renovations, except that there have been lingering problems with the new exhaust and air handling systems, such that the labs' are unable to maintain

constant temperature controls, a problem for their sensitive equipment. Weber has been working with the contractor and the state Architecture and Engineering Division, which has oversight of the remodeling contract, to resolve these problems. Final resolution was expected mid-February 2010.

Given the constantly changing nature of laboratory technology and testing requirements, Weber says the renovated labs have been designed for maximum flexibility. This includes the installation of rolling cabinets and counter tops that can be moved if the space needs to be redesigned in the future.



## Findings

- Both the Veterinary Diagnostic Lab and Wildlife Lab appear to be in need of additional space better suited to their mission and function.
- While the Analytical Lab director says that facility is sufficient for the lab's testing and staffing needs, the MSU long range campus development plan doesn't show the lab at the same location in 10 years. A new location has yet to be determined.
- The MSU long range campus development plan envisions demolishing the building that houses the VDL in 10 to 25 years.
- Both the Environmental and Public Health Labs are newly renovated and in sufficient condition, except for lingering difficulties with the new air handling system.

## **The Future**

Based on the above findings, the following is a discussion of potential options for addressing the needs of the labs, while encouraging continued and additional cooperation between them.

Assuming that trying to collocate all five labs in either Helena or Bozeman would be an insurmountable challenge given the need to relocate entire staffs, and considering the recent remodeling of the Public Health and Environmental Labs, the following discussion focuses on possible options for the Veterinary Diagnostic, Wildlife, and Analytical Labs in Bozeman.

### **A joint lab**

Considering the existing cooperation between the VDL and the Wildlife Lab, some similarity in mission, and the mutual need for updated facilities, a new, combined building could be constructed or leased to serve both labs' needs. Officials with the Departments of Livestock and Fish, Wildlife, and Parks have expressed support to legislative staff for a joint lab concept.

Possible design considerations include:

- a shared loading dock/receiving area for animals or carcasses with a communal hoist system that reaches the delivering vehicle and extends fully into a common cooler, freezer, and necropsy area for improved work efficiency;
- separate necropsy rooms may still be needed to accommodate the work and workload of each lab and to prevent cross contamination;
- though separate coolers and freezers may also be needed, there could still be economies of scale in constructing these coolers and freezers within the same area of the building, sharing walls, power sources, etc, coolers in existing facilities may also be able to be moved and reused in a new facility;
- a shared incineration area for carcass disposal;
- shared specimen and test kit preparation areas;
- continuation of shared diagnostic resources, with VDL staff and equipment continuing to conduct analysis of Wildlife Lab samples;
- a shared BSL-3 area for diagnostic testing and, when needed, necropsies;
- sufficient office and storage space for personnel, records, etc;

### **Location**

**Option A:** Given the uncertainty of the Analytical Lab's future location on the MSU campus in the long range development plan, a new, joint facility could include the Analytical Lab. College of Agriculture Dean Jeff Jacobsen indicated that a new Analytical Lab could be built on MSU property southwest of the existing Veterinary Diagnostic Lab. Could a joint facility for the three labs be built on this site, or an off campus site, assuming there would be greater economies of scale in construction of three labs in one?

Discussion points:

- The director of the Analytical Lab, Heidi Hickes, has expressed concern that a lack of similarity in mission, and need to maintain certain pesticide testing standards, makes the idea of housing all three labs in the same facility unpalatable. Dean Jacobsen disagrees.
- These labs house potentially explosive materials, including compressed gases. Is

- there any increased risk in locating the labs in the same facility?
- Economies of scale in construction of three labs in one may not increase that much over the combination of two facilities. Further analysis would be required.

**Option B:** Lab space used by the MSU Department of Veterinary Molecular Biology, operated by the College of Agriculture, is located in a leased building adjacent to the MSU campus. The private development in which this building sits is billed as a "science park" and may include other space where a joint Veterinary Diagnostic, Wildlife, and Analytical Lab could be housed. The developer outfitted the MSU lab space to the college's specifications. However, according to Dean Jacobsen, both the developer and lab personnel agree in retrospect that more durable goods should've been used in the initial construction. Halfway through a 15 year lease, Jacobsen says the facility is showing wear and tear. A discussion of the pros and cons of leased vs. owned space is included later in this report.

**Option C:** MSU is halfway through its 15 year lease for the lab space used by the Department of Veterinary Molecular Biology. In the future, Dean Jacobsen says MSU could consider constructing a new 100,000 square foot building, at an estimated cost of \$40 million, that would house the department and other biomedical academic units. However, Jacobsen stresses this vision is not currently included in MSU's long range campus development plan and a possible construction date and funding source are unknown. Jacobsen says there are multiple possible locations for a building of this nature on campus, including a site north of the existing Veterinary Diagnostic Lab. Could the state partner with MSU to construct this building and include space for the VDL, Wildlife, and Analytical Labs? Could this construction be done in phases to accommodate the state agency labs more quickly and then the MSU Department of Veterinary Molecular Biology when its lease has concluded? Dean Jacobsen says he and other MSU officials could be interested in this concept, depending on funding.

### **Other considerations**

- Space on the MSU campus is highly prized and requires specific use agreements with the university. Is an off campus location for a state lab facility more economical and palatable? Does moving the executive branch labs off of the campus open more needed space for university activities?
- Housing several labs in one location leaves fewer contingencies for emergencies.

### **Cost and Efficiency**

At the request of Legislative Services, Jim Whaley, chief of the Design and Construction Bureau at the Department of Administration, provided a cost evaluation for the construction of a new facility to house the Veterinary Diagnostic, Wildlife, and Analytical Labs in Bozeman. (Appendix J) Based on his own site visits and review of the functions of each lab, and using standard estimating guidelines for a college laboratory, Whaley estimated a new facility could cost about \$7.5 million in 2010 construction dollars. This figure doesn't include the cost of any acquisition of land, if necessary.

Whaley's estimate breaks down to about \$275/square foot. For comparison, Colorado's newly

constructed lab cost about \$439/square foot<sup>4</sup> and Wyoming, which is adding about 10,000 square feet to its existing facility, is paying about \$1,700/square foot<sup>5</sup>.

Whaley's estimate is for a facility with roughly the same square footage of the existing three labs combined. After his site visits in November, Whaley stated that he didn't see much opportunity to consolidate lab space due to the varied nature of the individual labs' functions and missions.<sup>6</sup> Whaley says the labs could be more efficient and are certainly antiquated. But Whaley questioned why the state wouldn't just renovate the existing facilities, since there doesn't seem to be much opportunity to consolidate space and gain efficiency in that way.

Whaley stated renovation is usually less expensive than new construction and could be more cost effective in this case, though it would disrupt normal work at the labs and possibly displace workers. Whaley said he did believe the Wildlife Lab would benefit from having a necropsy room that's comparable to the one at the VDL, though Whaley saw a downside in moving the Wildlife Lab away from its location behind the regional FWP office, which provides easy access for wardens and other FWP staff who need to visit both buildings.

This study did not contemplate the cost of additional renovations at the labs. When discussing Jim Whaley's comments, the director of the VDL, Dr. Layton, questioned whether trying to renovate his facility, particularly the air handling system, would be more cost effective.

Barbara Powers says that her impression from visiting the VDL in November 2007 was that renovations would be difficult because of the facility's age.<sup>7</sup> Powers went on to say that portions of the facility don't meet biosecurity standards, as far as people going in and out of certain areas, being able to separate 'dirty' and 'clean' areas, and being able to correct temperature modulations. Powers says the staff is doing the best it can with what it has, but the facility is not keeping pace with the modern state of diagnostic medicine.

### **Building vs. Leasing**

If a new facility were to be constructed to house any of the state labs in Bozeman, the question becomes whether that facility should be state-owned or leased. Generally speaking, a state-owned building is now believed to be more cost effective than leasing in the long run. In the 1980s, that wasn't the case. Two separate analyses conducted by the Legislative Audit Division (one in 1984 looking at state office space in Bozeman, one in 1987 evaluating space in Helena) concluded that it was less expensive to continue leasing space at that time. In the mid-1990s, the

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<sup>4</sup>Phone conversation, Barbara Powers, September 30, 2009.

<sup>5</sup>Phone conversation, Don Montgomery, Director, Wyoming Veterinary Diagnostic Lab, September 28, 2009.

<sup>6</sup>Phone conversation, November 30, 2009.

<sup>7</sup>Phone conversation, September 30, 2009.

trend reversed. Two analyses conducted by the Department of Administration and the LAD in Helena found that state-owned space had become more cost effective.

In the LAD's 1997 analysis, the perceived downsides of a state-owned building were loss of tax revenue for local jurisdictions, a loss of flexibility, and the long-term responsibility for maintenance and improvement costs. The LAD analysis found that the normal, useful life of a building is 40 years and that while buildings can and do last longer than that, major maintenance may be required beyond that time. While that may seem to be an argument against owning a building, the LAD analysis determined those costs may be calculated into and paid by the state under the terms of a lease anyway.

In 2007, the value of owning over leasing led the state to purchase the seven-year-old Forensic Science Building (forensic lab), which the Department of Justice had been leasing in Missoula for about half a million dollars a year. The Legislature approved the purchase after DOJ estimated it could save \$5.7 million over a 30 year period by owning the building. DOJ's analysis was based on its expectation that the cost of the lease would double when the contract was renegotiated in 2015, with expected 15% increases every 5 years thereafter. In its analysis, DOJ remarked that while the risk of owning the building included future costs of renovation, the lessor had "definite negotiation advantages when setting future lease costs – because of the specialized requirements for the building, the Forensic Science Building cannot easily relocate to another building." Ultimately, the state bought the building for \$7.25 million, saving an estimated \$7.5 million over 30 years, almost \$2 million more than first predicted due to the final purchase price.

#### **Other considerations**

- Long-term durability of goods used to construct a building and outfit the space (recall the discussion of lab space used by MSU's Department of Veterinary Molecular Biology);
- Specialized equipment needed for a laboratory and maintenance responsibility for that equipment; and
- Finance and funding options.

#### **Finance Options**

If a state-owned building were constructed to house laboratories in Bozeman, several finance options could be considered, including:

- a general fund appropriation by the legislature;
- issuance of a general obligation bond, typically for a 20 year term;
- financing through the Board of Investments (BOI). The BOI could either finance a new building via a mortgage, as it did with the existing Department of Public Health and Human Services Building, or purchase and hold the building as an investment in the pension portfolios. A minimum of 7.5 to 8 percent return would likely be required by the BOI. Debt service would be structured according to the requirements of the BOI;
- a public-private partnership, which could be structured in several ways. One option is to contract with a private developer to construct a new building according to the state's

specifications. The state would then lease the building from the developer. A lease/purchase agreement could be structured to provide the state an option to purchase the building at the end of some specified period of time. Lease payments would be paid by the agencies occupying space in the new building.

## Funding Issues

### Veterinary Diagnostic Lab Budget

As mentioned in the "Background" section of this report, the AAVLD has expressed concern about the condition of the funding of the VDL, saying that the staff's efforts to maintain the lab's accreditation and achieve adequate facilities and a quality system are hampered by inadequate resources. Funding, of course, is a consideration in the discussion of whether to renovate or build a new facility

Currently, the VDL is supported with general fund, animal health fees (lab charges), per capita fees (head tax), and a small portion of federal funds. During state fiscal year 2008, the lab received a non-budgeted transfer of funds from the per capita fund due to lower than anticipated revenue from the lab fees. Due to this incident, the executive proposed to increase funding from the per capita fund and decrease the animal health fees.

The 2009 Legislature debated the funding mechanism for the lab at various points in the process. The big issues included determining how much general fund represented the public health portion of the lab's activities, the reasonableness of the fees charged by the lab, the condition of the per capita fund, and how to assure the lab does not become over dependent on general fund appropriations. In the end, the legislature approved the following FY 2010 (or base) budget for the VDL.

Department of Livestock			
FY 2010 Diagnostic Lab Base Budget			
Fund		Appropriation	Percentage
General Fund	\$	421,109	24.0%
Per Capita Fees		250,225	14.3%
Animal Health Fees		1,070,788	61.1%
Federal Funds		<u>9,897</u>	0.6%
		<u>\$1,752,019</u>	

In order to address the need for extra cash, the Legislature supplemented the VDL's base funding with one-time-only general fund of \$172,350 in FY 2010 and \$11,100 in FY 2011. This funding would be available if or when the lab faced a shortfall in funding. As per state law, the lab is required to expend non-general funds (per capita, animal health, or federal funds) prior to expending state general fund.

As the biennium has progressed, the general fund ending fund balance has dropped significantly. The ending fund balance dropped below two percent of all general fund appropriations, therefore per state law, the executive had to call for budget reductions.

This situation places the VDL in a precarious position. First, the department suggested a \$9,597 general fund reduction to the lab. This will slightly decrease the lab's base budget for

consideration in the 2011 session. In addition, the one-time-only nature of the supplemental funding means that it will not be in the base for the next set of budget deliberations. Given the declining status of the general fund, it is difficult to determine if the legislature will consider extending this supplemental funding.

### **Overall financial picture**

The decline in general fund adds another dimension to any legislative discussion about the future of the facilities for the Veterinary Diagnostic, Wildlife, and Analytical Labs and any possible renovations or consolidation and construction of a new building. This raises the question of how and whether the concerns raised by the AAVLD about the VDL and its provisional accreditation (granted through December 2010) can be addressed.

Barbara Powers with the AAVLD accreditation committee says that in these economic times the accreditation committee can be relatively lenient about requiring a lab to have a new building in place by a certain date.<sup>8</sup> But, she says the committee does need to see evidence of a plan, or funding, to show a lab is moving forward. In Montana's case, Powers says the committee wants to see a plan that something is being done to address the situation, although the necessary legislative process may take time.

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<sup>8</sup>Phone conversation, September 30, 2009.



## **Importance of Maintaining Accreditation**

Powers says that losing accreditation with the AAVLD would have many implications and could virtually shut down a laboratory.<sup>9</sup> The National Animal Health Laboratory Network, which coordinates disease surveillance and animal testing, requires associated laboratories to be accredited. The Montana livestock industry predominantly exports cattle to other states and countries, which frequently require disease surveillance testing. Importers demand that test results be accurate and most will only accept results from accredited laboratories.<sup>10</sup>

Dr. Layton says the VDL's accreditation with the AAVLD was considered a significant factor in the USDA's decision to reestablish Montana's brucellosis-free status in 2009. If the VDL were to lose accreditation, the state may have to out-source brucellosis and other testing to an accredited lab, which would create inefficiencies and slow the receipt of results.<sup>11</sup> The VDL could also lose revenue sources associated with other lab functions requiring accreditation.<sup>12</sup>

## **Findings\Recommendations**

To be determined by the Economic Affairs Interim Committee.

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<sup>9</sup>Phone conversation, September 30, 2009.

<sup>10</sup>Memo from Dr. A.W. Layton to the Economic Affairs Interim Committee, December 8, 2009. (Appendix B)

<sup>11</sup>Phone conversation with Barbara Powers, September 30, 2009.

<sup>12</sup>Ibid.