State of Montana

Department of Agriculture

IT Strategic Plan 2014

Contents

1. Executive Summary

Agriculture is Montana's number one industry, generating over $4.2 billion for our state's economy in 2012 with one in five Montanans working in agriculture or a related field. The benefits of Montana's agriculture industry are substantial, from forming the economic base for our rural communities to high quality food products for local, national and international markets.

It is necessary for the Montana Department of Agriculture (MDA) to work with family farmers and ranchers, entrepreneurs, businesses, and agriculture-related industries to take advantage of the technological opportunities available to improve the way they do business. We intend to continue to develop forward-thinking, innovative ways to deliver efficient and effective services to our Montana producers and consumers.

We are continuing our initiative to update our licensing, registration, and enforcement system which will make more of our services available online, something the agricultural community increasingly expects.

MDA will continue to expand our successful IT partnerships and collaborations to maximize effective use of agency funds in supporting the agricultural community. We will investigate, implement and apply appropriate mobile technology to improve citizen and employee access to agricultural information, including transferring to a responsive design website. We will continue to expand our use of Geographical Information Systems (GIS) to provide location based agricultural information for promoting agricultural industries and practices. In addition, we will look for ways to capitalize and expand on our successful electronic grant application processes.

Agriculture is integrating technology at an incredible pace, allowing farmers and ranchers to incorporate more efficient and effective practices. MDA will continue to meet the challenges of implementing these technology initiatives which will allow us to better serve the agricultural community and the citizens of Montana.

Respectfully submitted,

Ron de Yong
Director

2. Environment, Success, and Capabilities

Montana Department of Agriculture's business is to support, promote, market, protect, educate and regulate the State's #1 economic industry: Agriculture. The Department operates more than 30 programs, many funded entirely through user fees. These include regulatory programs that protect producers, consumers and the environment, as well as development and marketing programs to foster growth in Montana agriculture.

The stakeholders for the Department's activities include not only the agricultural community of Montana, but also consumers of Montana agricultural products worldwide. The Department regularly hosts grain trade teams from Korea, Columbia, Taiwan, Mexico, Japan and the Philippines and has participated in marketing livestock genetics to Russia and South Africa.

The majority of the Department's revenue comes from the agricultural community in the form of license, registration and certification fees or producer check-off programs.

3. IT Contributions and Strategies

The Department of Agriculture IT group works to support the state's agricultural community with services that provide efficient and effective access to governmental services. The IT group looks to use commercial products whenever cost effectively available and utilizes open source free to use applications to further reduce expenditures for delivered services.

4. IT Principles

The Montana Department of Agriculture's IT principles:
- Resources and funding will be allocated to the IT projects that contribute the greatest net value and benefit to Montana stakeholders.
- The most cost effective and expedient path to IT projects will guide the Department in selecting the best IT project implementation approach.
- IT projects will utilize industry standards and best practices whenever possible.
- IT systems will provide delivery channels that allow citizens to determine when, where, and how they interact with the Department.

5. IT Governance

Due to the small agency staff size IT governance is a face to face discussion between all stakeholders that takes place as needed. The needs and desires of the agricultural community are always balanced against available funding in any IT project decision.

6. IT Financial Management

The department of agriculture's IT section is located in the Central Services Division. Funding for personnel and operations is from a mixture of state special revenue, general fund, federal, and

proprietary funds in HB2. Specific technology initiatives (software purchase, implementation, and maintenance; development; hardware) are a direct cost to the program for which they are procured.

7. IT Services and Processes

The Department of Agriculture's list of services is typical for an agency IT organization. Agriculture's list of services includes:

- Network Services: Server configuration, support and management, network connectivity.
- Professional Services: Project Management, database management, desktop support and management
- Software Development: application development and web development

8. IT Infrastructure, Staffing and Resources

Department of Agriculture utilizes Montana's IT infrastructure -- SummitNet.

Department of Agriculture IT group is a staff of 4 dedicated individuals. Since the IT group is small in size, the workload and required skillset of each individual member is not limited to a single discipline. System analysts assist in network administration and problem resolution. Network administration assists in system analysis as related to infrastructure configuration and implementations of systems to support the Department's applications.

Vendor and agency partners, or collaborators, are cultivated by the Department's IT group. Because of the small staff size, the IT group tries to create beneficial working relationships with local vendors and other agency IT departments to share information and assist each other with problem resolution.

9. Risks and Issues

Primary Risk	Probability	Impact	Mitigation Strategy
Difficulty of hiring qualified technical staff	High	High	Work with less qualified but motivated and interested employees to help them develop the skills necessary to fill positions within the agency. Provide a challenging and interesting work environment which attracts qualified technical staff.

10.   IT Goals and Objectives

<u>Goal</u>: Share systems, components and functionality across agencies, Montana political subdivisions and other states.

Our objective: Increase use of consolidated platforms and shared services

Benefits: Implement best IT practices in relation to no single point of failure on the Agency data infrastructure.   Eliminate excessive costs and duplication of effort by having co-location, at the SMDC, coincide with the replacement cycle of server equipment.

Risk: Not replacing old equipment jeopardizes continuity of service.

Timeframe for completion: FY 2015

Measures: Users successfully login and are able to access data volumes. Backup of file and print servers successfully tested.

<u>Goal</u>: Seek out and implement innovative information technology solutions

Our objective: Contract with vendor to replace the existing Department Licensing, Registration and Certification data system.

Supports Department of Agriculture Business Requirements:

Protect the consumer by assuring that commercial feeds are correctly and truthfully labeled, contain safe ingredients, and feeds meet nutritional standards.

Protect the consumer by assuring that fertilizers are correctly and truthfully labeled, and by assuring that fertilizer products contain allowed ingredients and products are effective when used as directed.

Provide sound pesticide management in Montana by promoting safety; protecting agriculture, the environment and human health; assuring that pesticides are available for agricultural production; ensuring compliance with the Montana Pesticides Act and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); ensuring pesticides are sold and used by trained, qualified licensed/certified persons by providing training, educational manuals and materials; and protecting farm workers/handlers.

Register annually, federally registered pesticide products for use in Montana and register products as needed for special local needs (Federal Insecticide Fungicide Rodenticide Act Section 24(c)) and emergency pest problems (FIFRA Section 18).

Register pet food products in a prompt and efficient manner.

Register fertilizers in a prompt and efficient manner.

Register apiaries in a prompt and efficient manner.

Risks: Expensive to implement, COTS application may not support all Licensing, Registration and Certification unique processes requiring customization of the COTS product, IT Staff turnover would adversely affect the ability to complete this project on time

Timeframe for completion: FY 2012 start – FY 2015 completion

Measures: Completion of User Acceptance Testing and system live on the web. Registrations, Licenses and Certifications accessed by consumers via the web.

Vendor selection - The Department signed a work order with Montana Interactive who subcontracted with Iron Data Solutions. Phased requirements analysis, system configuration and customization are in process.

Our objective: Implement e-Government and mobile solutions for Montana Hail Crop Insurance program.
Supports Montana State Crop Hail Insurance program requirements.

Provide e-government access to the Montana State Crop Hail Insurance program. Producers will be able to make insurance applications, file claims and make electronic payments with credit, debit or e-Check. Hail Insurance adjusters will be able to utilize mobile devices to enter adjusted claim and loss information utilizing both connected and disconnected mobile applications.

11.   IT Projects

Item	Description
Project name	ASD Licensing, Registration and certification system replacement
Project/program purpose and objectives	Supports the Agency business of product registration, personnel licensing and process certifications
Estimated start date	In process
Estimated cost	$580,000
Funding source - 1	State Special Revenue
Annual Costs upon completion	$134,500
Item	**Description**
Project name	Replace Network File and Print Servers, co-locate servers at SMDC
Project/program purpose and objectives	Supports all agency business goals and objectives
Estimated start date	July 2014
Estimated cost	Agency owned equipment (1st year costs) Initial equipment purchase(3 physical): $55,000 Agency labor to install and configure: $10,080.00 VMWare licenses: Virtual Machines O/S Licenses: SITSD SMDC (15U) Rack Space charges FY14: $4,316.25 SITSD SMDC 1G (6) Network connection charges FY14: $2,221.02

	SITSD Miles City (3U) Rack Space charges: $1,469.16 SITSD Miles City 1G (1) network connection: $356.60 Total Agency (1st Year cost) Owned equipment cost: $ 73,443.14 Alternative (SITSD services only 1st year costs): SITSD Virtual Server Platform - Base: $36,144.84 SITSD Virtual Server Platform – Addn'l Host: $11,639.18 Agency labor to install and configure: $10,080.00 SITSD SMDC Network connection charges FY14: $2,221.02 SITSD SMDC Live Storage (2 TB): $10,117.12 SITSD SMDC data backup services: $8,375.00 Total SITSD Services (1st year cost): $ 76,425.03
Funding source - 1	State Special Revenue
Annual Costs upon completion	Agency owned equipment: VMWare Maintenance: $781.20 Microsoft OS Licensing: $7656.00 SITSD SMDC Rack Space charges FY14: $4,316.25 SITSD SMDC Network connection charges FY14: $2,221.02 SITSD Miles City Rack Space charges: $1,469.16 SITSD Miles City Network Connection charges: $356.60 Total Annual Agency Owned recurring costs: $16800.23 Alternative (SITSD services only) SITSD Virtual Server Platform - Base: $36,144.84 SITSD Virtual Server Platform – Addnl Host: $11,639.18 SITSD SMDC Network connection charges FY14: $2,221.02 SITSD SMDC data storage costs: $3,700.00 SITSD SMDC data backup services: $8,375.00 Total Annual recurring SITSD costs: $62,080.04

Item	Description
Project name	Wheat & Barley Committee (WBC) Grain Movement and Assessment program
Project/program purpose and objectives	Provide WBC stakeholders with a web based application for submitting monthly grain assessment forms and allow WBC to produce grain movement reports
Estimated start date	June 2015
Estimated cost	Custom software development, unless COTS solution can be found. Estimate for ½ of the project requirements SITSD Labor: $130,680.00 ($108/hr) Extrapolated estimate for full project SITSD Labor: $200,000.00 ($108/hr) Estimated Resource AGR Labor: $16,020.00 ($63/hr) Total estimated cost for whole project: $216,020.00 Possible COTS solution being researched: Price not yet determined
Funding source - 1	State Special Revenue

Item	Description
Annual Costs upon completion	Negligible
Item	**Description**
Project name	Online e-Government Montana State Crop Hail Insurance
Project/program purpose and objectives	Supports Montana State Crop Hail Insurance program allowing public to apply, file claims, adjust claims and pay for Hail insurance policies online. Producers will be able to make insurance applications, file claims and make electronic payments with credit, debit or e-Check payments. Insurance adjusters will be able to utilize mobile devices to enter adjusted claim and loss information utilizing both connected and disconnect mobile applications. The Montana State Crop Hail Insurance program is a program unique to Montana. This will be mostly a custom built system with possibly some COTS or open source product integration.
Estimated start date	June 30, 2015
Estimated cost	Resource AGR Labor: $250,000
Funding source - 1	Proprietary
Annual Costs upon completion	Negligible

12.   Security and Business Continuity Programs

Security Program Description

a.   Annual security training for all employees
b.   Additional security training for Department Security Officer and Department IT staff.
c.   Acquiring as an agency or as part of a state wide purchase some way to control mobile and remote location data and devices.

Continuity of Operations (COOP) Capability Program

Description:
Please refer to the State of Montana Continuity Community website at:
http://continuity.mine.mt.gov/content/MainPageDocs/AgencyBCPProgress

13.   Planned IT Expenditures

The department of agriculture's IT section is located in the Central Services Division. Funding for personnel and operations is from a mixture of state special revenue, general fund, federal, and proprietary

funds in HB2. Specific technology initiatives (software purchase, implementation, and maintenance; development; hardware) are a direct cost to the program for which they are procured.

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
IT personal services	313,840	333,404	343,406	353,708	364,320	375,249
IT operating expenses	60,298	61,106	62,939	64,827	66,772	68,775
IT initiatives			25,000			
Other						
Total	374,138	394,510	431,345	418,536	431,092	444,024

Personal services and operating calculated at a 3% increase over previous year beginning FY2016

14.   Administrative Information

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