

Montana's eGovernment Services: Assessing the Last Decade

Executive Summary
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Acknowledgements

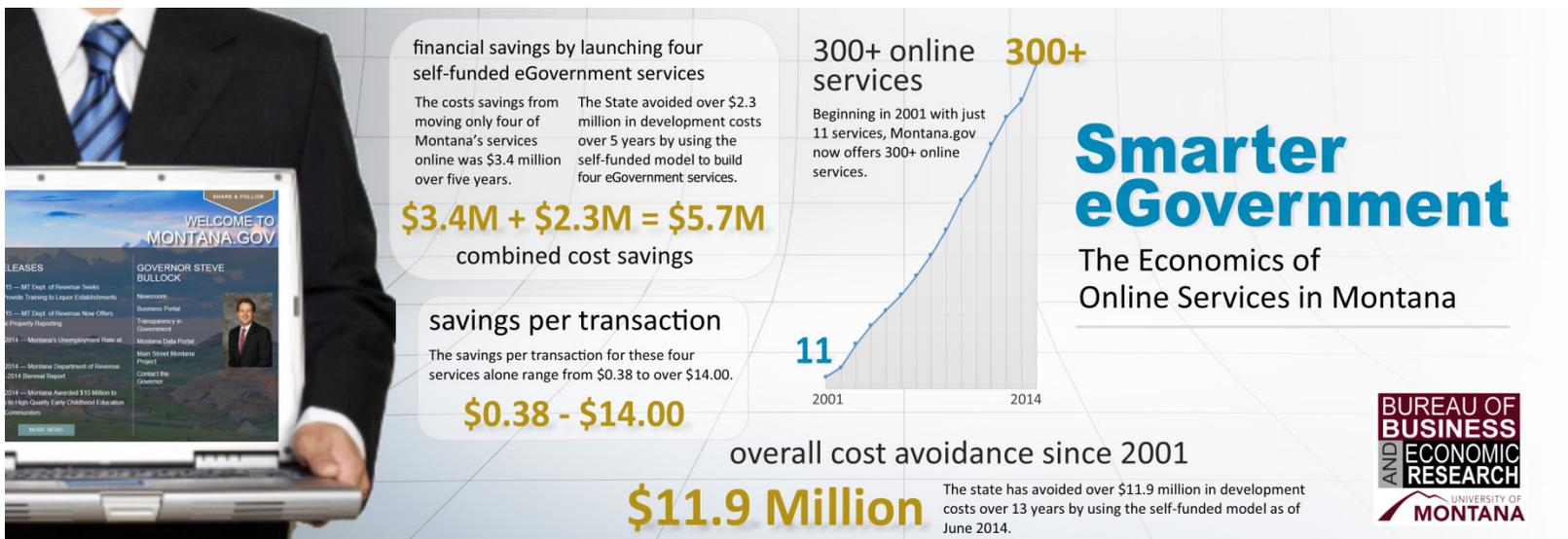
We would like to thank the four agencies that participated in this study and, in particular, Audrey Hinman, Bureau Chief, State of Montana Information Technology Services Division, who provided us with a significant amount of help and support in obtaining the data we were able to obtain from each of the four agencies to prepare this report.

Montana's eGovernment Services: Assessing the Last Decade

The state of Montana's suite of online, Internet-based services has grown tremendously since its first web-based presence was launched by the Department of Fish, Wildlife and Parks in 2001. Today there are over 300 different types of online services available from 23 different state departments and agencies, whose more than 10 million annual transactions accounted for half a million dollars per year in fees. To say that this online interface to Montana government agencies and resources has changed the relationship between state government and the households and businesses it serves would be an understatement. The time, convenience, and the usefulness of information requests, permit applications, and screenings has changed dramatically for users of state services, and the move from traditional forms to online access has resulted in reduced costs and efficiency savings for users and providers alike.

To date there has been no comprehensive, quantitative assessment of how this new online platform, known as "eGovernment," has benefited stakeholders and taxpayers. Such an assessment would be of considerable value as decisions on extending eGovernment to other state services come under consideration. This study attempts to fill that information void. Figure 1 below summarizes the cost savings found by this study.

Figure 1: eGovernment Cost Savings Summary



The Bureau of Business and Economic Research at the University of Montana (BBER) was retained by the Montana Department of Administration and the Office of the Governor to perform a cost savings and customer satisfaction analysis for Montana's eGovernment Services provided at the state's web portal, Montana.Gov. Over the summer and fall of 2014, BBER worked with agency heads and other state officials as well as the state's major information technology vendor to obtain the information needed to perform a cost analysis of eGovernment. Separately, BBER also surveyed users of government services over this same period to assess their level of satisfaction with Montana's eGovernment services.

Based on a cost analysis of the adoption of eGovernment services by four Montana agencies, as well as survey-based analysis of 500 eGovernment customers, we find that eGovernment has resulted in substantial, ongoing cash savings in the operations of state government, and has simultaneously produced high levels of satisfaction among businesses and households that rely on those services. Specifically we find that:

- Over the five-year period ending in June 2014, the state of Montana has realized \$3.4 million in measured (Table 1), operational savings by providing eGovernment services in place of the older, paper-based forms.
- This cost savings is based on a full analysis of approximately 5 percent of the total eGovernment transactions. If per transaction savings computed in this study were valid for all of the 10.7 million annual transactions originating from the Montana.Gov web portal, the total savings could be 20 times as high, in the range of \$60-\$70 million.
- Businesses and individuals who use eGovernment services report very high levels of satisfaction, with more than 9 out of 10 assessing their overall satisfaction as good, very good, or excellent.
- There has been enormous growth in the use of eGovernment services through the Montana.Gov portal, with the total number of web-based transactions with state government agencies increasing from 2.3 million in 2006 to 10.7 million in 2013, a 450 percent increase.

Table 1: Total Costs Avoided

Agency	Service	Number of Transactions	Costs Avoided per Transaction	Totals Cost Avoided
Montana Secretary of State	Business entity annual report	506,887	\$3.05	\$1,547,005
Montana Department of Corrections	Convicted offender network	73,978	\$14.09	\$1,042,350
Montana Department of Justice	Temporary registration permit	238,617	\$0.69	\$164,646
Montana Department of Fish, Wildlife, and Parks	Automated licensing system	1,699,698	\$0.38	\$645,885
Total Costs Avoided				\$3,399,886

These cost savings estimates represent the reduction in costs to state government that have resulted from the changeover from paper-based transaction processing to online processing applications over the five years ending June 30, 2014. They do not take into account the savings that users of services have realized over this same period or the considerable value to users of getting information more quickly than older manual processes could accomplish.

The story of the adoption of eGovernment services by the state of Montana is a story of success. In a very short span of time the enormous informational resources of state government have become much more accessible to the Montana businesses and households that use them, and the efficiency and accessibility of the state's regulatory and legal processes have increased markedly. Success can also be measured by demand, which has also increased enormously. The modest investment in changing over the state's way of conducting businesses has reaped a very large reward.

How Costs Were Estimated

The methodology we used to perform our cost savings analysis consisted of determining in detail which type(s) of transaction(s) were converted by each of the four agencies we were able to analyze from manual to eGovernment services online processing. Our study focused on the cost avoidance realized by each agency as a result of the online transaction service implementation. We then estimated the associated personnel time savings and related costs, based upon past information provided to us regarding the number of personnel and time, manually, it took the agency to process the related transaction prior to the online implementation, including their related salary costs. As the four agencies we analyzed converted to eGovernment Service between 2002 and 2005, we incorporated a factor for inflation in our estimated personnel cost savings when projecting the savings for the five years ending June 30, 2014.

The financial savings, primarily in terms of the associated personnel costs (including state of Montana paid taxes and benefits) and other expenses to process the ever-increasing number of transactions using eGovernment Services, online, instead of manually, over the five years ending June 30, 2014, alone, was approximately \$3.4 million. The total financial savings of approximately \$3.4 million found in our study is conservative, as no fixed cost avoidance was reported to us by any of the four agencies, and no variable cost avoidance was reported to us by two of the four agencies which we analyzed.

The state of Montana has adopted a transaction-based, self-funding Electronic Government Services model to provide eGovernment Services to agencies of the state of Montana since May 2001, with NIC, Inc., doing business in Montana as Montana Interactive, LLC. The end result is a self-funding approach which does not require the use of appropriated state of Montana-based taxpayer dollars for the development of these eGovernment Service websites. The Montana Interactive General Manager's Report as of June 30, 2014 reported total costs avoided by not paying development or maintenance costs since 2001 totaled \$11.9 million, of which the four agencies we surveyed totaled \$2.2 million.

What Businesses and Others Think About eGovernment Services

University of Montana’s Bureau of Business and Economic Research (BBER) administered an online survey to analyze the level of satisfaction and attitudes of customers who use state of Montana online business services. The results of the survey are summarized in Figure 2 below. Montana Department of Administration and the Office of the Governor sponsored the survey as part of the Main Street Montana Project.

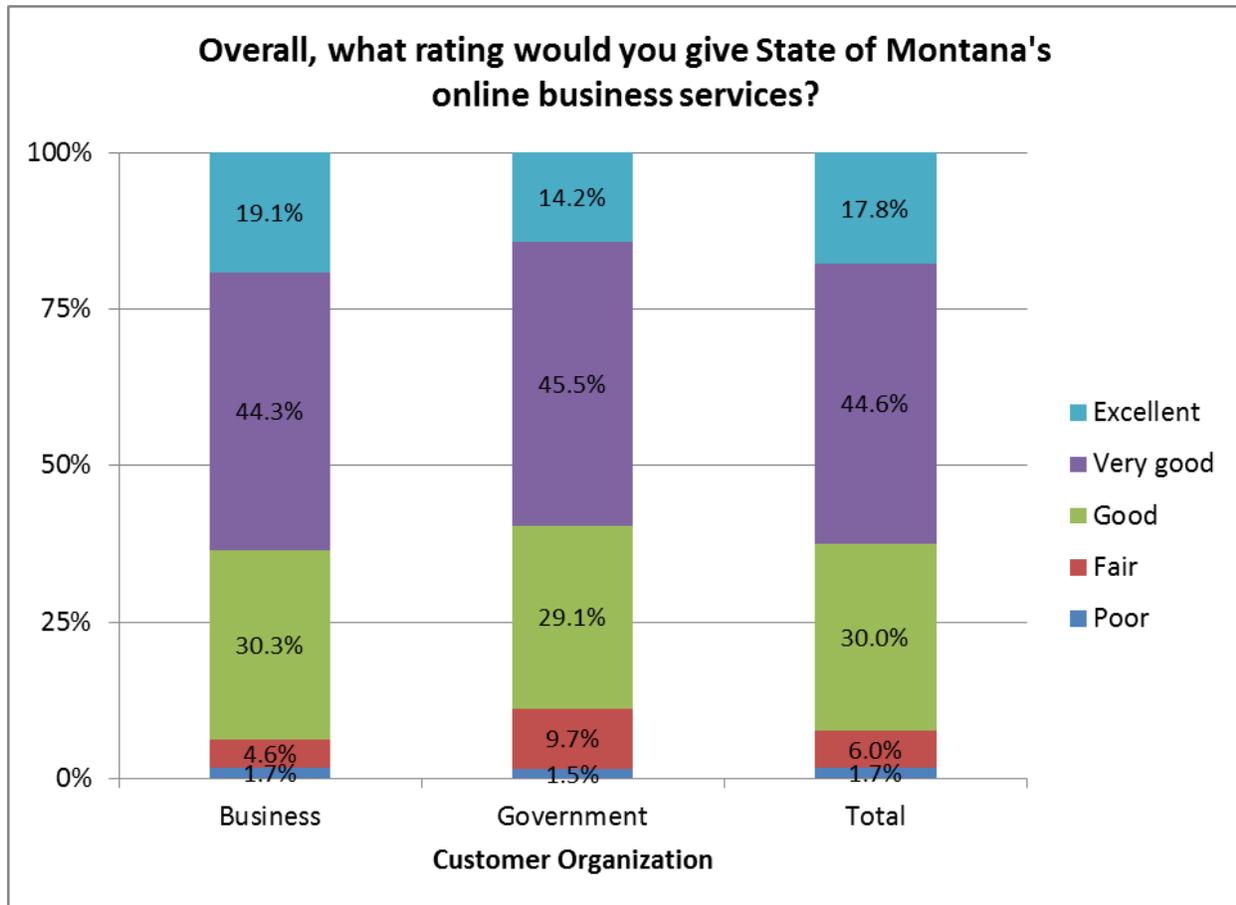
The survey was administered during the period November 4 – 17, 2014. The list of potential respondents was provided to BBER by Montana Department of Administration. The questionnaire was developed by BBER. Montana Department of Administration was the final approval authority for the questionnaire. 500 respondents completed the questionnaire.

More than 9 of every 10 eGovernment users who responded to the survey (92.3%) gave state of Montana’s online business services a positive overall rating (Figure 3). More than 3 in 5 users (62.4%) rated online business services overall as excellent or very good. Only 7.7% of users gave online business services a fair or poor rating. Overall, business respondents gave state of Montana online business services a slightly higher rating than did government respondents. Almost 1 of every 5 (19.1%) business respondents rated online business services as excellent, while 14.2% of government respondents rated online business services as excellent. Similarly, only 6.3% of business respondents rated online services overall as fair or poor, compared with 11.2% of government respondents.

Figure 2: Survey Summary



Figure 3: Overall Rating



A very large majority of all respondents, at least 80%, rated state of Montana’s online business services positively on each of five important service characteristics. In general, business respondents rated these characteristics even higher than did government respondents. The service characteristics rated by respondents were:

Table 2: Service Characteristic Rating

Rank	Service Characteristic	% Positive Rating
1	Speed of transaction completion	93.8%
2	Reliability	92.2%
3	Customer service	89.0%
4	Ease of use	88.8%
5	Reasonableness of fee charged	80.8%

While understanding customer ratings of state of Montana's online business services is key to providing good service, insight into customers' attitudes toward those services gives state of Montana a deeper comprehension of overall customer satisfaction. A very large majority of customers expressed positive attitudes toward state of Montana online business services along three important dimensions:

1. 78.4% of respondents agreed that state of Montana online business services make it easier to conduct business;
2. 74.3% of respondents agreed that state of Montana online business services are business friendly; and
3. 64.7% of respondents agreed that state of Montana online business services reinforce the perception that Montana is a business friendly state.

Conclusions

The state of Montana has steadily increased the number of online services available at Montana.Gov, as evidenced by the number of visitors and volume of transactions being generated at Montana.Gov. The state of Montana's tech-savvy businesses and citizens are using Montana.Gov, increasingly, as an important point of contact and information for state agency services. The benefits of Montana.Gov are numerous, including time savings, the ease of use, and the convenience of being able to access these services 24 hours a day, 7 days a week. Beyond these benefits, Montana.Gov is producing considerable cost savings to the state of Montana, and nine of every ten business users gave the Montana.Gov services a positive rating in our survey performed at the end of 2014.

We recommend consideration be given to expanding this study further, especially to include those agencies where substantial amounts of manual transaction processing has been replaced by online processing at Montana.Gov since 2001, in order to further quantify the savings of eGovernment Services to the taxpayers of this state. In addition, we recommend consideration be given to expanding the customer satisfaction portion of our work directly to the consumers themselves-citizens and residents of the state of Montana using Montana.Gov on a daily basis.

About the BBER

The Bureau of Business and Economic Research is a research department within the School of Business Administration at the University of Montana, Missoula. We produce a variety of economic and industry data including annual economic forecasts for the United States as well as Montana, its industries, and counties. Six functional areas make up the Bureau of Business and Economic Research:

1. Economic Analysis tracks the economic performance of all geographic areas in Montana.
2. Manufacturing Research and Forest Industry Research focus special attention on these important industries in Montana and surrounding states.

3. Health Care Industry Research examines markets, trends, industry structure, costs, and other high visibility topics to monitor the health status of Montanans.
4. Publications, such as the Montana Business Quarterly, the Outlook Book and other reports, include research and data that help Montanans better understand the state's economic climate.
5. The Survey Research Division regularly conducts research to gather local, state, and national economic data for both public and private sector studies.
6. The Natural Resources and Energy Research Program is devoted to understanding and tracking the growth and importance of Montana's energy and natural resources sector.

In addition to these six areas, the Bureau also houses the Montana Kids Count Program, a collaborative effort to collect data concerning Montana's children and families. The Bureau was founded in 1948 to monitor the state's economic and business conditions. Over the years we have expanded from a staff of four to a research department of 18 full-time employees and more than a dozen part-time workers.

Bureau data assists businesses, government agencies, and individuals across Montana. We field thousands of requests each year from people seeking information ranging from inflation rates to county demographics to business startup tips.