RESULTS OF A SURVEY OF STATE AGENCIES REGARDING INFORMATION TECHNOLOGY DEPARTMENT SERVICES AND RATES

This memorandum provides the results of a survey of state agencies regarding Information Technology Department (ITD) services and rates.

BACKGROUND

Section 8 of 2017 Senate Bill No. 2001 requires the Legislative Management to study ITD services and costs. The section provides:

During the 2017-18 interim, the legislative management shall consider studying the delivery and cost of the information technology department's services provided to state agencies. The study must include a review of the department's cost of services, staffing, and billing processes and must identify improvements to the efficiency and effectiveness of the department's services that will result in reduced costs for state agencies. The legislative management shall report its findings and recommendations, together with any legislation necessary to implement the recommendations, to the sixty-sixth legislative assembly.

The Legislative Management assigned the responsibility for this study to the Information Technology Committee. As a result, the Information Technology Committee asked the Legislative Council to conduct a survey in which state agencies were asked to provide feedback regarding their experiences with services provided by ITD. The survey indicated that agency responses would be reported anonymously.

Of the 57 agencies asked to participate, 54 responded with completed surveys. The following agencies did not complete a survey--Veterans' Home, the Indian Affairs Commission, and the North Dakota University System. Of the 54 responding agencies, 52 stated their agency receives information technology (IT) services from ITD. The Northern Crops Institute and the North Dakota State University (NDSU) Main Research Center receive information technology services from NDSU.

INFORMATION TECHNOLOGY EXPENDITURES FROM THE INFORMATION TECHNOLOGY DEPARTMENT

The 52 responding agencies that receive IT services from ITD reported the following expenditures paid to ITD during the 2013-15, 2015-17, and 2017-19 (projected) bienniums:

	Information Technology Expenditures							
Biennium	General Fund	Special Funds	Federal Funds	Total Funds	General Fund Percentage	Special Funds Percentage	Federal Funds Percentage	
2013-15	\$60,961,005	\$16,741,054	\$36,870,686	\$114,572,745	53.2%	14.6%	32.2%	
2015-17	58,912,772	15,926,271	31,353,970	106,193,013	55.5%	15.0%	29.5%	
2017-19	55,694,062	19,475,832	43,335,270	118,505,164	47.0%	16.4%	36.6%	
Total	\$175,567,839	\$52,143,157	\$111,559,926	\$339,270,922	51.7%	15.4%	32.9%	

INFORMATION TECHNOLOGY SERVICES PROVIDED BY THE INFORMATION TECHNOLOGY DEPARTMENT

The survey revealed state agencies received the following 15 services most often from ITD:

- · Telecommunication-related services
- Email hosting services
- Network services and hosting
- · Website development and support
- Website hosting
- Desktop support
- File and print services
- Software development and maintenance
- Server hosting
- Application hosting

- Database hosting
- · Records management
- · Project management
- · Video conferencing
- Instant messaging

INFORMATION TECHNOLOGY SERVICES FROM PRIVATE PROVIDERS

Of the 54 responding agencies, 37 reported their agency received IT services from private providers during the 2013-15, 2015-17, or 2017-19 (projected) bienniums, resulting in the expenditures shown in the table below:

	Information Technology Expenditures							
Biennium	General Fund	Special Funds	Federal Funds	Total Funds	General Fund Percentage	Special Funds Percentage	Federal Funds Percentage	
2013-15	\$13,893,284	\$17,204,417	\$21,833,331	\$52,931,032	26.2%	32.5%	41.3%	
2015-17	57,605,094	27,416,099	99,084,655	184,105,848	31.3%	14.9%	53.8%	
2017-19	32,912,821	34,171,778	84,499,305	151,583,904	21.7%	22.5%	55.8%	
Total	\$104,411,199	\$78,792,294	\$205,417,291	\$388,620,784	26.9%	20.3%	52.8%	

Information technology services received from private providers were often specific to the agency receiving the service. The most commonly reported services received related to application development; business analysis; software subscriptions, development, and maintenance; project management; and website design and support.

INFORMATION TECHNOLOGY SERVICES COMPARISON

The following table provides a percentage comparison of the IT expenditures paid to ITD compared to private providers during the 2013-15, 2015-17, and 2017-19 (projected) bienniums:

	Information Technology Expenditures							
	General Fund		Special Funds		Federal Funds		Total Funds	
	Private			Private		Private		Private
	ITD	Provider	ITD	Provider	ITD	Provider	ITD	Provider
Biennium	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage
2013-15	81.4%	18.6%	49.3%	50.7%	62.8%	37.2%	68.4%	31.6%
2015-17	50.6%	49.4%	36.7%	63.3%	24.0%	76.0%	36.6%	63.4%
2017-19	62.9%	37.1%	36.3%	63.7%	33.9%	66.1%	43.9%	56.1%
Total	62.7%	37.3%	39.8%	60.2%	35.2%	64.8%	46.6%	53.4%

FULL-TIME EQUIVALENT INFORMATION TECHNOLOGY POSITIONS

Of the 54 responding agencies, 32 agencies, or 59.3 percent, employ full-time equivalent (FTE) information technology positions, totaling 188.75 FTE positions, ranging within agencies from 0.5 to 41.50 FTE positions. The agency IT personnel often coordinate with ITD staff to meet the IT needs of the agency. The most common job functions of these FTE positions relate to the development and maintenance of systems specific to the respective agency, which require specialized expertise. Other common job responsibilities include software development, web development, application support, training, equipment ordering and deployment, and license management.

INFORMATION TECHNOLOGY DEPARTMENT SERVICES SATISFACTION

The survey provided to state agencies included questions related to the services provided by ITD and asked each agency to rank their experiences with ITD in each category according to the following criteria:

- Very satisfied 5
- Mostly satisfied 4
- Somewhat satisfied 3
- Somewhat dissatisfied 2

- Mostly dissatisfied 1
- · Very dissatisfied 0
- Not applicable N/A

A total of 50 agencies provided responses to this question, with varying levels of participation for each category, since some services listed in the survey may not be applicable for every state agency. The results of state agencies customer satisfaction with ITD services is as follows:

_	Agencies Reporting Rating of	Total Number of Agency	Average Category					
Category	5	4	3	2	1	0	Responses	Rating
Key Performances					_	_		
Aligned with mission	8	23	10	1	1	0	43	3.84
Trusted partner	13	20	11	4	0	0	48	3.88
Positive customer experience	7	31	9	1	1	0	49	3.86
Easy to do business with	6	22	16	3	1	0	48	3.60
Delivers needed services	8	23	15	1	1	0	48	3.75
Meets service expectations	6	20	20	1	1	0	48	3.60
Builds strong relationships	8	21	17	0	0	1	47	3.72
Provides technology direction	6	15	13	7	3	1	45	3.24
Key performance average								3.69
Customer Satisfaction								
Professionalism and courtesy	20	28	2	0	0	0	50	4.36
Knowledge	9	25	15	0	0	0	49	3.88
Timeliness	8	23	14	4	1	0	50	3.66
Quality	6	30	12	1	1	0	50	3.78
Value	5	16	19	7	3	0	50	3.26
Customer satisfaction average								3.79
Services								
Network	16	25	4	3	0	0	48	4.13
Hosting	13	22	7	2	0	1	45	3.96
Email	18	25	5	0	0	0	48	4.27
Instant messaging	11	23	6	1	0	0	41	4.07
Telephone	19	24	6	0	0	1	50	4.18
Video conferencing	5	20	4	1	0	0	30	3.97
File and print	12	25	4	0	0	0	41	4.20
Records management	6	29	5	4	0	0	44	3.84
Basic content - Enterprise document management system	3	16	7	1	0	1	28	3.64
Business intelligence	3	5	7	1	1	0	17	3.47
Geographic information	4	13	2	1	1	0	21	3.86
systems								
Service desk	14	24	9	2	0	0	49	4.02
Software development	4	10	13	5	1	0	33	3.33
Business analysis	2	7	9	3	1	0	22	3.27
Project management	4	11	6	3	0	0	24	3.67
Enterprise architecture	5	17	12	2	2	0	38	3.55
IT planning	4	18	14	2	0	1	39	3.54
IT procurement	5	13	12	0	0	0	30	3.77
IT security	13	27	6	1	Ö	0	47	4.11
Desktop support	8	12	3	1	0	0	24	4.13
Services average								3.85

The average rating by agency for all categories is as follows:

Overall Rating	Number of Agencies
5	6
4	33
3	10
2	1
1	0
0	0
Total	50

See <u>Appendix A</u> for excerpts of selected responses from state agencies explaining the approval ratings provided related to ITD services and experiences.

INFORMATION TECHNOLOGY DEPARTMENT RATES FEEDBACK

State agencies were asked if the rates charged by ITD were fair given the services provided from ITD. Of the 52 agencies receiving ITD services, 13 did not provide a conclusive answer to this question. Of the remaining 39, 12 agencies, or 30.8 percent, believed the ITD rates were fair while 27 agencies, or 69.2 percent, indicated they were not satisfied with the rates charged by ITD. See Appendix B for excerpts of selected responses from state agencies regarding ITD rates charged for IT-related services.

INFORMATION TECHNOLOGY DEPARTMENT SERVICE PREFERENCES

State agencies were also asked to provide feedback on services received by ITD and to indicate their preference for receiving IT services, based on the following options:

- · Agency staff
- ITD
- Private provider
- Agency staff and ITD
- · Agency staff and private provider
- ITD and provide provider
- · Agency staff, ITD, and private provider
- Other

The results of the survey revealed the following statistics related to agency preference of IT service providers:

Category	Number of Responses	Percentage of Responses
Agency staff	3	6.4%
ITD	12	25.5%
Private Provider	0	0.0%
Agency staff and ITD	5	10.6%
Agency staff and private provider	1	2.1%
ITD and private provider	2	4.3%
Agency staff, ITD, and private provider	24	51.1%
Other	0	0.0%
Total ¹	47	100.0%
¹ Of the 52 agencies receiving ITD services,	5 did not answer this question.	

See <u>Appendix C</u> for excerpts of selected responses from state agencies explaining each agency's preference in IT services providers.

STATE AGENCY QUESTIONS

The following questions related to ITD services and plans were posed by various state agencies:

 Agencies receive an estimate from ITD of the time and cost of a development project. If the project takes longer and the cost is more, agencies pay the excess. What risk does ITD bear?

- How does ITD ensure projects, on which ITD is the primary developer, are completed on time and on budget?
- Regarding ITD's plans to move state data to the cloud:

How will ITD mitigate the risks (e.g. no network access to host/application or application data not available)?

How will ITD provide disaster recovery?

What are the future costs compared to the state data center and how will future costs be controlled?

ATTACH:3