

ENTERPRISE SERVICES ALLOCATION

A Report Prepared for the
Legislative Finance Committee

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INTRODUCTION

The 2017 Legislature included HB 2 language directing the Legislative Finance Committee (LFC) to examine enterprise services established by the State Information Technology Services Division (SITSD) as part of its interim work. The purpose of this report is to outline enterprise services and related components, the process for establishing enterprise allocations, and the process for setting state agency enterprise allocations.

2019 BIENNIUM ENTERPRISE SERVICES ALLOCATION

Enterprise services are those IT service processes and technologies provided by SITSD that are used across Montana state government. As part of the examination of the Department of Administration (DOA) budget for SITSD the Joint Appropriations Subcommittee on General Government was provided a summary description and allocation breakdown of enterprise services. See Appendix A for the complete listing. Figure 1 shows the components of the enterprise services and the projected annual budget for these services in the 2019 biennium.

Figure 1

Department of Administration State Information Technology Services Division Enterprise Services 2019 Biennium Budget	
Description	Budgeted Biennial Costs
Continuity Services	\$866,956
Information Security	2,407,898
State of Montana Data Centers	758,830
IT Councils and Conference Support	163,927
CIO Activities	398,573
IT Procurement and Contact Management	1,067,877
Montana.gov and MINE Portals	1,417,436
Asset and Configuration Management	378,119
Website Hosting	730,813
SITSD Service Desk	357,750
Active Directory	87,924
Total	\$8,636,103

Components of Enterprise Services

Enterprise services shown above are made up of multiple service components. Figure 2 shows a breakdown of the components of the enterprise services, along with the allocation and total annual costs of each component.

Figure 2

Department of Administration State Information Technology Services Division Enterprise Services FY 2018 Budget			
Enterprise Service	Components	Rate	Annual Cost
Continuity Services	Network Security	\$866,028.66	\$866,029
Information Security	Chief Information Security Officer Expert Time	217.14	140,710
	Enterprise Application Services Expert Time	150.06	313,633
	Security & Forensic Analysis Expert Time	154.00	301,532
	Enterprise Security Expert Time	154.00	282,436
	Indent Management Monitoring	140,525.40	281,051
	Network Operations and Security Center	1,073,250.00	1,073,250
	AdLib - PDF Converter		5,000
State of Montana Data Centers	Rack Space - Miles City Data Center	13,128.29	170,668
	Rack Space - Helena Data Center	8,133.67	244,010
	Data Center Remote Hands Expert Time	105.49	36,921
	Enterprise Services Bureau Expert Time	164.77	43,170
	Microsoft Express Rout		260,075
IT Councils and Conference Support	Administrative Support	88.54	141,671
	Enterprise Technology Services Bureau Expert Time	149.42	19,723
CIO Activities	Application Technology Services Bureau - Expert Time	123.78	24,756
	Chief Information Officer - Expert Time	166.21	368,106
IT Procurement and Contract Management	Adobe ETLA	16.52	225,180
	Contract and Vendor Management	193.39	839,308
Montana.gov and MINE Portals			1,417,436
Asset and Configuration Management	Load Balancing	375,337.63	375,338
Website Hosting	Application Development	120.00	180,000
	Database hosting - SQL	465.25	4,653
	Database hosting - SQL database backup	2.30	115
	Database hosting - SQL Licensing	1,195.72	3,587
	DBA Professional Services	120.00	21,600
	Website/Web Content Hosting	517,720.04	517,720
SITSD Service Desk	Computing Systems Monitoring	98.44	357,750
Active Directory	Directory Services - Active Directory	43,407.28	86,815

It should be noted that state agencies do not pay all of the Helena data center costs through the enterprise allocation. The state of Oregon uses the Helena data center for disaster recovery and pays for a portion of the costs. In addition, SITSD charges state agencies for specific services provided in the data center that are not part of the enterprise services.

Components that are titled “expert time” include salary, benefits, other operating costs, and SITSD overhead as part of the establishment of the allocation. For example, in addition to the Chief Information Officer’s (CIO) salary and benefits, expert time includes costs for administrative staff time, information technology professional and consulting contracts that benefit the state, and overhead.

BUDGET ESTABLISHMENT

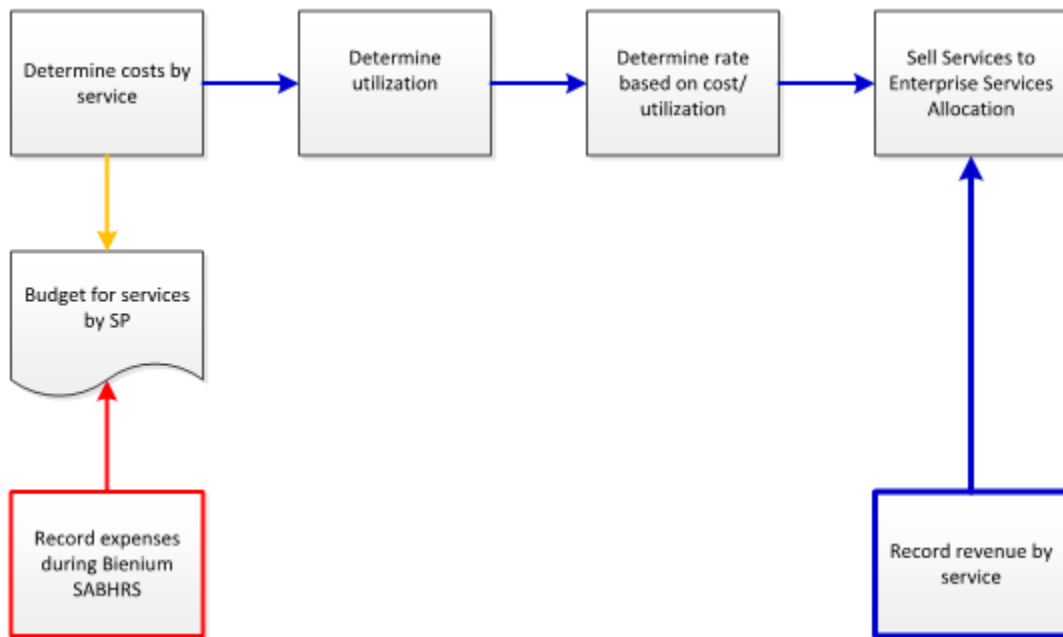
To determine the amount charged to state agencies for enterprise services, SITSD establishes a budget. SITSD provides around 180 different information technology services (IT) to state agencies who rely on IT systems and services to conduct business. To determine the amount charged to state agencies, SITSD establishes an enterprise services budget. Agency allocations are established by SITSD for these services

each biennium using a rate-setting model called the Financial Transparency Model (FTM). FTM methodology includes determining the estimated cost of providing the service and dividing the total estimated costs by the anticipated usage of the service by the various state agencies. Once the rates for the services have been determined, SITSD determines the services that are considered enterprise or in other words used by all state agencies. A budget for the enterprise services is then established and an allocation developed. State agencies are then charged for their portion of the enterprise services allocation based on the average number of active directories within the agency in the previous even year of the biennium. For example, in FY 2018 the average directories for an agency in FY 2016 are used to determine the enterprise services allocation charged to a state agency.

Development of SITSD enterprise allocation

Figure 3 shows a flow chart of the process SITSD uses to develop and charge the enterprise services allocation to state agencies. SITSD used actual expenditures recorded in the State Accounting, Budgeting and Human Resource System (SABHRS) in the 1st year of the biennium prior to a legislative session to determine the budget amount for services by service provider (SP).

Figure 3



As reflected above, SITSD determines the services that will be included in the enterprise allocation and establishes the allocation for state agencies. The total budget is based on SITSD’s estimate of state agency utilization. An agency may use more or less of the services during the fiscal year, but will still be billed for the utilization included in the budget. The budgeting model used by SITSD “sells” services to state agencies, for the enterprise service allocation the components of the enterprise services allocation “sell” their services to the budget unit (Enterprise Services Allocation) that then allocates the costs to state agencies.

Potential Process Improvement

Discussion with state agencies as to the services that should be included in the enterprise services allocation is not part of the process. The LFC may wish to expand state agency involvement in the enterprise services allocation process and the services that are included in the allocation, by requiring SITSD to request and

consider state agency input on the services and agency utilization included in the enterprise services allocation prior to the time the allocation is determined.

Budgeted Enterprise Allocation - FY 2012 through FY 2019

The components included in the enterprise services allocation have been refined in the last several biennia. Figure 4 provides a summary of the various components of the enterprise services between FY 2012 and FY 2019. As reflected, some components have been merged with other components to create a single budget component. For example, in the 2013 biennium budget the MT.gov portal and the MINE portal were budgeted separately, in the 2015 biennium these were combined. The costs associated with the MT.gov Portal and the MINE portal are assessed to SITSD by vendors or divisions maintaining the portals. Costs for continuity services are passed through SITSD to the Continuity and Emergency Management Program in the Director's Office of DOA.

Figure 4

Department of Administration State Information Technology Services Division Enterprise Services Rate Breakdown								
Enterprise Service	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Enterprise Continuity Services	\$550,854	\$551,504	\$681,732	\$681,732	\$525,000	\$525,000	\$866,028	\$866,028
Information System Risk Management	137,232	137,516	131,387	131,387	0	0	0	0
Enterprise Information Security	1,582,495	1,583,858	1,399,984	1,399,984	3,037,493	3,037,493	2,397,613	2,397,613
Enterprise State of Montana Data Centers	0	0	0	0	0	0	754,845	754,845
MITA (Montana Information Technology Act)	459,301	460,033	432,820	432,820	0	0	0	0
Enterprise IT Planning	0	0	0	0	463,989	463,989	0	0
Enterprise IT Councils and Conference Support	190,265	190,776	193,993	193,993	154,002	154,002	161,394	161,394
Enterprise CIO Activities	630,932	631,961	657,530	657,530	796,821	796,821	392,862	392,862
Enterprise IT Procurement and IT Contract Manager	275,169	276,310	340,126	340,126	404,006	404,006	1,064,488	1,064,488
Enterprise IT Training	57,484	57,797	129,567	129,567	0	0	0	0
MT.gov Portal	233,898	229,656	0	0	0	0	0	0
MINE Portal	113,139	113,142	0	0	0	0	0	0
MT.gov and MINE Portals	0	0	852,970	852,970	1,422,572	1,422,572	1,382,061	1,382,061
Enterprise Asset and Configuration Management	0	0	0	0	162,831	162,831	375,338	375,338
Enterprise Website Hosting	903,086	919,600	495,407	495,407	606,395	606,395	727,674	727,674
Enterprise Application Hosting - Citrix	126,290	133,145	0	0	0	0	0	0
Enterprise SITSD Service Desk	0	0	0	0	0	0	357,750	357,750
State Telephone Operators	163,800	164,335	143,970	143,970	135,317	135,317	0	0
Enterprise Access to Statewide GIS Data	77,064	76,170	0	0	0	0	0	0
Enterprise Application Hosting - ORACLE	17,536	20,357	0	0	0	0	0	0
Active Directory	362,934	363,432	459,298	459,298	602,103	602,103	86,814	86,814
Project Management Activities	284,710	285,456	247,321	247,321	568,544	568,544	0	0
Total Budget	\$6,166,189	\$6,195,048	\$6,166,105	\$6,166,105	\$8,879,073	\$8,879,073	\$8,566,867	\$8,566,867

As reflected in Figure 4, the enterprise services allocation budget was fairly consistent between FY 2012 and FY 2015 then increased by 44.0% in FY 2016 and FY 2017. Increased costs between the 2015 biennium and the 2017 biennium mainly reflect increased costs for enterprise security. In the 2015 biennium, HB 10 related to long-range IT, provided SITSD with \$6.5 million in funding for network and security upgrades, data protection, security system replacement and assessments, improvements to the public safety communication system, and court technology improvement program projects. A majority of the increases in the enterprise allocation for information security in the 2017 biennium were linked to the changes implemented in HB 10 from the previous biennium.

During the November 2017 Special Session, the legislature reduced state agency SITSD budget by 6.61%. A portion of the reductions will be included in the enterprise allocation. Cost savings associated with the vacant positions, including temporary vacancies in the former CIO and deputy CIO positions, will be used as part of SITSD's plan to address the cost reductions, lowering the amount of enterprise services charged to state agencies.

The amount charged to each agency varies based on the average number of active directories at each state agency and total budgeted enterprise services. An active directories is a Microsoft product that manages user accounts, passwords, phone numbers, etc. Figure 5 shows the expenditures for enterprise services paid by each state agency between FY 2012 and FY 2018 through the end of May.

Figure 5

Department of Administration State Information Technology Services Division State Agency Enterprise Services Expenditures							
State Agency	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Partial FY 2018*
Legislative Branch	\$78,764	\$79,135	\$72,720	\$72,720	\$108,694	\$108,694	\$75,201
Consumer Counsel	2,764	2,777	2,744	2,744	3,905	3,905	3,171
Judicial Branch	351,904	353,562	351,709	351,709	515,484	515,484	444,498
Governor's Office	34,545	34,708	28,356	28,356	40,354	40,276	30,526
Secretary of State	31,782	31,932	36,589	36,589	43,608	43,608	35,164
Commissioner of Political Practices	2,539	2,314	3,409	2,744	4,176	4,936	3,748
State Auditor's Office	39,612	39,799	46,192	46,510	63,785	63,785	43,257
Office of Public Instruction	85,673	78,904	117,999	117,999	123,501	134,729	123,382
Crime Control Division*	9,373	10,181	9,605	9,605	12,518	11,336	2,967
Department of Justice	507,127	509,517	471,079	462,713	699,027	699,027	552,924
Public Service Commission	18,424	18,511	19,209	19,209	31,892	34,550	18,505
Board of Public Education	2,303	2,314	1,372	1,372	2,869	1,953	1,562
School for the Deaf and Blind	5,489	6,016	10,977	10,977	30,591	30,591	26,125
Montana Arts Council	3,685	3,702	3,659	3,659	7,159	7,159	5,301
Montana State Library	34,315	32,661	35,674	35,570	50,116	50,116	33,224
Montana Historical Society	32,242	32,394	31,558	31,558	49,466	49,769	36,291
Department of Fish, Wildlife, and Parks	286,958	288,310	280,037	279,903	391,820	391,820	313,307
Department of Environmental Quality	215,065	216,117	210,385	210,385	259,636	283,776	195,466
Department of Transportation	1,002,281	1,007,003	985,150	985,150	1,438,407	1,438,407	1,152,371
Department of Livestock	37,770	37,948	48,614	48,480	51,418	51,418	31,563
Department of Natural Resources and Conservation	276,827	278,118	262,294	262,524	370,993	370,993	300,314
Department of Revenue	306,764	308,210	324,724	324,724	443,238	443,238	339,762
Department of Administration	137,875	138,833	144,525	144,525	220,643	220,622	167,228
Montana State Fund	149,697	150,403	146,355	146,355	0	0	0
Public Employee Retirement System	18,885	18,974	11,434	22,868	61,181	61,181	25,225
Teacher's Retirement System	8,291	8,330	11,434	11,434	13,017	13,017	11,264
Office of the Public Defender	100,286	100,756	106,565	106,564	158,811	158,811	154,590
Department of Agriculture	50,206	50,443	50,767	50,767	73,548	71,959	50,858
Department of Corrections	544,438	547,003	522,303	522,303	810,324	742,797	606,944
Department of Commerce	94,755	95,795	84,222	83,226	121,718	124,966	81,921
Department of Labor and Industry	417,823	414,168	416,196	417,046	537,613	537,613	425,141
Department of Military Affairs	19,836	19,829	19,125	19,209	24,530	24,661	19,232
Department of Public Health and Human Services	1,261,142	1,267,084	1,286,549	1,286,549	1,871,882	1,871,882	1,376,059
Total	\$6,169,441	\$6,185,748	\$6,153,526	\$6,156,045	\$8,635,923	\$8,607,077	\$6,687,089

* FY 2018 expenditures through the end of May 2018

As expected, state agency costs increase as costs for the enterprise services increased and the average number of active directories in an agency change. To determine if individual agency enterprise services costs were maintained at the same percentage of the total enterprise services budget, the Legislative Fiscal Division (LFD) examined the state agency percentage of enterprise costs in FY 2013, FY 2015, and FY 2017. This is reflected in Figure 6.

Figure 6

Department of Administration State Information Technology Services Division State Agency Enterprise Services Percentage of Total Enterprise Services				
State Agency	FY 2013	FY 2015	FY 2017	
Legislative Branch	1.28%	1.18%	1.26%	
Consumer Counsel	0.04%	0.04%	0.05%	
Judicial Branch	5.72%	5.72%	5.99%	
Governor's Office	0.56%	0.46%	0.47%	
Secretary of State	0.52%	0.59%	0.51%	
Commissioner of Political Practices	0.04%	0.06%	0.06%	
State Auditor's Office	0.64%	0.75%	0.74%	
Office of Public Instruction	1.28%	1.92%	1.57%	
Crime Control Division*	0.16%	0.16%	0.13%	
Department of Justice	8.24%	7.66%	8.12%	
Public Service Commission	0.30%	0.31%	0.40%	
Board of Public Education	0.04%	0.02%	0.02%	
School for the Deaf and Blind	0.10%	0.18%	0.36%	
Montana Arts Council	0.06%	0.06%	0.08%	
Montana State Library	0.53%	0.58%	0.58%	
Montana Historical Society	0.52%	0.51%	0.58%	
Department of Fish, Wildlife, and Parks	4.66%	4.55%	4.55%	
Department of Environmental Quality	3.49%	3.42%	3.30%	
Department of Transportation	16.28%	16.01%	16.71%	
Department of Livestock	0.61%	0.79%	0.60%	
Department of Natural Resources and Conservation	4.50%	4.26%	4.31%	
Department of Revenue	4.98%	5.28%	5.15%	
Department of Administration	2.24%	2.35%	2.56%	
Montana State Fund	2.43%	2.38%	0.00%	
Public Employee Retirement System	0.31%	0.19%	0.71%	
Teacher's Retirement System	0.13%	0.19%	0.15%	
Office of the Public Defender	1.63%	1.73%	1.85%	
Department of Agriculture	0.82%	0.83%	0.84%	
Department of Corrections	8.84%	8.49%	8.63%	
Department of Commerce	1.55%	1.37%	1.45%	
Department of Labor and Industry	6.70%	6.76%	6.25%	
Department of Military Affairs	0.32%	0.31%	0.29%	
Department of Public Health and Human Services	20.48%	20.91%	21.75%	
Total	100.00%	100.00%	100.00%	

State Agency Enterprise Services Allocation Analysis

To examine the impact of the enterprise services allocation on the overall budgets of state agencies, the LFD examined budgeted IT costs compared to enterprise services allocation paid by state agencies. As part of its preparation for the 2019 biennium budget the executive compiled Volume 10, Information Technology Summary. Volume 10 included a summary of all IT expenditures in FY 2016 and those IT expenditures that were considered base expenditures. To assess the amount of IT spending that is allocated to enterprise services the LFD compared enterprise services expenditures to IT base funding. Figure 7 shows FY 2016 IT base expenditures and actual state agency spending on enterprise allocation in FY 2016.

Figure 7

Department of Administration State Information Technology Services Division Enterprise Services			
Agency	Base Expenditures FY 2016	Enterprise Services FY 2016	% of Base
Legislative Branch	\$3,060,182	\$108,694	3.6%
Consumer Counsel	18,575	3,905	21.0%
Judicial Branch	5,127,185	515,484	10.1%
Governor's Office	374,292	40,354	10.8%
Secretary of State	1,573,563	43,608	2.8%
Commissioner of Political Practices	67,963	4,177	6.1%
State Auditor's Office	591,890	63,785	10.8%
Office of Public Instruction	4,792,748	123,501	2.6%
Crime Control Division	349,836	12,518	3.6%
Department of Justice	15,992,889	699,027	4.4%
Public Service Commission	180,996	31,892	17.6%
Board of Public Education	9,158	2,869	31.3%
Office of the Commissioner of Higher Education	452,952	0	0.0%
School for the Deaf and Blind	172,602	30,591	17.7%
Montana Arts Council	136,342	7,159	5.3%
Montana State Library	1,912,613	50,116	2.6%
Montana Historical Society	441,901	49,466	11.2%
Department of Fish, Wildlife, and Parks	5,522,979	391,819	7.1%
Department of Environmental Quality	5,448,758	260,128	4.8%
Department of Transportation	20,235,835	1,438,407	7.1%
Department of Livestock	601,078	51,418	8.6%
Department of Natural Resources and Conservation	4,737,926	370,993	7.8%
Department of Revenue	11,414,823	443,238	3.9%
Department of Administration	10,971,368	220,642	2.0%
Office of the Public Defender	1,380,804	158,881	11.5%
Department of Agriculture	763,026	73,548	9.6%
Montana State Fund	7,515,357	0	0.0%
Department of Corrections	5,387,725	810,324	15.0%
Department of Commerce	3,753,705	121,718	3.2%
Department of Labor and Industry	10,079,871	537,613	5.3%
Department of Military Affairs	996,700	24,530	2.5%
Department of Public Health and Human Services	66,726,878	1,871,882	2.8%
Total	\$190,792,520	\$8,562,286	4.5%

As shown in Figure 7, overall 4.5% of state agency IT base budgets is spent on enterprise services in FY 2016. The differences between the percentages of the base IT expenditures that are spent on enterprise services varies from agency to agency. Total IT base budget is a function of state agency IT costs including:

- The number of databases required by a state agency
- The complexity of IT services
- Requirements for IT staffing at the agency level

For example, the Department of Public Health and Human Services (DPHHS) exhibits a low percentage due to utilization of large databases to maintain the Medicaid management information system, supplemental

nutritional assistance payments, women, infants, and children benefits, and a number of others. The oversight of these systems requires the staff that is assigned to the Technology Services Division within DPHHS.

In contrast, for the Governor's Office enterprise services are a much greater percentage of the base IT budget as the Governor's Office IT needs are addressed by SITSD, additional staff and operating expenses for IT are not a large part of the IT budget.

To examine if the enterprise services allocation was applied to each agency consistently the LFD compared the FY 2016 expenditures on enterprise services paid by state agencies to the average number of active directories to determine the allocation per active directory. Figure 8 shows the enterprise allocation per active directory for each state agency in FY 2016.

Figure 8

Department of Administration State Information Technology Services Division Enterprise Services Expenditures FY 2016			
Agency	Expenditures	Active Directory	Rate per AD
Legislative Branch	\$108,694	167	\$650.86
Consumer Counsel	3,905	6	650.86
Judicial Branch	515,484	792	650.86
Governor's Office	40,354	62	650.86
Secretary of State	43,608	67	650.86
Commissioner of Political Practices	4,176	7	596.62
State Auditor's Office	63,785	98	650.86
Office of Public Instruction	123,501	207	596.62
Crime Control Division	12,518	19	658.85
Department of Justice	699,027	1,074	650.86
Public Service Commission	31,892	49	650.86
Board of Public Education	2,869	3	956.30
School for the Deaf and Blind	30,591	47	650.86
Montana Arts Council	7,159	11	650.86
Montana State Library	50,116	77	650.86
Montana Historical Society	49,466	76	650.86
Department of Fish, Wildlife, and Parks	391,820	602	650.86
Department of Environmental Quality	260,128	436	596.62
Department of Transportation	1,438,407	2,210	650.86
Department of Livestock	51,418	79	650.86
Department of Natural Resources and Conservation	370,993	570	650.86
Department of Revenue	443,238	681	650.86
Department of Administration	220,643	339	650.86
Public Employee Retirement System	61,181	94	650.86
Teacher's Retirement System	13,017	20	650.86
Office of the Public Defender	158,811	244	650.86
Department of Agriculture	73,548	113	650.87
Department of Corrections	810,324	1,245	650.86
Department of Commerce	121,718	192	633.95
Department of Labor and Industry	537,613	826	650.86
Department of Military Affairs	24,530	38	645.52
Department of Public Health and Human Services	1,871,882	2,876	650.86
Total	\$8,636,415	13,327	\$648.04

As shown, while mostly consistent, the enterprise services costs by active directory vary by state agency, from a low of \$596.62 for the Commissioner of Political Practices, Office of Public Instruction, and the Department of Environmental Quality to a high of \$956.30 for the Board of Public Education. Overall, if state agencies were paying a consistent percentage of the enterprise services allocation based on the number of active directories the allocation would have been \$648.04. A review of the same information for FY 2018 through the end of May showed greater variation between agencies. According to SITSD the variation for FY 2018 is the result of state agencies delaying payment of SITSD invoices. For example, Department of Military Affairs has only recorded six and a half months of expenses, while the Office of the Public Defender has recorded the entire annual charge for the enterprise services allocation. By fiscal year end the costs per active directory should even out for all agencies.

It should be noted that this methodology does not take into account changes in the number of active directories that occur in the current biennium. For example, the Department of Revenue (DOR) reduced a number of FTE in various property assessment offices around the state due to November 2017 Special Session budget reductions. The reduction in the number of FTE would result in fewer active directories for DOR, but the enterprise allocation assessed to DOR does not reflect these changes in the 2019 biennium. In the 2021 biennium these reductions will be included in the updated allocated of the enterprise services allocation.

Potential Process Improvement

To ensure that state agencies are paying consistent enterprise services allocations in a given fiscal year the legislature may wish to establish an enterprise services rate as part of HB 2. This would expand the legislative discussion on the components included as part of enterprise services and allow for public comment from agency relative to the rate.

State Agency Concerns with the Enterprise Services Allocation

Concerns identified in the Customer Satisfaction Survey of SITSD include state agencies:

- Were uncomfortable with the manner in which enterprise allocations were established, identifying a lack of transparency as an issue
- Did not feel that they have an accurate understanding of what they are paying for, what services are included and which are not
- Agencies did not understand why they are being charged additional consulting fees, and why the fee is so high
- Agencies also felt there should be a route for agency input and possible appeal prior to budget allocations being set in stone

SITSD formed the Enterprise IT Financial Workgroup (workgroup) in the 2017 biennium. Members included CIOs and state agency financial managers. The workgroup has heard several presentations on the enterprise services allocation with information and discussion concerning:

- 2019 biennium enterprise services allocation
- Components of the enterprise services
- FY 2012 through FY 2019 enterprise services breakdown
- Potential changes to the 2021 biennium enterprise services allocation

These meetings were intended to address the majority of the state agency concerns addressed in the Customer Satisfaction Survey of SITSD.

Summary

As part of its review of the enterprise services allocation the Legislative Fiscal Division identified two areas for potential improvement including:

- Establish a legislatively approved enterprise rate for state agencies
- State agency input on the services included in the enterprise services allocation prior to the time the allocation is being determined