Schedule 13
Change Request for FY 08-09 Budget Request Cycle

Decision Item FY 08-09 ☑ Base Reduction Item FY 08-09 ☐ Supplemental FY 07-08 ☐ Budget Request Amendment FY 08-09 ☐

Request Title: IT Infrastructure Support
Department: Human Services
Priority Number: 11

Dept. Approval by: Reginald Jeffers **Date:** 10/17/07
OSPB Approval: [signature] **Date:** 10/25/07 for 11/1/07

	Fund	1 Prior-Year Actual FY 06-07	2 Appropriation FY 07-08	3 Supplemental Request FY 07-08	4 Total Revised Request FY 07-08	5 Base Request FY 08-09	6 Decision/ Base Reduction FY 08-09	7 November 1 Request FY 08-09	8 Budget Amendment FY 08-09	9 Total Revised Request FY 08-09	10 Change from Base (Column 5) FY 09-10
Total of All Line Items	Total	8,103,871	9,117,641	0	9,117,641	11,120,986	168,125	11,289,111	0	11,289,111	347,592
	FTE	68.4	76.2	0.0	76.2	76.2	2.4	78.6	0.0	78.6	5.0
	GF	5,721,748	6,533,042	0	6,533,042	7,791,973	126,550	7,918,523	0	7,918,523	269,189
	GFE	0	0	0	0	0	0	0	0	0	0
	CF	63,447	103,038	0	103,038	91,124	733	91,857	0	91,857	1,469
	CFE	873,143	1,191,379	0	1,191,379	1,721,507	16,410	1,737,917	0	1,737,917	33,660
	FF	1,445,533	1,290,182	0	1,290,182	1,516,382	24,432	1,540,814	0	1,540,814	43,274
	MCF	613,295	773,101	0	773,101	1,263,379	6,552	1,269,931	0	1,269,931	13,925
	MGF	306,991	383,517	0	383,517	630,908	3,276	634,184	0	634,184	6,963
	NGF	6,028,739	6,916,559	0	6,916,559	8,422,881	129,826	8,552,707	0	8,552,707	267,262
(2) Information Technology Services Personal Services	Total	6,259,606	5,617,053	0	5,617,053	5,617,053	144,944	5,761,997	0	5,761,997	336,530
	FTE	68.4	76.2	0.0	76.2	76.2	2.4	78.6	0.0	78.6	5.0
	GF	4,518,087	4,348,432	0	4,348,432	4,348,432	108,187	4,456,619	0	4,456,619	260,524
	GFE	0	0	0	0	0	0	0	0	0	0
	CF	25,395	24,062	0	24,062	24,062	718	24,780	0	24,780	1,442
	CFE	542,534	548,258	0	548,258	548,258	15,250	563,508	0	563,508	32,847
	FF	1,173,590	696,301	0	696,301	696,301	20,789	717,090	0	717,090	41,717
	MCF	300,527	224,909	0	224,909	224,909	5,596	230,505	0	230,505	13,475
	MGF	150,264	112,453	0	112,453	112,453	2,797	115,250	0	115,250	6,738
	NGF	4,668,351	4,460,885	0	4,460,885	4,460,885	110,984	4,571,869	0	4,571,869	267,262
(2) Information Technology Services Operating Expenses	Total	345,772	386,576	0	386,576	386,576	19,650	406,226	0	406,226	4,750
	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GF	307,488	307,488	0	307,488	307,488	15,630	323,118	0	323,118	3,778
	GFE	0	0	0	0	0	0	0	0	0	0
	CF	0	0	0	0	0	0	0	0	0	0
	CFE	15,288	16,040	0	16,040	16,040	815	16,855	0	16,855	197
	FF	22,996	63,048	0	63,048	63,048	3,205	66,253	0	66,253	775
	MCF	15,288	16,040	0	16,040	16,040	815	16,855	0	16,855	197
	MGF	7,644	8,020	0	8,020	8,020	408	8,428	0	8,428	99
	NGF	315,132	315,508	0	315,508	315,508	16,038	331,546	0	331,546	3,877

Schedule 13
Change Request for FY 08-09 Budget Request Cycle

Decision Item FY 08-09 ☑ Base Reduction Item FY 08-09 ☐ Supplemental FY 07-08 ☐ Budget Request Amendment FY 08-09 ☐

Request Title: IT Infrastructure Support
Department: Human Services
Priority Number: 11

Dept. Approval by: **Date:**
OSPB Approval: **Date:**

	Fund	1 Prior-Year Actual FY 06-07	2 Appropriation FY 07-08	3 Supplemental Request FY 07-08	4 Total Revised Request FY 07-08	5 Base Request FY 08-09	6 Decision/ Base Reduction FY 08-09	7 November 1 Request FY 08-09	8 Budget Amendment FY 08-09	9 Total Revised Request FY 08-09	10 Change from Base (Column 5) FY 09-10
(1) Executive Director Amortization Equalization Disbursement	Total	1,498,493	2,631,937	0	2,631,937	3,875,868	2,404	3,878,272	0	3,878,272	4,809
	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GF	896,173	1,592,902	0	1,592,902	2,372,913	1,861	2,374,774	0	2,374,774	3,723
	GFE	0	0	0	0	0	0	0	0	0	0
	CF	38,052	65,360	0	65,360	51,179	10	51,189	0	51,189	21
	CFE	315,321	531,031	0	531,031	876,399	235	876,634	0	876,634	469
	FF	248,947	442,644	0	442,644	575,377	298	575,675	0	575,675	596
	MCF	297,480	450,698	0	450,698	774,253	96	774,349	0	774,349	193
	MGF	149,083	224,919	0	224,919	386,484	48	386,532	0	386,532	96
	NGF	1,045,256	1,817,821	0	1,817,821	2,759,397	1,909	2,761,306	0	2,761,306	3,819
(1) Executive Director Supplemental Amortization Equalization Disbursement	Total	0	482,075	0	482,075	1,241,489	1,127	1,242,616	0	1,242,616	1,503
	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GF	0	284,220	0	284,220	763,140	872	764,012	0	764,012	1,164
	GFE	0	0	0	0	0	0	0	0	0	
	CF	0	13,616	0	13,616	15,883	5	15,888	0	15,888	6
	CFE	0	96,050	0	96,050	280,810	110	280,920	0	280,920	147
	FF	0	88,189	0	88,189	181,656	140	181,796	0	181,796	186
	MCF	0	81,454	0	81,454	248,177	45	248,222	0	248,222	60
	MGF	0	38,125	0	38,125	123,951	23	123,974	0	123,974	30
	NGF	0	322,345	0	322,345	887,091	895	887,986	0	887,986	1,194

Letternote revised text:

Cash Fund name/number, Federal Fund Grant name: Department Indirect Revenue, including Medicaid

IT Request: ☐ Yes ☑ No

Request Affects Other Departments: ☑ Yes ☐ No **If Yes, List Other Departments Here:** Health Care Policy and Financing

CHANGE REQUEST for FY 08-09 BUDGET REQUEST CYCLE

Department:	Colorado Department of Human Services
Priority Number:	Priority #11
Change Request Title:	IT Infrastructure Support Request

SELECT ONE (click on box):

☒ Decision Item FY 08-09
☐ Base Reduction Item FY 08-09
☐ Supplemental Request FY 07-08
☐ Budget Request Amendment FY 08-09

SELECT ONE (click on box):

Supplemental or Budget Request Amendment Criterion:

☒ Not a Supplemental or Budget Request Amendment
☐ An emergency
☐ A technical error which has a substantial effect on the operation of the program
☐ New data resulting in substantial changes in funding needs
☐ Unforeseen contingency such as a significant workload change

Short Summary of Request:

The Office of Information Technology Services is requesting $168,125 and 2.4 FTE in FY 2008-09 ($347,592 and 5.0 FTE in FY 2009-10) to both bring the base for department-wide technical operations support up to a reasonable level reflective of the commensurate growth in the Office of Information Technology Services' (OITS) overall department / county customer base and to address new external business requirements that have weakened OITS' ability to maintain minimal service levels. The Department estimates that it will need 25.0 FTE to be whole in terms of adequate, basic support for the state and county customers it supports. However, this request is the first of a multi-phase request by the Office of Information Technology.

Background and Appropriation History:

The Office of Information Technology Services has sustained three remarkable direct resource impacts since the Department's inception. First, when the Department was created in the mid-1990s, the OITS like many support activities was cobbled together from like activities pre-existing in the former Departments of Social Services and

Institutions. Expected (economies of scale) efficiencies resulted in overall reductions of these various central support functions (IT, accounting, human resources, etc.). In addition to this paring down as a result of organizational consolidation, some resources were lost when the Department of Health Care Policy and Financing was carved out of the organization to become its own agency.

Second, in FY 2000-01, the Department under a new director reorganized its IT program support from a Matrix model in which IT support was co-located with the respective program to a centralized model. The Matrix model had positive attributes in that IT staff could forge closer, dedicated working relationships with their programs. However, as program requirements changed over time due to new federal and state requirements, some OITS staff's daily routines were not optimized as some staff gained new duties and others lost duties. Therefore, a centralized support model was chosen because it allowed OITS to pool resources, allowing OITS to better react to both changing support needs as well as more effectively deploying resources in crisis situations. While in general, individuals remained dedicated to their former programs; they were also able to undertake other projects that supported other program areas.

Third, during the most recent recession, OITS staff was reduced in order to bring Department and statewide expenditures in line with reduced revenues. As a result, dedicated program support was further stretched. And while county staff supported by DHS decreased in approximately the same proportions as DHS FTE during the recession, upon implementation of the CBMS project anecdotal evidence supports that county FTE increased in each of the years following implementation. While CBMS has somewhat normalized in the past year or so, counties have received base building increases which have translated into additional support staff resulting in the current estimate of 5,600 county workers supported by OITS staff. Table 1 below depicts as best as possible using reasonable assumptions the trends in the ratio of OITS staff to individuals supported.

Table 1. Number of CDHS and County Staff Supported per OITS FTE

Central IT LB	2000 S.B. 215	2001 H.B. 1451	2002 S.B. 212	2003 H.B. 1420	2004 S.B. 258	2005 H.B. 1422	2006 S.B. 209	2007 H.B. 1385	2008 S.B. 239
Total OITS LB FTE*	119.1	149.2	177.5	165.7	145.1	138.3	135.3	134.3	134.3
Clients Supported									
CDHS*	3,079.0	3,051.0	3,062.0	3,120.0	2,957.0	2,984.0	2,981.0	3,100.0	3,100.0
County	4,992.0	4,947.0	4,964.0	5,058.0	4,794.0	5,062.7	5,331.4	5,600.0	5,600.0
Total:	8,071.0	7,998.0	8,026.0	8,178.0	7,751.0	8,046.7	8,312.4	8,700.0	8,700.0
Support Ratio (Total # of Clients per FTE)	**67.8**	**53.6**	**45.2**	**49.4**	53.4	**58.2**	**61.4**	**64.8**	**64.8**

Baseline = greatest budget reductions

***Basic assumptions about Table 1:** The Department estimates that it currently (FY 2006-07) provides direct support to about 3,100 DHS personnel (FTE typically differ from actual employee headcounts and some employees do not use computers) and provides oversight for support of 5,600 county personnel. While counties receive different levels of infrastructure support, all county social services employees who utilize and/or access CDHS services/systems, receive help desk and other technical support from DHS OITS staff.*

To keep OITS FTE numbers comparable for FY 2006 to the present, the additional Colorado Trails FTE were not included in these years. The reason for this exclusion is that the additional FTE came about as a result of a swap between contractors (who were using the DHS OITS systems and networks as part of their duties) and FTE; therefore, adding these FTE would inaccurately distort actual support ratios. In addition, the 3.0 FTE added for Client Index Project in FY 2007-08, also a swap of contractors for FTE, are excluded.

Steady increases to County users were adjusted for FY 2005 to the present to account for the facts that 1) counties were steadily adding FTE as a result of CBMS implementation and in more recent years counties have been provided additional County Administration allocations. Therefore, county user numbers have been trended upward from FY 2005 to the present. The dip in the OITS staff-to-users ratio between FYs 2001 and 2002 was due to new FTE were being added for the Colorado Trails and Colorado Benefits Management System development. These FTE were generally dedicated to only the development of those systems. The 6.0 FTE cut from the Long Bill in FY 2007-08 are carried back to FY 2003-04 as a more accurate depiction of employees versus FTE; in other words, funds available were inadequate to hire up to the full allocation of FTE.

The background and the FTE analysis in Table 1 above represent the foundation of the request. Additionally it should be noted that some of the information provided in this request was the result and findings from an independent Workload Assessment Study that was commissioned by OITS for the area of Technical Operations. This study was performed by an independent contractor in 2006 and early 2007. The final report was submitted to OITS on March 21st, 2007. This analysis was a descriptive baseline of the workload requirements of the staff within the Technical Operations work unit.

In the next section, Comprehensive Breakdown of the Request, the Department examines both quantitative and qualitative aspects beyond FTE growth.

Comprehensive Breakdown of the Request: The Department is requesting $168,125 and 2.4 FTE in FY 2008-09, annualizing to $347,592 and 5.0 FTE for 12 months in FY 2009-10 as the first of multiple phases based on a number of factors including growth in the ratio of department and county personnel that each OITS employee must support either directly or indirectly.

Indirect Staff Support

Indirect staff – accounting, human resources, budget, compliance and information technology to name a few – are typically the first to be cut during lean economic times and the last to be reinstated during growth years. It should be noted that reductions in staff can stimulate out of necessity more effective work processes and force people to work smarter and prioritize work activities. However, in most instances there is a breakeven point at which the quality of service begins to degrade for the sake of efficiencies. The growth and evolution of the organization outpace the point-in-time efficiencies gained from earlier staff reductions.

In the area of information technology, one such efficiency was pooling of resources when the Department moved from the Matrix to a centralized model of organizational support. Through centralizing staff, the Department better utilized all individuals in supporting the entire enterprise. In addition, the Department has implemented other efficiencies. For

example, it reengineered its management of infrastructure support, which reduced costs. The Department also moved from a "thick client" to a "thin client" model of supporting county workers. The thick client model required that each version of a software upgrade be "pushed out" to users in the field. This model is more labor intensive because not all counties have identical hardware and software standards, which increased the propensity of failures during such upgrades. Not all workers were logged on or available due to normal absences during such upgrades and this also created difficulties in smoothly upgrading clients in the field. As a result, there was often a heightened strain on resources during software upgrades to Colorado Financial Management System, Colorado Trails and Colorado Benefits Management System (to name the largest utilities supported at the county level). By switching to a thin client model, clients log into the portal / network where software upgrades are implemented centrally thus mitigating resources strains for DHS OITS.

Growth of OITS' Customer Base and External Workload Demands

Despite the efficiencies above, supporting increasing levels of individuals is an independently measurable workload burden which in short order erodes the gains from planning and implementing smarter service provisions. This workload has been exacerbated in recent years by three significant factors: the complexity of new information systems being implemented, new external considerations such as HIPAA and Information Security and expanding program support requirements.

Depending on one's information source, the Department handles at least 10,000 and as many as 11,000 work requests each month related to individual account access. The number of users has grown over several years with the implementation of Colorado Works and Colorado Benefits Management System, but what is most remarkable is that county turnover rate each year is about 25 percent. As well, Department turnover is also at a very high level as anecdotally indicated by the length of time it takes to make an ordinary hire (60 days or more). In addition, individuals transfer to new positions and new positions are being created as the budget situation has improved since the passage of Referendum C—which has added Department staff. For several years, the Department's

average time for setting up a new individual with a correct IT security profile and password is five (or more) days. Table 2 below (Idle Employee Impact) estimates the lost paid time between the state and counties from employees not having immediate access to computing resources:

Table 2. Idle Employee Impact

Assumptions	Calculations
Number of new users annually	10,000
Number of days to set up new employees (security profile / passwords)	5
Number of hours in five days (assumes that not all workers are full-time)	38
Gross hours	380,000
Assume new employees will need computers only 10 percent. Rest of the time is doing reading, training, other activities, and communicating by phone.	38,000
Assume average employee (state and county) annual salary is $42,000 / year	$ 42,000
Hourly rate =	$ 20
	(38,000 hrs X $20 per hour)
Paid time lost due to not having access to computing resources	$760,000

Basic Assumptions for Table 2: *The DPA FY 2005-06 workforce report (Web location: http://www.colorado.gov/dpa/dhr/workforce/docs/workforcereportFY06.pdf) indicates that the average state employee salary is over $47,000 per year. The analysis above uses $42,000 per year to account for some employees being part time and it assumes that generally county employees will be paid less than state employees. One could use just about any metric to analyze the impact from the average five days with computer access and the impact would be notable. Across the Department there are parallel analyses to support the conclusions above. For example, one could perform a similar analysis on the cost in overtime and shift differential for the length in time it takes to fill positions in the Department's 24-hour facilities (Youth Corrections, Mental Health Institutes and Regional Centers). Not having all employees available and not being able to allow employees to perform certain activities are related in that the State (and counties in this request) is incurring costs unnecessarily.*

New systems have heightened security administration requirements. Setting up a new employee is not as simple as inputting a name into a utility and issuing a password. CBMS, for example, has about 100 unique security profiles depending on the individual and the fact that technicians work on many social services programs and not just one as

was generally the case prior to CBMS implementation. In fact, since Client Oriented Information Network (COIN) and the other predecessors to CBMS were "green screen" applications that simply accepted previously calculated data and functioned as payment utilities, the previous level of security is nowhere close in comparison to that of CBMS. In addition, Colorado Trails is an equally complex security environment. As new people are hired or transfer between jobs, each individual's job responsibilities have to be taken into consideration when granting them security access.

The Health Information Portability and Accountability Act (HIPAA) has placed new information security requirements on agencies. New funding was provided to make technology system improvements to bring the Department into HIPAA compliance. New FTE were provided at the Executive Director level for oversight of the program. What is not accounted for is the "sliver" of new business requirements (not unlike the sliver of incremental workload from new system security requirements) and compliance cognizance that workers, including in the technology arena, must absorb into daily routines and add to the business requirements in making programming or other technology changes / upgrades.

With the creation of the Chief Information Security Officer program (H.B. 06-1157) there were implemented 19 new security rules that Departments must comply with. The passage of S.B. 07-239 did not include new funding as required by H.B. 1157 and Department efforts to review security of information systems and remediate any security gaps becomes an unfunded workload burden. The Department, because of security requirements driven by its new information systems (Colorado Trails, CBMS), by its need to be HIPAA compliant and because many business units must interact with the Medicaid MMIS, might have a more mature security profile. Therefore, one could assume its remediation efforts might not be as work intensive as other agencies. Nevertheless, rules are rules. They drive changes to agency rules and, in turn, to business requirements of the agency and to its county partners. At some level, these new mandates, which are not funded, will drive a new sliver of workload that was not previously present.

S.B. 06-063, Information Technology Procurement, added new demands on the Department in how it plans and implements large, high risk technology projects. The Department supports the principal of well-managed technology projects. There is added workload, however, because of the expectations driven by this new legislation. Because so many of the Department's programs are complex and often reach across programs, may span over several fiscal years, and often involves other state agencies, any new statutory requirements are an additional sliver of work that must be integrated into procurements and project planning, budgeting, development and implementation.

Direct Program Support Capability

Program support is yet another area that has been stretching CDHS OITS capacity to adequately support the Department. Table 3 below shows the trend in program growth over time.

Table 3. Trend in Program Growth

DHS Long Bill	2000 S.B. 215	2001 H.B. 1451	2002 S.B. 212	2003 H.B. 1420	2004 S.B. 258	2005 H.B. 1422	2006 S.B. 209	2007 H.B. 1385	2008 S.B. 239
Line Items	158	172	172	173	174	173	176	180	176
Footnotes	58	70	66	69	59	36	43	48	45
Total OITS LB FTE	119.1	149.2	177.5	165.7	145.1	138.3	135.3	134.3	134.3

Basic Assumptions about Table 3: *Vocational Rehabilitation line items have been excluded from the count since OITS does not provide direct support for this business unit except at the 1575 Sherman location. Not every line item is a program per se and the Department acknowledges that line items come and go, are consolidated and then broken out into more detail. The purpose of Table 3 is merely to demonstrate that line items are an indicator that all funding levels for the Department have varied over time, programs for the most part remained relatively unchanged. This is due to the fact that generally the Department chose to reduce program scope or clients served during the recession rather than eliminate programs wholesale. Footnotes, as well, do not always drive IT workload. Furthermore, some footnotes are specifically requested by the Department to provide spending flexibility for certain line items. One can still properly assume that some portion of footnotes will drive IT efforts to produce ad hoc reports and that the Department is typically not provided funding to produce footnote reports.*

What Table 3 demonstrates intuitively is that even through the recession, the number of programs (tracked here through a count of Long Bill line items) has remained relatively stable. Like DHS programs department-wide, DHS OITS' budget lines were reduced. However, the number of programs did not go away. These programs, though they may have been reduced in scope, still required IT support in form of programming and reporting requirements, as these programs were still beholden to state and federal oversight requirements. One might even argue that during the recession programs received even more scrutiny, as efficacy and outcomes are measures used to prioritize budget reductions. Nevertheless, Table 3 demonstrates that OITS FTE were being reduced but program totals were remaining relatively stable.

What is also shown (to a lesser extent) in Table 3 is the impact to the Department from reporting to the Legislature. Although the total number of footnotes was reduced by nearly 39 percent from the 2004 to the 2005 long bills, footnotes have increased by 25 percent between 2005 and 2008. The 2008 number is exacerbated further by the Legislature's override of the Governor's veto, which translates to more overall footnotes that must be responded to by the Department. While IT is not involved in all footnotes, many of them do require specialized reporting that drives programming requirements. In addition, increased federal scrutiny of DHS programs – residential treatment centers, the HCBS waiver program, food and nutrition programs (to name a few) – in one way or another drives an IT response in the form of adopting new or revised reporting requirements in order to continue to support the Department's and client's access to precious grant programs.

Grant programs are another programmatic area that has placed pressure on DHS OITS. With the exception of some programs that receive legislative oversight through state statute, many more federal programs drive workload even though they are not captured in the Long Bill. One remarkable requirement of most state grants is a long adopted policy that such grants will not in the future create a General Fund burden on the State. What this policy does is to require the Department (and, in turn, IT where such support is needed as part of the grant) to absorb such costs. Therefore, without receiving any

additional resources, IT will provide programming or reporting support to its customers less the customer loose access to the grants that often make up some of the gaps in State funding.

Total Quality Department Support Capacity

While this section deals in more qualitative matters, it speaks to an essential element of how over the long term we want to move from providing reactive-adequate service to adequate-proactive service to the clients.

The Department facilitated team meetings within its OITS division in 2006 and discussed barriers to providing adequate services to customers and to managers in achieving their organizational goals. The following is summary of those meetings and recommendations. It should be noted that many of these items are of a nature that improved processes and practices can be accomplished by actions from current employees. However, in the current environment, the issues are largely driven by workload and a deficit of human resources that creates a reactive versus a proactive working culture. The effort to satisfy minimum customer requirements results in only basic services. Many qualitative or added value activities cannot be accomplished. To provide an adequate level of the qualitative activities listed below it was determined to drive approximately 3 hours a week or 12.4 hours in a month per employee.

Communications. There is not enough time to effectively communicate with customers on project requirements. Because of time pressures, communications are rushed between OITS delivery services and customers receiving the services. This sometimes results in a mismatch between the product delivered and customer expectations. When this occurs, an unnecessary amount of additional effort must take place to remediate miscommunications.

> **Benefit from additional human resources:** *Better and more routine interactions with customers will assist OITS staff to better understand customer needs and their expectations will be more consistently met.*

Customer Service. There is not enough time for customer follow-up after services are provided. The customer is unable to benefit from training on products, which results in more technical assistance calls. Customers are unaware of the full array of services available from OITS as well as policies and procedures.

> **Benefit from additional human resources:** *Customer services would be planned and managed and less reactive. Quality assurance would become a routine part of the customer relationship because OITS would be able to follow-up with the customer, understand better what worked or didn't work, making the necessary adjustments in practices closer to real time and universally across the division.*

Consistency. Services to and communications with customers are inconsistent. This is more a sub-category of communications and customer service.

> **Benefit from additional human resources:** *OITS managers' time would be freed up to add value to processes, procedures and service delivery through documented policies and procedures, consistent training and more frequent evaluation of the efficacy of policies and procedures. Misunderstandings would be reduced because roles, responsibilities and expectations would be more clearly articulated.*

Bottlenecks. Inconsistent policies and procedures and sometimes a lack of engagement of office managers and / or project / business area sponsors, result in projects stalling, or incurring frequent stops and starts, in which projects sometimes take months to complete.

> **Benefit from additional human resources:** *Well written policies and procedures, consistently followed. Managers and project sponsors would be more engaged in end-user, business needs. It would ensure that customer needs are in proper alignment with department and office goals.*

Tools. Lack of resources to adequately research and choose the appropriate tool required has resulted in too many tools that require remarkable maintenance. Some tools are acquired and supported but then not used optimally or not at all.

> **Benefits from additional human resources:** *Creation of a comprehensive New Tool Purchase Business Process that would better evaluate the added value from the desired tool. Customers could be better trained on tools so that they can be better integrated into work routines. Better planning behind tool acquisitions would result in more common and shared services, reducing the overall number of tools that require OITS time and support.*

Documentation. There is a lack of resources to thoroughly document projects and to transfer knowledge among employees. This results in project details that are not properly recorded and thus adds risk to long-term maintenance of the product. Employees that do not benefit from knowledge transfer require more training and do not adequately understand customer business needs.

> **Benefits from additional human resources:** *Management would be freed up to plan better for employee departures through cross training and ensuring that employee routine activities, projects managed and deliverables are well documented. Finally, better project documentation lends itself to customers being more informed about the product and this will reduce technical assistance calls.*

Consequences if Not Funded:

The Department continues to grow in human numbers (state / county employees and clientele) and complexity. If this request is not funded it will merely result in the status quo: policies and procedures will not be documented resulting in inconsistent delivery of services and products and adding risk to projects both during development and upon implementation; processing of routine requests for passwords and security permissions will continue to take several days resulting in periods of state and county employee idleness; procurement of tools that are under-utilized or otherwise not needed; and, project delays because of a lack of engagement of management and ineffective

communications between customers and OITS employees. The OITS will continue to be more reactive rather than proactive in supporting the Human Services enterprise because services and products will be delivered as a series of inefficient tasks. The ability of OITS to effectively support department-wide technical needs, to support programs comprehensively and to add value to services will continue to be stressed and compromised.

Calculations for Request:

Table 4. Financial Summary of FY 2008-09 Request

Summary of Request FY 08-09	Total Funds	General Fund	Cash Funds	Cash Funds Exempt	Federal Funds	Medicaid Cash Funds	Medicaid General Funds	Net General Fund	FTE
Grand Total	**$168,125**	**$126,550**	**$733**	**$16,410**	**$24,432**	**$6,552**	**$3,276**	**$129,826**	**2.4**
Personnel Services (less pay date shift)	$144,944	$108,187	$718	$15,250	$20,789	$5,596	$2,797	$110,984	2.4
Operating	$19,650	$15,630	$0	$815	$3,3205	$815	$408	$16,038	
AED	$2,404	$1,861	$10	$235	$298	$96	$48	$1,909	
SAED	$1,127	$872	$5	$110	$140	$45	$23	$895	

Table 5. Financial Summary of FY 2009-10 (Out Year)

Summary of Request FY 09-10	Total Funds	General Fund	Cash Funds	Cash Funds Exempt	Federal Funds	Medicaid Cash Funds	Medicaid General Funds	Net General Fund	FTE
Grand Total	**$347,592**	**$269,189**	**$1,469**	**$33,660**	**$43,274**	**$13,925**	**$6,963**	**$276,152**	**5.0**
Personal Services	$336,530	$260,524	$1,442	$32,847	$41,717	$13,475	$6,738	$267,262	5.0
Operating	$4,750	$3,778	$0	$197	$775	$197	$99	$3,877	
AED	$4,809	$3,723	$21	$469	$596	$193	$96	$3,819	
SAED	$1,503	$1,164	$6	$147	$186	$60	$30	$1,194	

Assumptions for Calculations:

Table 1 provides an estimate of the growth of customers that each OITS FTE is responsible for supporting. One might consider in the first instance the following formula:

64.8 customers / FTE in FY 2007-08
53.4 (minus) customers / FTE in FY 2003-04
11.4 additional customers per OITS FTE added since FY 2003-04

A simple remediation for this impact can then be calculated using this simple algebraic formula:

53.4 / 145.1 = 64.8 / X (where X is the number of FTE to support the growth in state / county customers)

X = (64.8 * 145.1) / 53.4

X = 176.1 FTE

Therefore:

176.1 (assumed number of FTE needed to fully support the growth in state / county customers)
134.3 (minus) FTE from Table 1
41.8 new FTE that one might consider from the formula

41.8 FTE is what one might oblige should one accept all assumptions behind Table 1 and in addition to those numerical assumptions include the qualitative issues discussed after Table 1. This is but one alternative to consider.

The Department recognizes that in the current fiscal environment 41.8 FTE no matter how well justified or appropriate is excessive. The Department must always balance its

requests against other priorities that also merit scarce financial resources. In addition, there are other analytical considerations that would tend to reduce the total number of FTE calculated above. First, OITS has been more effective in how it allocates its FTE time and efforts. While several factors work against these efforts and arguably can only be addressed through some level of human resources, the Department assumes and has determined in a separate analysis, that it would not need all 41.8 FTE. Second, not all OITS FTE provide direct customer support. Managers must focus a substantial part of their time with higher-level policy, budget and personnel issues as well as coordinating and planning in conjunction with their peers. Furthermore, as noted above, the Department has provided below an activity-based approach to more quantitatively support its request.

Table 6 details which FTE are requested as part of its FY 2008-09 budget request. This requested breakdown and number of FTE positions within the Technical Operations group was a result of the recommendation from Workload Assessment Study mentioned earlier in the document.

Table 6. Summary of Department IT Resources for Budget Request (5.0 FTE)

Technical Operations FTE – General Departmental Support					
FTE	**FTE position**	**State Class**	**Programs/Systems /Divisions Supported**	**Offices Supported**	**FY09 FTE Requested**
1.0	Telecommunications	IT Pro III	All except DVR remote offices	All except DVR remote offices	1.0 IT Prof III
1.0	Database Services	IT Pro III	All except DVR remote offices	All except DVR remote offices	1.0 IT Prof III
2.0	Desktop Services	IT Pro III (2)	All except DVR remote offices	All except DVR remote offices	2.0 IT Prof III
1.0	Server Support Services	IT Pro III	All except DVR remote offices	All except DVR remote offices	1.0 IT Prof III

The list below reflects those FTE positions that have been identified for possible future budget requests.

- 1 FTE Telecommunications
- 1 FTE Database Services
- 3 FTE Desktop Services
- 1 FTE Server Support Services
- 2 FTE Security Access Services
- 1 FTE Disaster Recovery / Continuity Of Operation / Pandemic Planning
- 2 FTE County Infrastructure.
- 2 FTE Developer/Staff Authority
- 1 FTE Developer/Quality Assurance
- 2 FTE Developer
- 3 FTE Project manager/Project lead
- 1 FTE Web Developer

The OITS provides support to a diverse clientele at the CDHS. Agencies/programs supported by all work units with the OITS include:

Administrative Services	Information Technology Services, Performance Improvement, Administrative Review Division, Audit Division, Boards and Commissions, Communications, County Commissioner Liaison, Developmental Disabilities Council, Employment Affairs Divisions, Field Administration , Food Stamp Quality Assurance, Legislative Liaison, Work Force Development.
Office of Operations	Accounting, Contracts Management, County Administration Allocations, Facilities Management, Procurement.
State-wide Applications in Support of County Administered Programs	Children Youth and Families – Trails, Colorado Benefits Management System, County Financial Management System, Help Desk.
Office of Adult, Disability and Rehabilitation Services	Aging and Adult Services, Developmental Disabilities Services, Regional Centers, Vocational Rehabilitation staff located at central downtown site.
Office of Self-Sufficiency	Disability Determination Services, Child Support Enforcement, Colorado Works Program, Domestic Assistance Abuse Program, Colorado Works (TANF) Rule, Employment First, Food Distribution Program, Refugee Services, Low Income Energy Assistance Program (LEAP).
Office of Behavioral Health and Housing	Alcohol and Drug Abuse (ADAD), Colorado Mental Health Institutes, Division of Mental Health, Supportive Housing and Homeless Program.
Children Youth, Families	Child Care, Child Welfare, Youth Corrections Services Centers – Adams, Gilliam, Grand Mesa, Lookout Mountain, Marvin W. Foote, Platte Valley, Pueblo, Spring Creek, Zebulon Pike.
State and Veterans Nursing Homes	Fitzsimons, Florence, Homelake, Rifle, Trinidad.

Individual Task Based FTE Calculations:

1.0 FTE Telecommunications. The Telecommunications Services team maintains a wide area network (WAN) of switches, routers, hubs and leased high-speed circuits, which carries the following types of data and video communications traffic:

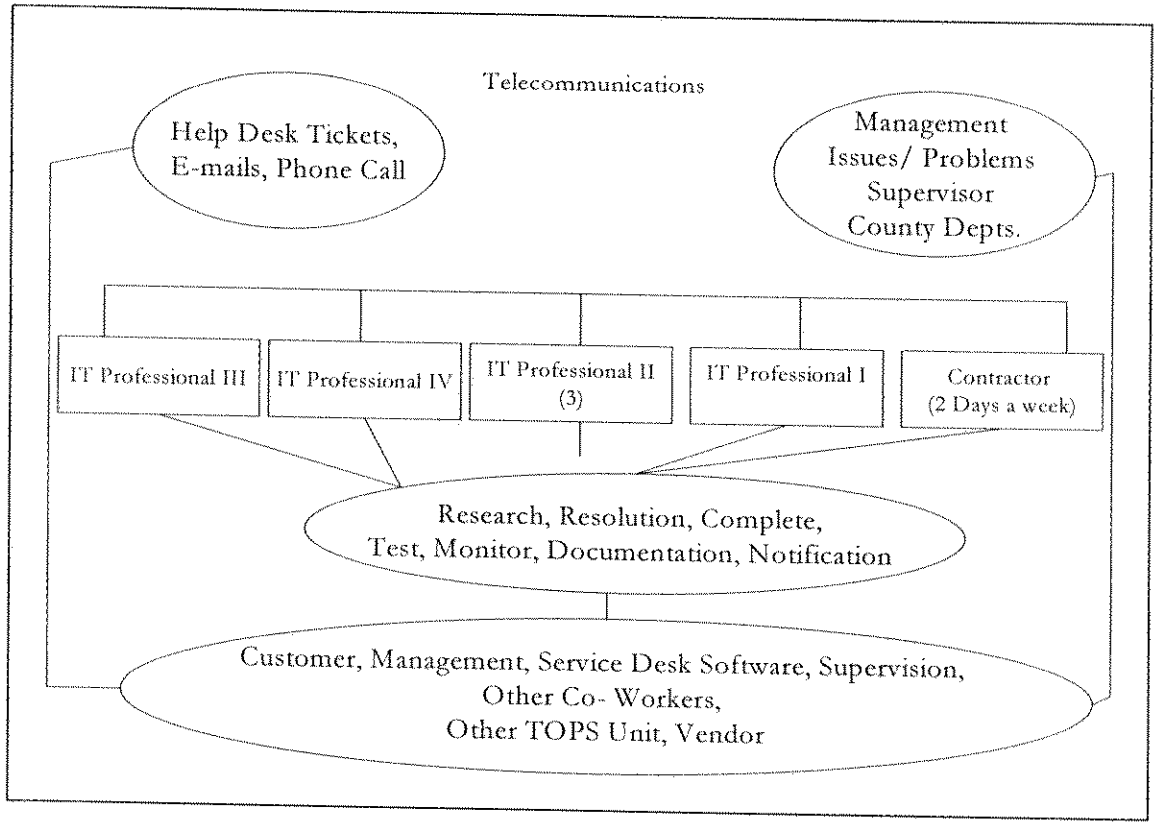
Data Traffic: File server connectivity, Internet/Intranet connectivity, e-mail service and remote client access to databases (such as CBMS and TRAILS) stored on centrally located servers and Storage Area Networks (SANs), comprises the majority of network traffic. The WAN also provides a pathway for OITS to administer CDHS servers and client computers, install service packs; software upgrades and patches, and obtain software updates, all from a centralized location.

Video Traffic: Streaming audio/video signals, in support of video teleconferencing, is a small but bandwidth-intensive, delay sensitive component of CDHS's communications traffic.

Telecommunications maintains over 400 main pieces of network equipment, including hubs and switches. There are approximately 300 switches in use and 17 hubs still due for replacement.

Table 7 demonstrates the workflow for the Denver unit and Pueblo unit:

Table 7. Telecommunications Work Flow



The Telecommunications Services team has employees located in Denver and Pueblo. The Denver office is comprised of 3 full time FTE's, 1 part time FTE, 1 part time contractor (who works 10 hours per week) for a total of 5 Telecommunications employees, and the Pueblo office is comprised of 2 full time FTE's with both units reporting to the Security, Database and Telecommunications Manager.

Table 8 details the workload generated by this unit's customers.

Table 8. Time Breakdown of Telecommunications Services' Tasks

TASK	Hours per Month
Help Desk Tickets, Firewall Variance Requests, Wiring Requests (full support including vendor interaction), Make Changes to allow Traffic in	286
Researching and Support of New Tools and Technologies	23
Tool Maintenance and Troubleshooting	14
Maintain and troubleshooting issues/problems coming in through Firewalls including detection of intrusions and intrusion protection	81
Intrusion Detection - Analyzing information that is Entered, Alert verification (weeding through false alerts), Update the firewalls to prevent false alerts, Firewall code upgrades and testing, Create/Review reports	145
On Site Wire Request and Inspection for Voice and Data	43
Liaison with facilities on new projects	8
Short-term Telecomm Projects. Examples include: Voc Rehab Phase 1 and Phase 2 – 2 new sites DYC Building Configure and Install – 10 switchers and 4 routers equipment (refreshed) CiscoView / Cisco Works Project	163
Troubleshoot frame relay and ATM circuits. Respond to downed networks after hours.	4
Provide analysis for the development and implementation of various LAN/WAN technologies for CDHS	2
Installation of switches, routers / Router and Switch Configurations, Schedule an outage, documentation	176
Modem Configuration, Train Customers, Trouble shoot with equipment after installed	21
Equipment Configure, test, scheduled, travel to install, install, test	21
DSL Circuit Orders	21
Provide technical support for voice communications for CDHS. Assist in insuring all DHS telephone systems are installed and maintained properly. Assist customers by matching voice communication and data needs with technical solutions.	324
Wireless Deployment Project, Air Magnet Wireless Monitoring Tool	162
Vendor Liaison	8
Document into Solar Winds	8
Status Report/EPM Reports	17
Estimated time to complete various qualitative items detailed above that current telecomm staff are unable to complete partially or in their entirety due to staff shortages.	87
Total Hours (7 Staff)	**1,614 Hours / Mo.**

The calculations above represent the average staff time to complete the respective tasks. Tasks are often delayed due to routine staff absences, the availability of all staff due to competing priorities, conflicts arising due to department and other external factors [meetings, information requests (briefing / hearing documents, queries, etc.), reports and fiscal notes]. The calculations represent delays (time customers must wait). The qualitative amount of 87 hours for 7.0 FTE was the estimated amount of time per FTE (12.4 hours per month roughly) to complete these added-value tasks. In addition, though the total hours exceeds previously calculated need of 2.0 FTE in the long term for OITS (and 1.0 FTE for this request), it essentially acknowledges that amounts above are estimated averages in which there will be periods of more activities as well as periods of fewer activities.

14,560 Commonly accepted hours for 7.0 FTE (2080 hours / year)
19,368 Total calculated task hours for 7.0 FTE in a typical year
5,808 Difference is hours needed equivalent to 2.8 FTE (Request FY 2008-09 1.0 FTE)

Calculations for all 5.0 FTE are provided at the end of this section

1.0 FTE Database Administration. This section is comprised of 6 database administrators who report to the Security, Database and Telecommunications Manager. The Database Administrators are responsible for the software installation/maintenance of the following:

Databases	Oracle, SQL Server 2000 and 2005, MySQL
Web Servers	Internet Information Services (IIS), Apache
Middleware	Oracle Application Server
Report Writers	Business Objects, Crystal Reports, LogicXML
Web/Development Software	Visual Studio Contribute Contribute Publishing Server, PHP Microsoft .NET Framework Component Art, Moodle
File Transfer Software	SSH Tectia
Unicenter Service Desk	

The Technical Operations' Database Administrators provide support for the InterSystems Cache Database (does not install) and the following application software: Avatar DSS, Emphasys Elite, Enterprise Project Manager (EPM), and MS Access.

The Database Administration Unit manages databases written using: Microsoft SQL Server 2000, InterSystems Cache Database 5.0.2.607 (a proprietary system), MySQL 5.0 (an open-source database) and Oracle 9.0.2.

Table 9 demonstrates how work flows into this unit:

Table 9. Database Administration Work Flow

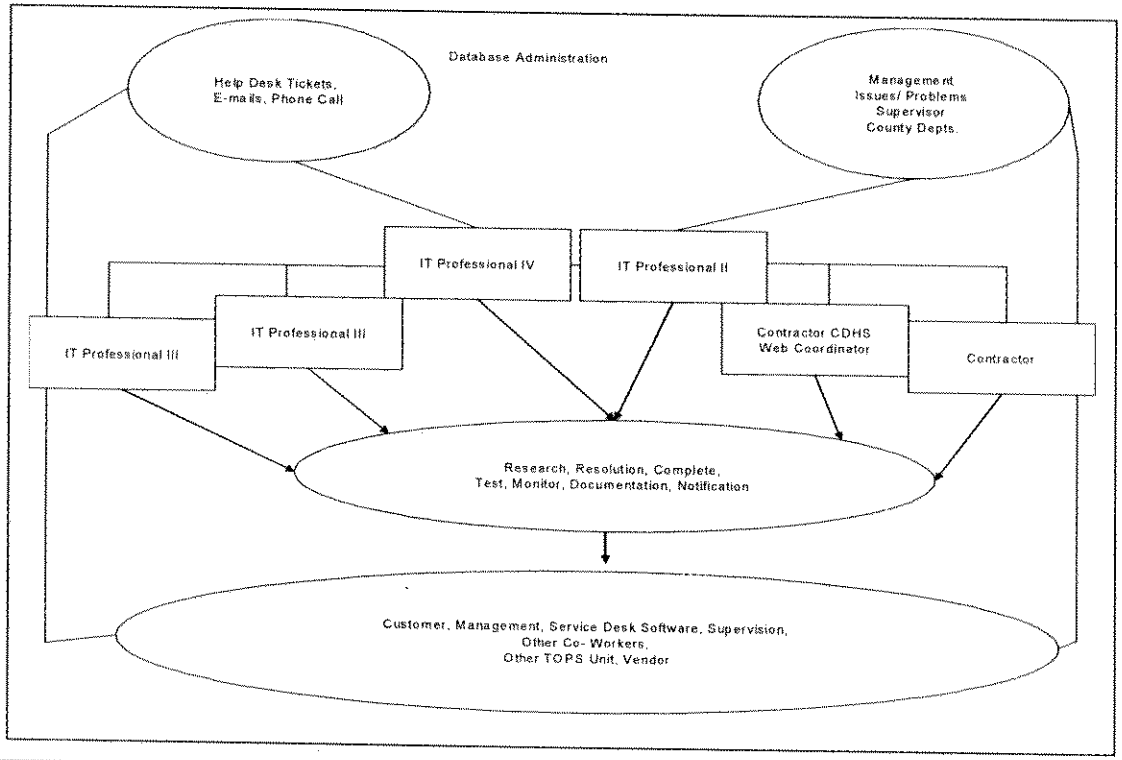


Table 10 details the workload from Database Administration tasks that were identified along with the results of the work analysis for this unit.

Table 10. Database Administration Task Workload

TASK	Hours per Month
Information Technology Services / Tech Support	40
CDHS HIPAA Security Remediation & Monitoring	10
Avatar System Support, DSS Support, Unix System Administration	48
ADAD TMS / DD CCMS System Support	168
SHHP, MH & ADAD Program Support	74
Project Management, Customer Service Contact	27
Building and Supporting the Web/database/application servers. Including IIS, Apache, Contribute; Database Administration and monitor usage; Backup and Restore; Oracle Database; DB Security; Data Conversion; Building and configuring Web sites (over 75), Site clean up; Standards; Design and Training, Maintenance, Troubleshooting CDHS Intranet/Internet and CBMS Broker/Infomove	442
System Administration OS Install and Maintenance	32
Memory and Disk Management	20
Hardware/Software Troubleshooting (solve, document)	20
DTC Management	13
Users Account Setup	13
Revise and maintain security policies, procedures and standards on all supported systems	39
New system tools implementation and Research	13
EPM – Time Entry/Tracking System Administration	11
EPM – Hardware/software support	13
Mainframe – Top Secret Administration, program files management	34
Database Administration Duties on Microsoft SQL Server, Oracle, Cache, and MySQL Databases	129
Installing Patches for SQL Server and IIS	26
Moodle Training System	5
Maintain Broker links	13
Documentation, Standards, Policies	20
Help Desk Ticket System, Maintenance and Upgrade	143
Status Reports/EPM Entry	15
Qualitative items for 6.0 FTE (see descriptions above) at 12.4 hours per FTE / month	74
Total Hours (6.0 FTE)	**1,442 Hours**

The calculations above represent the average staff time to complete the respective tasks. Tasks are often delayed due to routine staff absences, the availability of all staff due to competing priorities, conflicts arising due to department and other external factors [meetings, information requests (briefing / hearing documents, queries, etc.), reports and fiscal notes]. The calculations represent delays (time customers must wait). The qualitative amount of 74 hours for 6.0 FTE was the estimated amount of time per FTE (12.4 hours per month roughly) to complete these added-value tasks. In addition, though the total hours exceeds previously calculated need of 2.0 FTE in the long term for OITS (and 1.0 FTE for this request), it essentially acknowledges that amounts above are estimated averages in which there will be periods of more activities as well as periods of fewer activities.

12,480 Annual Hours for 6.0 FTE based on 2,080 hours/ year
17,304 Hours to complete all tasks for 6.0 FTE including overtime and task delays (customer wait times)
4,824 Total hours need in long run equivalent to 2.3 FTE (FY 2008-09 Request is 1.0 FTE)

2.0 FTE Desktop Services. The requested FTE supports the Regional Desktop Support Services, one of two units under Network Services – Server Support Services (1.0 FTE are requested below for this unit) and Regional Desktop Support Services. Network Services is managed under a single manager, while the two work units also each have a dedicated manager.

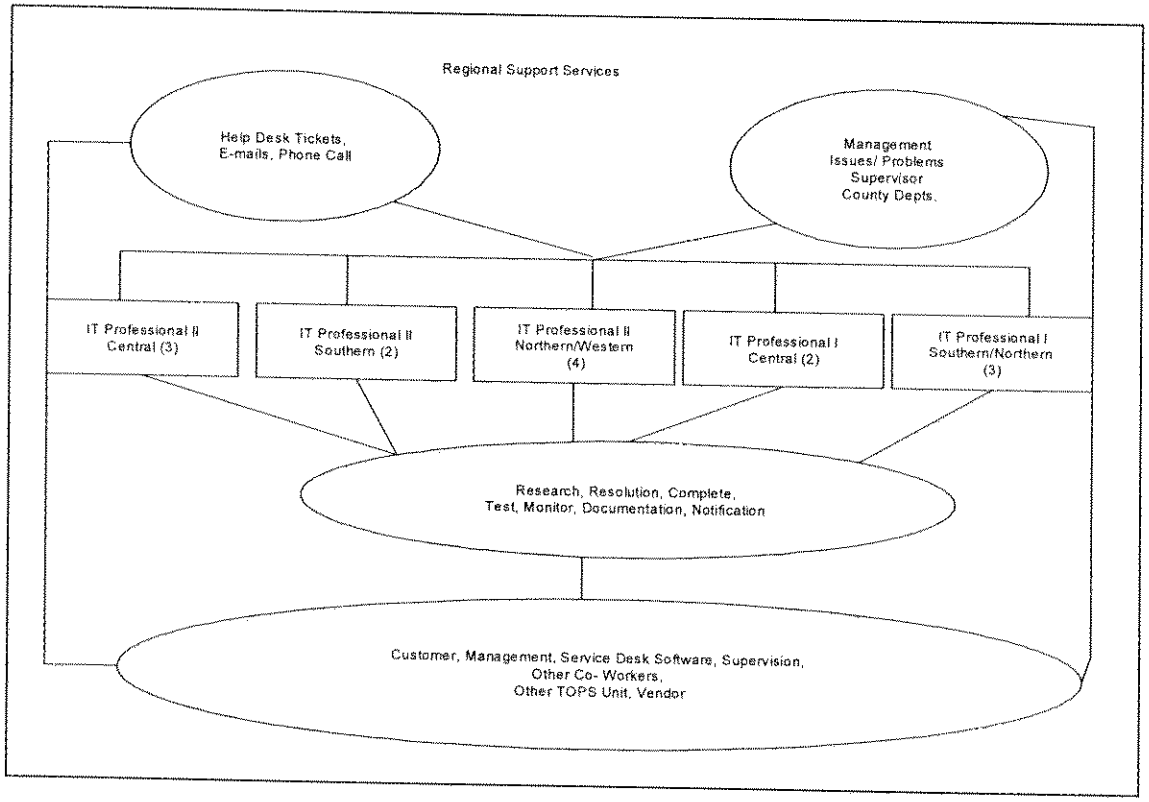
The Regional Desktop Support Services (DSS) manages the purchasing, leasing, licensing and support of desktop computers, mobile computing devices, printers, operating systems, remote access software and application software.

The Regional Desktop Support Services Unit has an OITS Manager located at the Human Services building, 1575 Sherman Street, Denver, who reports to the Network Services OITS Manager. The Regional Desktop Support Services Unit Manager supervises a total of 14staff: Central Region has 5 employees (FTE's), the Western Region has 1 employee

(FTE), the Northern Region has 5 employees ((FTE's), and the Southern Region has 3 employees (FTE's).

Table 11 describes the workflow of this Regional Desktop Support Services:

Table 11. Regional Desktop Support Services Work Flow



The Regional Desktop Support Services Unit provides services to a large number of customers. There are 3100 Local Area Network (Novell) user accounts that are supported within the Colorado Department of Human Services.

The types of activities that Regional Desktop Support Services supports on an ongoing basis are generalized below in Table 12:

Table 12. Generalized DSS Activities

Regional Support Services
Desktop Management
Help Desk tickets
Rental Coordination
Software/Hardware Approvals
LAN User Account Management
Site Wiring Coordination
Server Backup
Help Desk Policies/Procedures
Infrastructure Reporting
Desktop/Printer Inventory
Local application deployment
Desktop imaging
Desktop standards
Printer standards
Disaster Recovery Contingency Plan
Installation of Hardware: o Printers o Handheld Devices(BlackBerry, Palms, etc.) o Scanners

Table 13 provides a detailed breakdown of the workload for 14.0 FTE generated by the Regional Desktop Support Services customers and other departmental or external requirements.

Table 13. Regional Desktop Support Services Workload Tasks

TASK	Hours per Month
Master Rental Coordinator: Follow up on customer orders and installs for all regions, Issues/problems DOA – swipe out equipment	212
Primary Infrastructure Reporting (May – Sept of every year)	78
Service Help Desk Tickets	1277
Coordinator Projects: Moves (Ft Logan to downtown), Licensing, Follow up with Customer	32
MC Installs	292
Prepare Hardware/Software: Paperwork for Approval Request – research request to verify it meets standards, Approve process	22
Regional ARCserve/Storage SVM Lead – working with technical engineers, upgrade of servers, upgrade of drives and SVM appliances, reviewing technical briefs of products, strategy of backup and storage	93
Provide Assistance with SNA – Server Maintenance/repair, upgrades	22
Project Planning – preparing project plan, delivering project, project follow-up and lessons learned. General Coordination.	63
Budgeting – budget preparation for infrastructure reports, project estimates, hardware and software cots for annual and three year planning	9
Documentation – creation, review, maintenance and follow-up	143
Database Management – creation, review, maintenance and follow-up of laptop database, server list, Arcserve licenses, hardware and software licensing and maintenance.	14
Training and Presentations – Arcserve, SVM, PC Encryption, one-day training or half day training sessions. Presentations on backup and storage direction, encryption project, other RSS projects as needed.	14
Regional Backup ARCserve Coordinator	46
SME Hardware/Software	48
Regional Patch Management	68
Regional NDPS Printers	69
Regional Image Team	96
Regional Primary Software Compliancy Coordinator	47
Disaster Recovery Task Force	8
Regional Back-up Rental Coordinator	41
Backup Maintenance	15

TASK	Hours per Month
CR Locks	25
Blackberry Support	30
DITP Report Department Information Technology Report – gather information into one report for OITS management. Report contains: Infrastructure billing information (user ids, # computers, etc), Departmental Printer expenditures, Software Licensing expenditures and Network Server hardware and software expenditures.	10
Administrative function - Primary Imaging Systems Printer Contact – Contacting vendor to customer to resolve issued regarding repairs/cost/contract time frames, reports, etc.	31
After Hours Support – (On call 24 *7) Answering emergency calls.	40
Tape Backup System Responsibilities	26
Inventory Process Maintenance	16
Rogue Process Control Maintenance	8
Creating ZEN applications and WinBatch Programs	135
Southern Region Lead responsibilities (Assigning and Administering Help Desk Tickets, answering customer's questions, etc.)	61
Programming the telephone switches, replacing telephones, communicating with customers, coordinating service, maintaining 3 telephone databases.	95
Wiring Vendors Contact	81
Traveling to Nursing Home Sites: Homelake, Trinidad, Florence	11
Programming Door Locks	3
Regional Backup ITM	27
Technical GroupWise Administrator	20
Iron Mail – Backup	2
Regional Backup Remote Access	5
Anti-virus Lead	39
Northern Region Lead responsibilities, Computer Room Changes, Fire Alarm Upgrades, working with other techs on help desk ticket solutions.	47
Qualitative items for 14.0 FTE (see descriptions above) at 12.4 hours per FTE / month	174
Status Reports/EPM Entry	42
Total Hours (14.0 FTE)	**3,637**

The calculations above represent the average staff time to complete the respective tasks. Tasks are often delayed due to routine staff absences, the availability of all staff due to competing priorities, conflicts arising due to department and other external factors [meetings, information requests (briefing / hearing documents, queries, etc.), reports and fiscal notes]. The calculations represent delays (time customers must wait). The

qualitative amount of 174 hours for 14.0 FTE was the estimated amount of time per FTE (12.4 hours per month roughly) to complete these added-value tasks. In addition, though the total hours exceeds previously calculated need of 5.0 FTE in the long term for OITS (and 2.0 FTE for this request), it essentially acknowledges that amounts above are estimated averages in which there will be periods of more activities as well as periods of fewer activities.

29,120 Annual Hours for 14.0 FTE based on 2,080 hours/ year
43,644 Hours to complete all tasks for 14.0 FTE including task delays (customer wait times)
14,524 Total hours need in long run equivalent to 7.0 FTE (FY 2008-09 Request is 2.0 FTE)

1.0 FTE Server Support Services. The requested FTE supports the Server Support Services unit, one of two units under Network Services – Server Support Services and Regional Desktop Support Services. Network Services is managed under a single manager, while the two work units also each have a dedicated manager. The Server Support Services unit consists of a manager and three (3.0 FTE) employees.

The types of activities that Server Support Services supports on an ongoing basis are generalized below in Table 14:

Table 14. Server Support Services General Responsibilities

Server Support Services
Server Management
Novell NetWare
Microsoft Windows 2000/2003 Server
Standards/maintenance management
Security Administration
GroupWise Administration
CA
Border Manager
Insight Manager
Miscellaneous Admin Tools/Utilities
Server Inventory
Server application deployment
Outage Reporting
ZEN (server and desktop) standards
Research & Development

Table 15 provides the typical workflow for the Server Support Services unit.

Table 15. Server Support Services Workflow

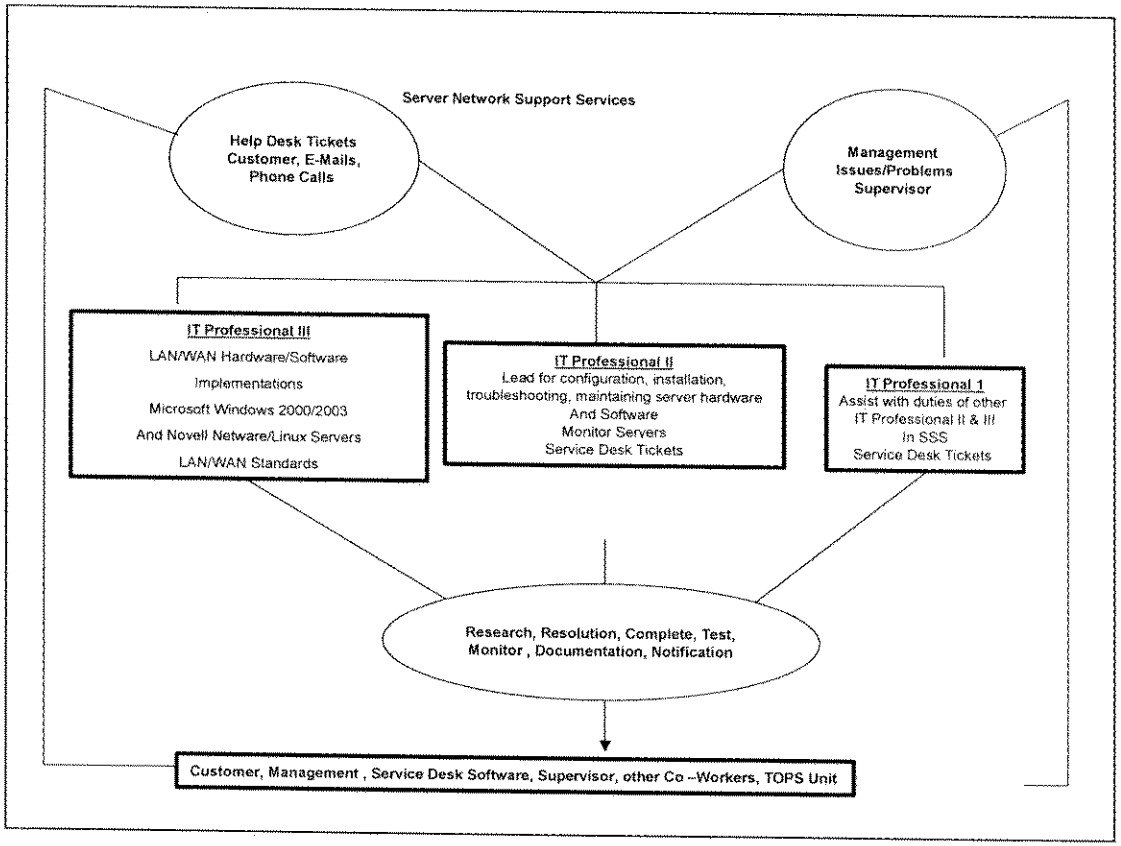


Table 16 provides a detailed breakdown of the workload for 3.0 FTE generated by the Server Support Services customers and other departmental or external requirements.

Table 16. Server Support Services Workload Tasks

TASK	Hours per Month
Formulates and Manages Work plans and formal project plans related to LAN/WAN hardware and softwar e implementations	19
Provides administration, management, policy setting and direction for Microsoft Windows 2000/03 and Novell NetWare/Linux servers	81
Provides direction to technical peers and customers regarding the detection and discovery of problems and violations	22
Maintain IT Security Policies	16
LAN/WAN Standards – Gather recommendations from other SNSS members and present to supervisor for approval	4
HW/SW Standards – Gather recommendations from other SSS members and present to supervisor for approval	4
LAN server installation documents (NetWare/Windows/Linux) Gather recommendations from other SSS members and present to supervisor for approval	4
Maintain Server Warranty list until an automated system is created	16
Lead in scheduling monthly server outages – Gather recommendations from other SSS members and present to supervisor for approval.	8
Train/mentor staff to keep them appraised of the current technology systems in CDHS	24
Provide assistance to DSS/DBA/Telecom/Security Control Center Staff	22
After Hours Support – (On call 24 *7) Answering emergency calls.	47
Lead Worker for configuration, installation, troubleshooting and maintaining server hardware and software	243
Lead worker in server-based hardware and software implementations, upgrades, maintenance	31
Monitoring of servers through use of HPSIM, NetWare remote manager, Imonitor, CA ITM, GW monitor, MBSA and other monitoring programs	81
Provide input to scheduling monthly server outages	1
Assignment and monitoring of Service Desk Tickets – Prioritize, track on time closure and equitable assignment of tickets	2
Provide recommendations for LAN/WAN standards, HW/SW Standards and server installation documentation.	7
Assist with formal project plans	22
Provide assistance to DSS/DBA/Telecom/Security Control Center Staff	47
Service Help Desk Tickets	81
Verify Microsoft Patches/security hot fixes and approve for distribution to all MS servers.	4

Monitor Windows Network	27
Windows Server Audits	4
Research new products	4
Give status of tasks/projects	6
Qualitative items for 3.0 FTE (see descriptions above) at 12.4 hours per FTE / month	37
Status Reports/EPM Entry	9
Total Hours (3.0 FTE)	**873 Hours / Mo.**

The calculations above represent the average staff time to complete the respective tasks. Tasks are often delayed due to routine staff absences, the availability of all staff due to competing priorities, conflicts arising due to department and other external factors [meetings, information requests (briefing / hearing documents, queries, etc.), reports and fiscal notes]. The calculations represent both overtime costs and delays (time customers must wait). The qualitative amount of 37 hours for 3.0 FTE was the estimated amount of time per FTE (12.4 hours per month roughly) to complete these added-value tasks. In addition, though the total hours exceeds previously calculated need of 2.0 FTE in the long term for OITS (and 1.0 FTE for this request), it essentially acknowledges that amounts above are estimated averages in which there will be periods of more activities as well as periods of fewer activities.

6,240 Annual Hours for 3.0 FTE based on 2,080 hours/ year
10,476 Hours to complete all tasks for 3.0 FTE including task delays (customer wait times)
-4,236 Total hours needed in long run equivalent to 2.0 FTE (FY 2008-09 Request is 1.0 FTE)

Table 17. FTE and Salary Calculations

OSPB Common Policy for FTE Requests									
FTE and Operating Costs								*GRAND TOTAL*	
Fiscal Year(s) of Request		**FY 08-09**	**FY 09-10**	**FY 08-09**	**FY 09-10**	**FY 08-09**	**FY 09-10**	**FY 08-09**	**FY 09-10**
PERSONAL SERVICES	**Title:**	**IT Professional III**							
Number of PERSONS / class title		5.0	5.0	0.0	0.0	0.0	0.0		
Number of months working in FY 08-09 and FY 09-10		6	12	0	0	0	0	6	12
Number months paid in FY 08-09 and FY 09-10*		6	12	0	0	0	0	6	12
Calculated FTE per classification		2.5	5.0	0.0	0.0	0.0	0.0	2.5	5.0
Annual base salary		$60,108	$60,108			$0	$0		
Salary		$150,270	$300,540	$0	$0	$0	$0	$150,270	$300,540
PERA	**10.15%**	$15,252	$30,505	$0	$0	$0	$0	$15,252	$30,505
Medicare	**1.45%**	$2,179	$4,358	$0	$0	$0	$0	$2,179	$4,358
Prior Year Supplemental Amortization Equalization Disbursement	**N/A**	$0	$1,127	$0	$0	$0	$0	$0	$1,127
Subtotal Personal Services at Division Level		**$167,701**	**$336,530**	**$0**	**$0**	**$0**	**$0**	**$167,701**	**$336,530**
Shift in Pay Date ($GF and $MGF) **Shift in Pay Date FTE**								**($22,757)** **(0.1)**	**$0** **0**
Subtotal Personal Services **Subtotal Personal Services (FTE)**								**$144,944** **2.4**	**$336,530** **5.0**
Subtotal Amortization Equalization Disbursement at Executive Director's Office Long Bill Group Level	**1.60%**	**$2,404**	**$4,809**	**$0**	**$0**	**$0**	**$0**	**$2,404**	**$4,809**
Subtotal Supplemental Amortization Equalization Disbursement at Executive Director's Office Long Bill Group Level	**Varies**	**$1,127**	**$1,503**	**$0**	**$0**	**$0**	**$0**	**$1,127**	**$1,503**
Subtotal Health, Life, Dental (if over 20 FTE) **	**N/A**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Subtotal Short Term Disability (if over 20 FTE) **	**0.13%**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Fiscal Year(s) of Request		**FY 08-09**	**FY 09-10**	**FY 08-09**	**FY 09-10**	**FY 08-09**	**FY 09-10**	**FY 08-09**	**FY 09-10**
OPERATING EXPENSES									
Supplies @ $500/$500***	**$500**	$1,250	$2,500	$0	$0	$0	$0	$1,250	$2,500
Computer @ $900/$0 ****	**$900**	$4,500	$0	$0	$0	$0	$0	$4,500	$0
Office Suite Software @ $330/$0 ****	**$330**	$1,650	$0	$0	$0	$0	$0	$1,650	$0
Office Equipment @ $2,225 /$0	**$2,225**	$11,125	$0	$0	$0	$0	$0	$11,125	$0
Telephone Base @ $450/$450***	**$450**	$1,125	$2,250	$0	$0	$0	$0	$1,125	$2,250
Subtotal Operating Expenses		**$19,650**	**$4,750**	**$0**	**$0**	**$0**	**$0**	**$19,650**	**$4,750**
GRAND TOTAL ALL Personnel-Related COSTS				**$0**	**$0**	**$0**	**$0**	**$168,125**	**$347,592**

*Initial year salary is 6 months (CF, CFE, FF) and 5 months (GF and MGF) to adjust for pay date shift. FTE was adjusted 0.1 for pay date shift.

**Estimated Health Life and Dental and Short Term Disability costs cannot be claimed for under 20 Requested FTE. If claiming more than 20 FTE for Health Life and Dental please use the agency average in your calculation as a placeholder. For Short Term Disability please use 0.13%.

***The $450 for Telephone Base and $500 for Supplies will carry over each year as an acceptable expense.

Table 17 provides FTE calculations for 5.0 FTE associated with this request. The Department is requesting IT Professional III staff. The reasons for this is that the goal of the Department is to be able to not only begin to "catch up" on staffing shortages but to have these new staff apply their greater experience, knowledge and skills toward the qualitative items discussed earlier in this request.

Impact on Other Government Agencies:

This request includes an increase in Medicaid funds transferred from the Colorado Department of Healthcare Policy and Financing to the Department of Human Services to support CDHS general administrative support programs. The amount of the Medicaid increase is determined by applying the percentage of Medicaid included in the State Indirect Cost Plan to the CDHS Office of Information Technology Personal Services and Operating Expenses FY 2007-08 appropriation lines.

Cost Benefit Analysis:

The cost benefit analysis for this request is based upon some straightforward assumptions that lend themselves more towards organization effectiveness than economic benefits compared to real costs. The thrust of this request is based upon the increasing length of time it takes to meet customer demands and the additional time calculated to achieve more of the qualitative items that are either not being performed at all right now or are not being performed as effectively as OITS (and the customer) would prefer.

This request looked at the detailed workload of 30.0 FTE in four business units (Telecommunications, Database Administration, Regional Desktop Support and Server Support Services). If one looks solely at the tasks excluding the qualitative work factor added to routine workload measures, it indicates that the work flow coming into these business units in the aggregate (some, such as Regional Desktop Support Services have more than others) exceeds the available normal 40 business hours by 1,994 hours (on average) per month. This amount is 38.3 percent higher than available 40-hour-per-week business hours or an estimate of over 14 hours per week per employee.

All of these affected employees are exempt professional staff and some are contractors. While exempt professional staff may not incur overtime for hours worked in excess of 40 hours per week, some if not all contractors may bill overtime for those additional hours. What work is not accomplished through overtime efforts, is simply delayed. While there is no benchmark available as to how many tasks were performed at a certain point in time and how long, on average (in days or hours), it was taking to perform each task, one can look to the average time to complete security requests (five days) as an indicator at some

level that customers are waiting longer and longer as time goes by and more customers (and systems, software, licenses, hardware and external business requirements) are added to OITS' base. On an ongoing basis, all work that is input into these business units is not being accomplished within the same fiscal years and it simply overflows into the next fiscal year. In addition, if one closely considers the qualitative activities, they are simply not included in the current workload.

Implementation Schedule:

Task	Month/Year
FTE Hired	Approximately 60 days or more to post position, review applications, select a candidate pool, schedule and perform an oral examination board (if necessary), arrange final interviews with hiring authority, complete salary negotiations and set employee start date. Start date January 2009.

Statutory and Federal Authority:

26-1-105. Department of human services created - executive director - powers, duties, and functions.

(1) Effective July 1, 1994, there is hereby created a department of human services, the head of which shall be the executive director of the department of human services, which office is hereby created. The executive director shall be appointed by the governor, with the consent of the senate, and shall serve at the pleasure of the governor. The reappointment of an executive director after an initial election of a governor shall be subject to the provisions of section 24-20-109, C.R.S. The executive director has those powers, duties, and functions prescribed for the heads of principal departments in the "Administrative Organization Act of 1968", article 1 of title 24, C.R.S.

24-1-105. Types of transfers.

(1) Under this article, a **type 1** transfer means the transferring intact of an existing department, institution, or other agency, or part thereof, to a principal department established by this article. When any department, institution, or other agency, or part thereof, is transferred to a principal department under a **type 1** transfer, that department, institution, or other agency, or part thereof, shall be administered under the direction and supervision of that principal department, but it shall exercise its prescribed statutory powers, duties, and functions, including rule-making, regulation, licensing, and registration, the promulgation of rules, rates, regulations, and standards, and the rendering of findings, orders, and adjudications, independently of the head of the principal department. Under a **type 1** transfer, any powers, duties, and functions not specifically vested by statute in the agency being transferred, including, but not limited to, all budgeting, purchasing, planning, and related management functions of any transferred department, institution, or other agency, or part thereof, shall be performed under the direction and supervision of the head of the principal department.

24-2-105. Rules and regulations.

The head of each principal department is empowered, subject to the written approval of the governor, to prescribe rules and regulations, not inconsistent with law, for the government of his department, the conduct of its employees, the distribution and performance of its business, and the custody, use, and preservation of the records, papers, books, documents, and property pertaining thereto.

Performance Measures:

As a support organization, the goal of the Office of Information Technology Services (OITS) is to provide technology solutions in support of the business needs of the program areas of DHS and the Counties. All of these solutions depend upon the technology infrastructure to operate at all times so that users can access critical system applications when needed. The approval of this budget request will add critical resources to the support of the technology infrastructure and improve access and availability to the users. The following measurements are aggregate measures that reflect the user's availability to system applications:

- Support the business requirements of the State users by providing a high level of access to DHS system applications. Measured by the percent of time access to the system is available. The DHS program areas rely heavily on having access to their system applications to deliver service to their clients and to meet the goals of their mission.

- Support the business requirements of the County users by providing a high level of access to DHS system applications. Measured by the percent of time access to the system is available. The County users/technicians rely heavily on having access to system applications provided by DHS to deliver benefits and service to their clients.

- Maintain productivity of all users of DHS information technology by the timely response to technology related problems. Measured by the percent of technology related problems that are resolved within prescribed timeframes.

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