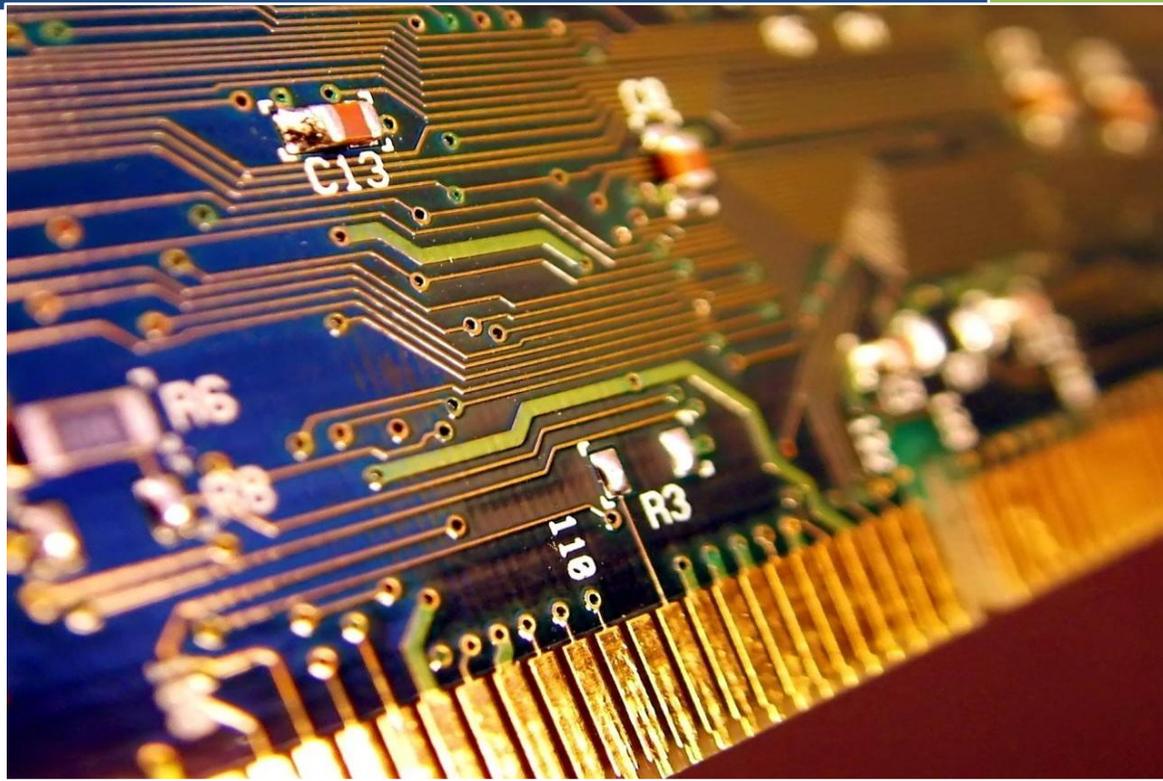




Statewide Information Technology Survey



November 2008

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In an effort to understand and baseline key statewide information technology (IT) statistics, the Office of the State Chief Information Officer (OCIO) of California conducted a statewide survey in May 2008. The survey requested information about several areas including general information about IT organization and how services are delivered; infrastructure including mainframe, servers, and storage; e-mail services; and technical environment. The results of the survey are contained in this report. The OCIO requested and will use this information as a basis to support and guide strategic and policy discussions.

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Executive Summary of Key Findings

The OCIO made the following observations during analysis of the survey data:

- *The State maintains a significant number of IT facilities, equipment, and staff across individual organizations. This provides an opportunity for consolidation, particularly with email services.*
- *The State could improve governance, stake holder buy in, and communication of IT investments by standardizing reporting relationships as well as roles and responsibilities within state agencies for setting IT priorities.*
- *The State could improve the management of IT resources by increasing the centralization of services.*
- *The State could improve the value of project feasibility studies by standardizing roles and responsibilities within state agencies.*

Survey Methodology

In May 2008, the OCIO requested all state agencies and departments subject to state IT policy to complete a web-based IT survey. The survey was given to 123 entities; 92 responded partially or in whole.

The data has not been adjusted and represents actual responses. In order to get an idea of how much statewide information might be missing due to non-respondents, the OCIO sized the non-respondents by staffing levels. We estimate non-respondents to be about 6% of the survey pool using this method. Thus, we estimate the survey wide sampling to be about 94%. It is important to note that not all respondents answered all questions. Therefore, survey results in individual categories may represent less information than the 94% applied to the whole survey.

The responses were reviewed for anomalies and respondents were contacted for validation/correction. Staffing, server, total IT spend, and project counts were validated against other data sources. Comments on variances or other survey results that are thought to be inaccurate are noted within the Detailed Survey Results section.

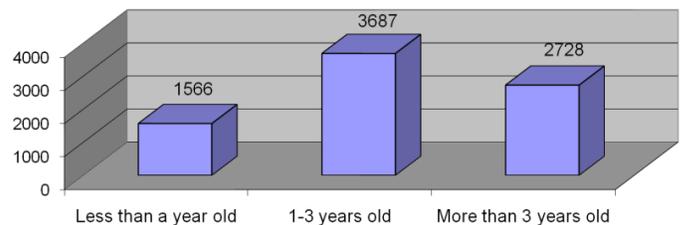
Executive Summary of Key Data

Infrastructure

- The State owns approximately **409,000 sq. ft. of floor space in 405 locations** dedicated to data centers and server rooms.
- **Only five respondents** [including the Department of Technology Services (DTS)] **reported having mainframe systems.** Floor space dedicated to mainframe

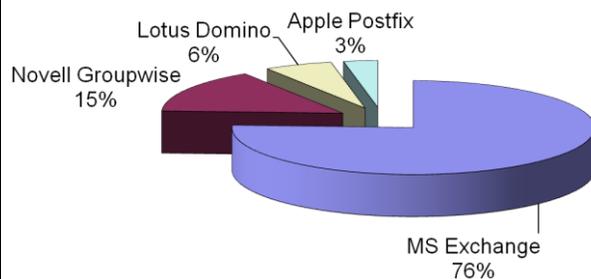
computing is 30,748 sq. ft., or approximately 7.5% of the total 409,000 sq. ft.

- Respondents reported supporting **16,364 mobile devices.** The OCIO believes this item was substantially underreported.
- The State owns and operates **9,494 servers.**
- The State's servers fall within the following age categories:



E-Mail

- **84% of respondents are not using DTS e-mail services.**
- A breakdown of e-mail products non-DTS customer respondents are using:



- Agency and department e-mail systems (excluding the DTS) have **551 servers statewide.**
- Agency and department e-mail systems are **supported by 131 PYs statewide.**

- Agency and department e-mail systems use **75 terabytes of storage**
- Agency and department e-mail systems support approximately **180,000 mailboxes**.

Staffing

- Respondents reported **8,009 statewide IT staff** out of 217,418 general staff. *The OCIO believes there are closer to 10,000 IT staff based on personnel data from the DPA.*
- In addition to the state staff, respondents reported using **vendors** to supplement state staff. They reported an **equivalent to 430 PYs** excluding vendor project staffing supplied in response to a formal bid.

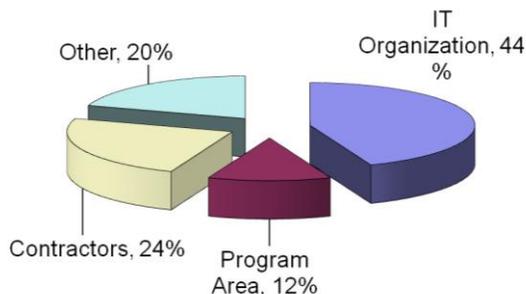
IT Budget

- Respondents reported **statewide IT expenditures of about \$1.3 billion**. *The OCIO believes this number is closer to \$3 billion when considering staffing costs and IT contract data available from the DGS. Many departments do not track IT costs as a budget line item.*

Projects and Project Management

- Respondents reported **105 active reportable** IT projects and **480 active non-reportable** projects. Reportable projects are projects that meet state policy for being required to be reviewed by the OCIO.

- **28** of 92 organizations reported **having a project management office**. PMOs for organizations with:
 - less than 200 staff = 0
 - 201-1000 staff = 7
 - more than 1000 staff = 21
- Who typically writes Feasibility Study Reports?



The 20% "Other" responses were mostly a comment of a collaborative approach between the business and the IT organization. The OCIO believes there is an opportunity for improvement of Feasibility studies by embracing this approach.

Reporting and Organizational Structure

- Many CIOs do not report to a top level executive within the organization. *The OCIO believes this is necessary and an opportunity for improvement.*
 - The Director = 28%
 - Chief Deputy Director = 17%
 - The Administrative Division Deputy Director = 31%
 - Other = 23%
- Centralization of IT Services within organizations was reported as 58% fully centralized and 42% partially centralized.

- Respondents reported IT Priorities as being set by:
 - Other =31%
 - CIO = 26%
 - Agency Director =24%
 - IT Oversight Committee =19%

IT Service Delivery

- 78 of 92 respondents use DTS services in some capacity
- 14 use another state entity's data center
- 13 use a commercial data center
- 6 use the Hawkins Data Center
- 4 use the Franchise Tax Data Center
- 1 uses the Legislative Data Center

Detailed Survey Results

Infrastructure

1. How many server rooms/data centers does your IT organization currently support?

89 of 92 respondents answered this question.
Total rooms were reported as 405.

2. What is the total square footage of all your server rooms?

84 of 92 respondents answered this question.
Total square footage was reported as 408,732.

The entities with the largest computing floor space (over 5000 sq.ft.) are shown below.

What is the name of your agency/department?	Server rooms	Total Sq. Ft.
DTS -- Department of Technology Services	3	125,000
Department of Transportation	40	60,000
Department of Justice	36	24,608
Franchise Tax Board	2	23,000
Department of Water Resources	20	21,000
Department of Motor Vehicles	3	20,754
California State Lottery	2	19,500
Employment Development Department	3	9,481
Social Services	46	9,400
Department of Corrections and Rehabilitation	3	7,576
CA Public Utilities commission	2	7,456
Department of Health Care Services	2	6,200
Department of Consumer Affairs (DCA)	6	6,000
State Controller's Office	6	5,737
Department of Public Health	9	5,020

3. Do your server rooms have the following features: raised floors, UPS power, Backup generators, dedicated cooling, power conditioning.

Responses varied by each item but in general 85 of 92 respondents answered this question. Respondents were asked to report as: All, Some, or None for their total number of rooms making it difficult to get exact counts. We believe it is safe to say that:

- *Over 52% the total rooms do not have a Raised Floor but at least 23% do.*
- *More than 85% of the rooms have UPS Power.*
- *At least 57% do not have Backup Generators but at least 19% do.*
- *At least 70% have dedicated cooling while at least 10% do not.*
- *At least 48% have Power Conditioning while at least 34% do not.*

	All	Some	None
Raised Floor	23.0% (20)	25.3% (22)	51.7% (45)
UPS Power	84.9% (73)	10.5% (9)	4.7% (4)
Backup Generators	18.6% (16)	24.4% (21)	57.0% (49)
Dedicated Cooling	70.1% (61)	19.5% (17)	10.3% (9)
Power Conditioning	48.2% (41)	17.6% (15)	34.1% (29)

4. Approximately how many servers of each type are installed in all of your server rooms?

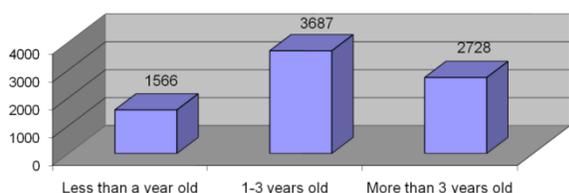
Response varied by each item but in general 83 of 92 respondents answered this question as follows:

<i>Application Servers</i>	<i>2,570</i>
<i>Other</i>	<i>1,532</i>
<i>File/Print</i>	<i>1,455</i>
<i>Database Servers</i>	<i>1,284</i>
<i>Web Servers</i>	<i>784</i>
<i>Email</i>	<i>637</i>
<i>DNS/DHCP</i>	<i>588</i>
<i>Presentation (Web) Server</i>	<i>398</i>
<i>Middleware Servers</i>	<i>246</i>
Total	9,494

The numbers are consistent with a DTS study conducted in 2007.

5. Percentage of servers in your server rooms by age.

Response varied by each item but in general 80 of 92 respondents answered this question as follows:



6. What percentage of your servers currently utilize external storage?

78 of 92 respondents answered this question. Respondents were asked to report whether the storage was SAN or NAS. Responses varied from 0% to 100%. In general, 44 of the 78 respondents reported using SAN to some degree and 20 reported using NAS. 11 reported using both SAN and NAS. The

statewide averages were about 20% of servers using SAN and 7% using NAS.

7. How many external storage subsystems of each type are currently in place in your server rooms?

78 of 92 respondents answered this question. Again, respondents were asked to report whether the storage was SAN or NAS.

Respondents reported 159 SAN systems and 100 NAS systems statewide.

8. Does your agency/department have mainframe class systems installed in any of your server rooms?

87 of 92 respondents answered this question. Only 5 respondents reported having mainframe systems including the DTS.

<i>Manufacturer</i>	<i>IBM & Unisys</i>
<i>Total Facility Sq. Footage</i>	<i>30,748</i>
<i>GBs of Storage Allocated</i>	<i>629,735</i>
<i>% of Storage In Use</i>	<i>73%</i>
<i>PYs Supporting</i>	<i>358</i>
<i>Using Tape</i>	<i>5</i>

All systems were IBM or Unisys. Again, respondents were asked to report whether the storage was SAN or NAS.

9. Organizations' IT needs met through services hosted at:

82 of 92 respondents answered this question.

- *78 of 92 respondents use DTS services in some capacity*
- *14 use another state entity's data center*
- *13 use a commercial data center*
- *6 use the Hawkins Data Center*
- *4 use the Franchise Tax Data Center*
- *1 uses the Legislative Data Center*

10. How many mobile devices of each type are you supporting?

84 of 92 respondents answered this question.

Blackberry	12,559
Windows Mobile Devices	3632
Other	183

The OCIO believes mobile devices counts are underreported.

E-Mail

11. Are you currently using DTS' CA.MAIL email service?

85 of 92 respondents answered this question.

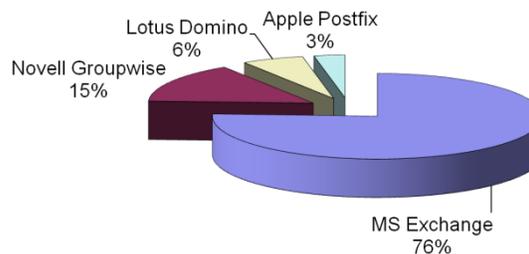
Yes	15.3%	13
No	84.7%	72

12. If using DTS email, what percentage of total departmental mail boxes are maintained by DTS?

14 of 14 respondents using DTS email answered this question. 10 were using DTS mail 100%, with 4 using smaller percentages ranging from 15%-90%.

13. What server and client email software are you currently using?

68 of 92 respondents answered this question with percentages as shown below.



14. What is your standard desktop operating system software and version?

66 of 92 respondents answered this question with counts as shown below.

Windows XP (most using SP2)	63
MAC OS 10	2
Windows Vista	1

15. Does your organization use Active Directory for authentication?

73 of 92 respondents answered this question.

Yes	82.2%	60
No	17.8%	13

16. How many email servers do you have?

73 of 92 respondents answered this question.

The total number of email servers reported was 551.

17. How many GBs of storage would you estimate you use for email?

79 of 92 respondents answered this question.

The total GBs reported was 76,826.

18. How many mailboxes are you supporting?

85 of 92 respondents answered this question. Some respondents gave ranges.

The total number of mailboxes reported was about 180,000.

19. How many PYs support your mail system?

81 of 92 respondents answered this question.

The total PYs reported was about 141.

Staffing

20. What is the approximate number of staff in your organization?

91 of 92 respondents answered this question.

Total staffing for all respondents was reported at 217,418.

The Department of Personnel Administration (DPA) reports 219,192 allocated positions for the State. Variances are attributed to non-responsive entities and possibly some respondents reporting filled positions as opposed to allocated.

21. How many IT staff are in your organization?

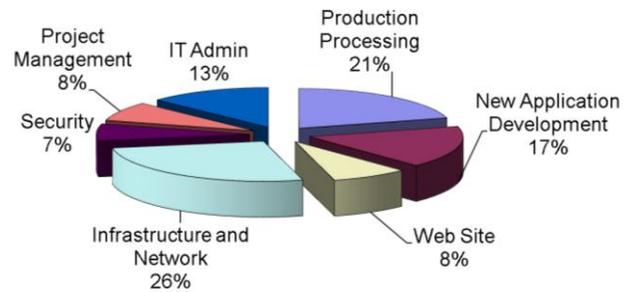
89 of 92 respondents answered this question.

Total IT staffing for all respondents was reported at 8009.

The OCIO believes there are closer to 10,000 IT positions according to DPA data. Again, variances are attributed to at non-responsive entities and possibly some respondents reporting filled positions as opposed to allocated positions.

22. What percentages of staff support the following areas?

79 of 92 respondents answered this question.



23. Excluding vendor project staffing supplied in response to a formal bid, what is the total Full Time Equivalent number of staff contracted to supplement your IT staffing?

89 of 92 respondents answered this question.

Total FTEs were reported at 430.

24. How many physical locations are supported by IT?

88 of 92 respondents answered this question.

The total number of locations was reported as 3,606. Entities with the most locations (more than over 100) are shown below.

Department of Justice	714
Department of Fish and Game	350
CALFIRE	339
Department of Motor Vehicles	300
Department of Corrections and Rehabilitation	231
Department of the California Highway Patrol	225
Department of Parks and Recreation	200
Employment Development Department	186
CA Military Dept	120
Department of General Services	115

25. In which regions are the locations?

83 of 92 respondents answered this question. The percentage and corresponding count of respondents reporting locations in survey specified areas is shown below.

Sacramento	84.3%	70
Bay Area	44.6%	37
Los Angeles	49.4%	41
Inland Empire	28.9%	24
San Diego	34.9%	29
Statewide	47.0%	39
Out of State	10.8%	9

IT Budget

26. What was your total IT Budget in the 2007-08 state budget?

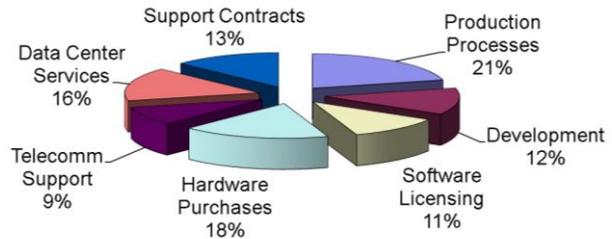
81 of 92 respondents answered this question, 4 of the 81 responded that they were not able to isolate IT as an individual budget item.

The total IT budget was reported as \$1,327,380,065.

The OCIO believes the annual number is closer to \$3 billion based on previous reporting's to the Department of Finance, total IT staff costs, and Department of General Services reports of IT contract costs. The variance is due to non-responses and probably some respondents not including staff and/or contract costs.

27. What percentages of your total IT budget support the following areas?

68 of 92 respondents answered this question.



Projects and Project Management

28. How many active projects do you have?

89 of 92 respondents answered this question. *Respondents reported 105 active reportable IT projects and 480 active non-reportable projects.*

29. Does your organization have a Project Management Office (PMO)?

91 of 92 respondents answered this question. *28 respondents reported having a PMO.* In general and as expected, larger organizations had more PMOs.

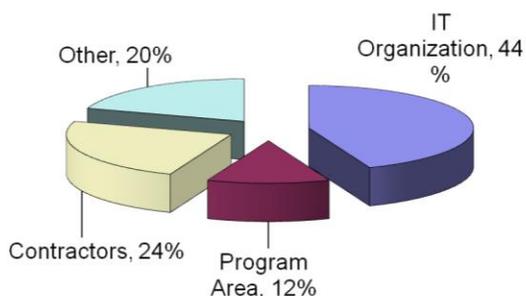
- less than 200 staff (28 orgs) = 0
- 201-1000 staff (28 orgs) = 7
- more than 1000 staff (35 orgs) = 21

30. If you have a PMO, how many staff are in it?

91 of 92 respondents answered this question. *Answers ranged for .5 to 31 and totaled 251 staff between the 28 PMOs.*

31. Who typically writes FSRs in your organization?

All 28 respondents with a PMO responded.



The 20% “Other” responses were mostly a comment of a collaborative approach between the business and the IT organization. The OCIO believes there is an opportunity for improvement of Feasibility studies by embracing this approach.

Reporting and Organizational Structure

32. If your department is part of an agency, please describe any interactions your IT management regularly has with you AIO?

60 of 92 respondents answered this question with 11 of those responding that the question was not applicable to them, leaving 49 respondents.

- *33 of the 49 report regular meetings on a schedules varying from daily to bi-monthly*
- *13 reported as needed e-mail/document (contracts, FSRs, etc.) review communication.*
- *3 reported little or no communication.*

33. Who does your CIO report to?

90 of 92 respondents answered this question. The survey requested answers with the four options shown.

<i>The Administrative</i>	
<i>Division Deputy Director</i>	31%
<i>The Director</i>	28%
<i>Other</i>	23%
<i>Chief Deputy Director</i>	17%

34. How are IT priorities set in your organization?

91 of 92 respondents answered this question. Again, the survey requested answers using four options.

<i>Other</i>	31%
<i>CIO</i>	26%
<i>Agency Director</i>	24%
<i>IT Oversight Committee</i>	19%