

OPEN SESSION AGENDA ITEM

54-123 SEPTEMBER 2018

DATE: September 13, 2018

TO: **Members, Board of Trustees**

FROM: Ron Pi, Principal Analyst, Office of Research & Institutional Accountability

SUBJECT: Workload Study Report

EXECUTIVE SUMMARY

This agenda item presents the final report of a workload study conducted by the Office of Research and Institutional Accountability in support of the State Bar's Strategic Plan. The key finding of the study is that the Office of Chief Trial Counsel (OCTC) needs an additional 58 positions relative to those budgeted for 2018. This projected need provides the basis for the Bar's budget planning and the request for a fee increase in 2019.

BACKGROUND

In 2016 the State Bar contracted with the National Center for State Courts to conduct a legislatively mandated Workforce Planning Study. One of the key recommendations of the study was that the Bar conduct a comprehensive workload study to provide quantitative measures as a tool for resource planning. Goal 2 of the Bar's strategic plan for 2017-2022, in Objective c (a), specifically highlighted the need to complete a workload study for the Office of Chief Trial Counsel (OCTC) and State Bar Court (SBC).

Bar staff began to plan for the workload study in early 2017. A time-study survey was developed in the fall of 2017 using an approach called the Random Moment Method. Over a two-month period in September and October, approximately 250 staff from OCTC, Probation, and SBC participated in the study to provide information about the allocation of their time across different activities. Analysis of the data was completed in May and Bar staff presented the results of the study to the Board of Trustees at the May 2018 meeting.

After further review and feedback, a final report of the study was completed, submitted here to the Board of Trustees for reference. Summarized below are highlights of the study findings.

DISCUSSION

Approximately 250 staff from OCTC, Probation, and SBC participated in a time study survey in the fall of 2017. The survey gathered detailed information regarding staff's allocation of time across various work activities. Combined with caseload data, a staffing model was created to

measure the amount of time required to process cases from initiation to final disposition. These case weights, measured as minutes per case, provided baseline measures representing staff resources needed to process cases at various stages, including Intake and Enforcement in OCTC; Probation; and the three departments in SBC: Hearing, Review, and Effectuation. Further breakdown of the data provided estimated case weights by staff type such as investigators and attorneys.

While the baseline case weights reflected the current staffing level, further analyses focused on an assessment of the adequacy of staffing level given the statutorily defined backlog target of processing cases within 180 days. This *quality* adjustment phase of the study relied on staff feedback regarding practices that work and don't work, which informed the direction for subsequent analyses of historical trends on caseload and staff resources.

The quality adjustments for OCTC were anchored in historical patterns that showed a negative correlation between the number of investigator positions filled and the median time necessary to complete an investigation. In other words, the more investigators, the shorter the median time to the completion of an investigation.

A different data source was used to assess the resource needs of SBC: a workload study conducted by the Justice Management Institute (JMI) in 2014 that evaluated the resource needs of SBC. The baseline case weight for the Office of Probation was not adjusted due to the lack of comparative data, as well as the small number of staff performing the work; it would require more in-depth process evaluation to make appropriate adjustments in the future.

As the workload for SBC (measured by either new cases filed or cases disposed) in the past few years has declined by approximately 20 percent, the comparative analysis projected reduced staffing needs by a similar proportion. Currently, the additional staff resources are devoted to the implementation of the new case management system, a fact that was partly captured by the time study.

The analysis for OCTC led to two simulation results related to investigator positions:

1. an increase of staffing levels to 72 investigator positions, which is empirically associated with a projected reduction of median disposition time in investigations from 160 to 100 days;
2. an increase of staffing levels to 82 investigator positions, leading to a projected reduction of the median disposition time in investigations to 60 days.

If the number of investigator positions increased to 82, it is projected that the average caseload carried by investigators would decrease from around 50 currently to 16 cases.

Further analysis of cases that typically took longer to reach disposition (as represented by 90th and 95th percentiles in the full range of disposition time) suggested that the results from scenario two (82 investigator positions) would provide the resources needed to substantially reduce the backlog. Extension of this analysis to other staff types to provide the full complement of staff shows a total projected staffing need of 315 in OCTC, compared to 257 positions budgeted for 2018, an increase of 58 positions.

The projected staffing need for OCTC resulting from the workload study provides the foundation for the Bar's budget planning in the next few years and the associated request for fee increase.

FISCAL/PERSONNEL IMPACT

None

RULE AMENDMENTS

None

BOARD BOOK AMENDMENTS

None

STRATEGIC PLAN GOALS & OBJECTIVES

Goal: 2. Ensure a timely, fair, and appropriately resourced admissions, discipline, and regulatory system for the more than 250,000 lawyers licensed in California.

Objective 2-c-a: completion of a workload study for OCTC and SBC.

RECOMMENDATION

None

ATTACHMENT(S) LIST

- A. Workload Study Final Report

THE STATE BAR OF CALIFORNIA WORKLOAD STUDY REPORT

I. Background

Goal 2 of the State Bar’s 5-year strategic plan for 2017-2022 points to the need to “Ensure a timely, fair, and appropriately resourced admissions, discipline, and regulatory system for the more than 250,000 lawyers licensed in California.”¹ Objective C of Goal 2 lays out, more specifically, the need to “Develop and implement transparent and accurate reporting and tracking of the health and efficacy of the discipline system, to include: (a) completion of a workload study for OCTC and SBC.”

In addition to the impetus from the Strategic Plan for conducting a workload study, the Workforce Planning Study conducted in 2016 by the National Center for State Court² also recommended that a comprehensive workload study be conducted, with the goal of establishing case weight measures as a tool for managing caseload and allocation of staff resources.

Combined with performance metrics – also being developed under the same strategic goal – a workload study will contribute to the implementation of a balanced, transparent set of performance metrics that encompass workload, resources, and the efficient management of resources in support of the public protection mission of the discipline system.

II. Methodology

The study conducted by Bar staff differs in scope and methods from the Workforce Planning Study conducted by the NCSC in that it focuses on measuring the amount of staff resources required to process cases throughout the discipline system, including Intake, Enforcement, State Bar Court, and Probation. The central element of the workload study is a time study, conducted with the goal of establishing case weights, measured in minutes of staff time per case. Case weights allow for the quantification of the input-output relationship between caseload and staff resources throughout various stages of processing the cases. In identifying the relationship between workload and staff resource needs, an appropriately constructed case weight encompasses additional aspects of the workflow process that addresses both efficiency and efficacy issues. These additional aspects reflect *qualitative* dimensions in managing the workflow processes, such as adherence to standard operating procedures to ensure statutory or procedural compliances; maintaining well-functioning team relationships to coordinate the

¹ The State Bar of California 2017-2022 Strategic Plan. (<https://board.calbar.ca.gov/Goals.aspx>)

² State Bar of California Workforce Planning, Report to the Office of the Executive Director, National Center of State Courts, 2016.

work across different operational areas; and providing staff with adequate training to maintain an effective and competent workforce.³

As a first step in documenting staff time needed for processing cases, several approaches are available, generally depending on the complexity of the processes involved and the purpose of the study. Time and motion study would be appropriate where the input-output relationship is characterized by homogeneity of input variables, with limited, discrete steps required to accomplish the tasks. Traditionally used in manufacturing settings, this method could be used to measure the amount of time required to create a file for a new case received or to complete data entry in the case management system.

In a process-oriented workflow involving multiple steps and requiring staff with different roles to perform a variety of tasks, a time study would require staff participation to record their routine activities and estimated time associated with those activities. Time Diary Method is a commonly used approach to collect this type of information in time studies.

The State Bar used a different approach, called a Random Moment Time Study (RMTS), to collect the task and time data. It is the same method used by the Judicial Council of California to conduct a time study with a large number of trial courts in 2010 and again in 2017, and provided the foundation for the creation of a workload-based funding model to address the historical inequity of funding across trial courts.

The RMTS method relies on study participants to fill out a few brief surveys every day during the study period, typically lasting two to three weeks. In each survey that respondents complete, they answer the same set of questions as follows:

1. Are you working on a case? (End of the survey if engaged in other activities.)
2. Select the case type that you are working on.
3. Select the allegation(s) involved in the case.
4. What is the task area and the specific task you are performing?

See Appendix A for the full survey questions and answer choices.

³ In a series of studies covering both private and public sectors (manufacturing, hospital, and schools) across several countries, Nicholas Bloom, professor of economics and management at Stanford, and his team documented the profound and consistent impact from management practices on both the productivity and efficacy of an organization beyond what could be explained by resource levels. The various dimensions of management practices are measured by questions related to performance tracking, communication, and as one of the key elements, ongoing effort in training and retaining talented staff. The survey instruments can be found at: <http://worldmanagementsurvey.org/>.

The survey response data does not provide an estimate of the time needed to perform any given task. Instead, the random sample design provides information to estimate the *proportion* of staff time allocated to different work activities and case-processing tasks. With the completion of the survey, additional information was collected to construct case weights, a process which is discussed in detail below.

III. Pilot Test and Formal Launch of Random Moment Time Study Surveys

Borrowing source code from the Judicial Council for a random moment survey application, the Bar modified the software and completed a beta version in August 2017. Pilot testing was conducted with a small number of staff from each office participating in the study.

The RMTS survey was formally launched during the months of September and October 2017.⁴ During the survey period, each staff participating in the study received four email notifications per day. As shown in Table 1, 252 staff from the three participating offices provided response data, contributing to a total of nearly 10,000 data points regarding their daily work activities. The large sample size along with a high response rate of 93 percent ensured the accuracy and reliability of the data.

Table 1. RMTS Survey Participants and Responses

Department	Number of Staff Participating	Number of Survey Notifications Sent	Number of Responses Received	Response Rate
OCTC	211	8,397	7,721	91.9%
Probation	7	280	279	99.6%
SBC	34	1,908	1,817	95.2%
Total	252	10,585	9,817	92.7%

IV. Survey Data Results

Following the sequence of the survey questions, Table 2 shows the responses to the first question regarding whether the individual is engaged in case-processing activity, combined

⁴ Selection of a specific timeframe for collecting the time study data, normally ranging from two to three weeks, is driven by the consideration that the workload volumes, staffing level and assignments, would represent the normal, average work activities. Therefore, holiday or vacation seasons are usually avoided. To capture the variation of work activities throughout the month, with more resources at the end of the month likely devoted to reporting and case closure routines, two non-contiguous weeks were selected for OCTC in September. Two weeks selected for Probation covered the end of September and the first week of October. For State Bar Court, three noncontiguous weeks were selected in October. The smaller sample size for Probation was deemed adequate due to the small staff size as well as the homogeneous nature of their daily work activities.

with additional data such as vacation and sick time to account for non-responses. Across OCTC, the Office of Probation, and the SBC, staff spend a little over 50 percent of their time on case-related activities. Table 2 also shows the proportion of staff time that is spent on non-case related activities, including administrative tasks, training, supervisory activity, breaks, and lunch. Non-case-related activities are aggregated from individual activity areas for each office and are shown in Table 3 .

Table 2. Allocation of Time (%) Across Case-Related and Other Activities

Department	<i>Case Related</i>	<i>Non Case Related</i>							Total
	Case Processing	Admin	Supv/ Mgmt	Special Projects	Training	Other*	Break/ Lunch	Sick/ Vacation	
OCTC	52.3	12.1	6.3	2.2	1.6	2.9	13.6	9.0	100.0
Probation	67.4	14.3	6.5	0.0	0.0	0.0	7.5	4.3	100.0
SBC	48.6	10.6	2.9	10.0	0.0	8.2	10.1	9.6	100.0
Total	52.1	11.9	5.7	3.6	1.2	3.8	12.8	9.0	100.0

* In addition to the generic "other" option provided in the survey, a small percentage of other responses are grouped here, including reporting in OCTC and court administration and legal work from SBC.

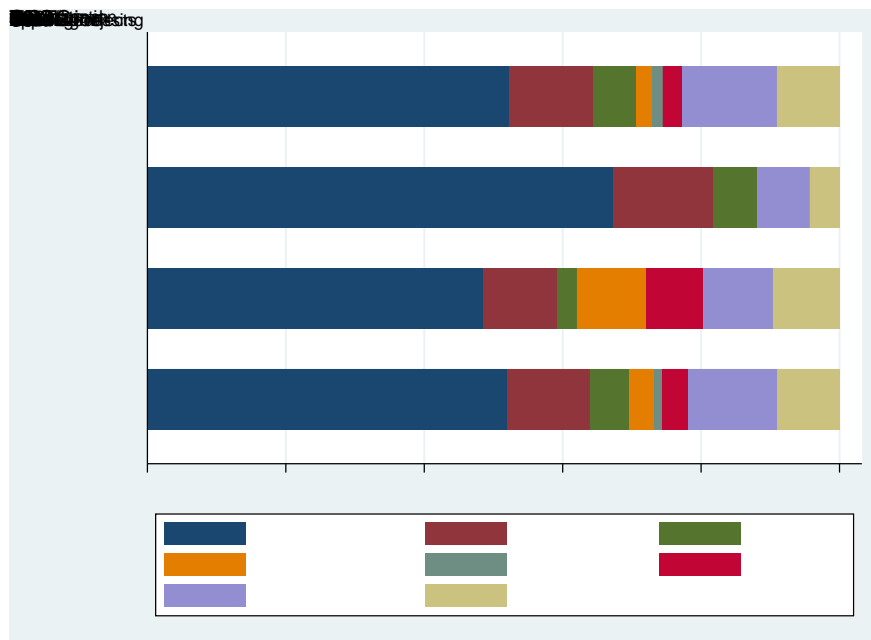


Table 3. Non Case-Related Activity Answer Options, by Office

OCTC	Probation	SBC
Break	Break	Break
Vacation	Vacation	Vacation
Sick	Sick	Sick
Lunch	Lunch	Lunch
Supervision/Management	Supervision/Management	Supervision/Management
Training	Other Administration	Technical Work
Case Management System Project	Other Personnel	Administrative Work
Other Special Projects		Legal Work
Board of Trustee Work		Special Projects
Reports		Internal Court/Judicial Administration
Other Administrative Work		

Case and Non-Case Related Time

Constructing case weights for a staffing model requires that the allocation of time as shown in Table 2 be organized into three separate categories: case-related, non-case-related, and non-work-related hours. The first category relating to case-processing activities is directly related to the volume of cases being handled; as a result, the amount of staff resources derived from this category would serve as a key variable in the first step of creating case weights. It should be noted that the overall proportion of staff time reported in this category represents 52 percent of the “gross” total, which includes breaks and leaves. Additional adjustments are necessary before the relevant figures can be used to create case weights.

The second category – non-case-related time – encompasses all work activities and associated staff resources that, while not tied directly to the fluctuating workload, are correlated with case volumes to some degree. Administrative work performed by various employee classifications – primarily administrative assistants and legal secretaries – may occupy a substantial amount of time that contributes indirectly to the processing of cases. While these employees don’t carry active caseloads, their contribution is an integral component in the support infrastructure enabling those staff who do carry a caseload to process cases effectively. In contrast, staff time devoted to supervision and management activities has a more tenuous connection to case processing and is likely to vary more across offices as a reflection of differences in management practices and composition of staff position types.

These two types of work activities (administrative and supervision/management) need to be incorporated into case weights or a staffing model to account for the total amount of employee time available and the total amount of employee time used. One common approach to incorporating non-case processing time into a model is to estimate ratios that represent the

amount of administrative support and supervisorial/managerial resources needed in relation to the number of key case-processing staff.

Staff time reported under Special Projects varies across offices and will likely fluctuate over time. The distribution of Special Projects time in the current time study is partly a reflection of a significant proportion of staff resources devoted to the implementation of the new case management system in all three offices.

Finally, the third category of response data (non-work-related) needs to be treated entirely separately from the rest of the time study data. In the process of constructing case weights, as will be discussed in the next section, the first step is to establish an empirically based work-year value; i.e., the amount of staff time expected to be available in a year for various work-related activities. Without knowing how much of an employee's time is non-work-related, it is impossible to estimate the total number of hours available for a given employee for work-related activities.

Allocation of Case-Related Time to Various Tasks

By itself, the proportion of case-related time as measured in the RMTS study is sufficient for constructing case weights. It is possible, nonetheless, to look more closely at the types of activities that staff work on within the case-related category. This more detailed data on the various task areas – and subtasks within each major task area – provides additional information to assess resource allocations across different functional areas.

Table 4. Allocation of Case-Related Time to Task Activities

OCTC			Probation		
Task Activities	Freq.	Percent	Task Activities	Freq.	Percent
Contacting	1,179	29.3	Reviewing Docs	83	44.2
Drafting/Creating Docs	838	20.8	Drafting/Creating Docs	51	27.1
Reviewing Docs	783	19.5	Contacting	39	20.7
File Admin	464	11.5	File Admin	11	5.9
Investigation	163	4.1	Prepare/Attend	3	1.6
Research	153	3.8	Office administration	1	0.5
Trial	145	3.6	Total	188	100.0
Prepare/Attend	105	2.6			
Discovery	79	2.0	SBC		
Case Administration	61	1.5	Task Activities	Freq.	Percent
Perfecting Record	23	0.6	Counseling	327	37.1
Travel	13	0.3	Drafting/Creating Docs	146	16.6
Informal Mediation	8	0.2	File Admin	136	15.4
Consult/Assist OGC re Review	7	0.2	Data Input	60	6.8
Total	4,021	100.0	Prepare/Attend	59	6.7
			Calendaring/Scheduling	49	5.6
			Contacting	39	4.4
			Perfecting Record	35	4.0
			Court Room Administrat	27	3.1
			Supervision/Manageme	4	0.5
			Total	882	100.0

Table 4 presents a high-level breakdown of various case-processing tasks performed by staff in OCTC, Probation, and SBC, showing the number and percentage of survey responses corresponding to each task area. In all three offices, a large proportion of case-processing activities are related to a few task areas, including reviewing, drafting, and creating documents; contacting parties involved in a case and contacting colleagues to communicate regarding cases; and file administration. The task area that was reported most frequently under case-related activity in the SBC was “counseling” as performed by attorneys; further breakdown at the subtask level shows that three subtasks account for more than 80 percent of the total in this task, including drafting opinion/decision, motion work/order, and record review.

During the process of creating case weights, detailed data at the task and subtask level are useful for working with subject matter experts (SMEs) to evaluate the validity of the time study data. When translated into case weights constructed from detailed information representing different operational and procedural tasks, the case weight data should serve as a tool to

engage staff and management in the ongoing assessment and improvement of the workflow process.

V. Construction of Case Weights and Staffing Model

With the RMTS data providing information on the proportion of staff time devoted to various case-processing activities, the two formulas below lay out the additional steps needed to compute case weights. Equation (1) establishes the staff resources available for work-related activities. With caseload information added, equation (2) derives estimated case weights, representing the amount of staff resources (typically measured in minutes) currently deployed to process a case throughout the life of a case. Taking the model one step further, once an appropriate case weight is derived, equation (3) establishes the relationship among key variables as a model for projecting staffing needs in anticipation of changes in workload.

(1) Total annual staff time available = Number of staff × Work-year value

(2) Staff time needed per case (case weight) = Annual staff time available ÷ Annual number of cases received

(3) Number of staff needed = Case weight × Number of cases received

Work-Year Values

At the time that the RMTS was being conducted, most represented staff at the Bar worked a 7 hour 15 minute (7.25) work day under the collective bargaining agreement. Anticipating the negotiated change to an 8-hour work day, effective in early 2018, Table 5 shows the steps and the data used to establish two separate work-year values, one for staff working 7 hours and 15 minutes per day and another one for those working 8 hour days.⁵

⁵ During the study period in September and October 2017, non-attorney and non-managerial staff followed the 7.25 hour per day schedule; attorneys were already on an 8-hour schedule. Since then the Bar has implemented the new, uniform 8-hour day work schedule incrementally. From February 2018 all full-time staff have been converted to the 8-hour schedule. The initial case weight estimates reflect the work schedule prior to the 8-hour schedule change. These case weights were further adjusted to reflect the new schedule when the baseline data was used to project estimated staffing need.

Table 5. Calculation of Work-Year Value in Minutes

(1)	Total work days per year (365 – 104 weekends)	=	261 days
(2)	Total work days minus holidays (261 – 14)	=	247 days
(3)	Total work days minus vacation, sick leave, and other non-work days (10% of workdays based on payroll data)	=	223 days
Staff year value (hours)			
(4)	8 hours/day	=	1,784 hrs
(5)	7.25 hr/day	=	1,617 hrs
	<i>Minus 30 min. break time per day</i>		
(6)	8 hours/day	=	1,673 hrs
(7)	7.25 hr/day	=	1,506 hrs
Staff year value (minutes)			
(8)	8 hours/day	=	100,368
(9)	7.25 hr/day	=	90,332

Starting with 365 days per year, line (2) in Table 5 shows the total number of workdays per year after subtracting weekends and holidays. Line (3) further subtracts non-work days, including vacation, sick leave, and other non-work days to arrive at 223 days, representing the total number of workdays per year that a full-time employee is expected to be available at work. This part of the analysis relied on the bar's payroll data over the past ten years to look at the patterns of various leave days taken.

After translating workdays to hours in lines (4) and (5), a standard 30-minute break per day is subtracted in lines (6) and (7), yielding 1,673 and 1,506 hours per year available for work-related activities for staff working on 8-hour and 7.25-hour schedules, respectively.

The final step converts the work-year values from hours to minutes, yielding an estimated work-year value of 100,368 minutes for staff on 8-hour schedule and 90,332 minutes for those on 7.25-hour schedule. These estimates approximate closely the work-year value of 95,900 minutes, which was based on 8-hour schedule, used in the Judicial Council's workload model noted above.

Workload Drivers – Three-Year Averages of New Cases Received

Ultimately, case weights rely on the number of cases processed as a driver of workload. The number of cases must be evaluated relative to the amount of staff time available for case processing. For this study, new cases received or filed in the past three years from 2015 to 2017 are used in the model to derive 3-year average caseload numbers. There are two reasons for using three-year averages to represent *current* caseload. First, cases initiated over a period of time in the past contribute to the current caseload; the extent to which older cases stay on the current caseload, and how much they contribute to the overall caseload relative to new cases, depends on the length of a typical case from initiation to closure as well as the pattern of case

closures through different stages. Second, 3-year averages address the inherent uncertainty of caseload trend as well as the potential changes in the composition and complexity of cases over time. Taking averages over a longer timeframe lend some stability to the case weight measure and the associated staffing model as a practical management tool.

Table 6. New Cases Received or Filed as Workload Driver

Year	OCTC		Probation	Hearing Dept.	SBC	
	Intake	Enforcement			Review Dept.	Effectuation Dept.
2015	16,306	4,299	571	462	197	1,337
2016	15,821	6,502	522	496	200	1,077
2017	15,787	6,064	419	407	218	858
3-Year Avg.	15,971	5,622	504	455	205	1,091

Table 6 shows the number of new cases received from 2015 to 2017 in the three departments participating in the study. For both OCTC and SBC, caseload data are further subdivided into sub-categories to reflect the distinct organizational and workflow structure of those offices and their caseload. The case data for each subunit within SBC represent not only new cases initiated or filed with the SBC, but also cases that were initially filed in one unit but moved to another unit, such as plenary and interlocutory reviews in the Review Department originating from the Hearing Department. All cases are counted once *within* each department.

Calculation of Case Weights

With all the elements available now as specified in equations (1) and (2), Table 7 shows the summary of case weights calculated for the three departments.

Table 7. Caseload, Current FTEs, and Case Weights

Department	Caseload (3-year Avg)	Current FTE	Case Weight (Minutes/Case)
OCTC			
Intake	15,971	18	110
Enforcement	5,622	200	3,332
Total FTEs		218	
Probation			
	504	8	835
SBC			
Hearing	455	21	4,232
Review	205	10	4,550
Effectuation	1,091	4	306
Total FTEs		34	

The case weights shown in Table 7 represent the average amount of all staff time each case is expected to take from initiation to closure at different stages. It includes not only the staff time devoted directly to processing the cases, but also their time performing other non-case related work that may indirectly support case processing, activities, such as training, supervision, administrative support, and special projects, etc. See Appendix B for case weights broken out by case-related versus non case-related activities. It also provides additional details regarding the contribution of different staff types to the estimate of total case weights.

VI. Validation and Adjustments

To arrive at the final case weights as the basis for estimating staffing needs, three additional steps were taken:

- Meetings were held with staff and managers to validate the preliminary results, ensuring there were no significant changes in business processes misrepresented in the time study results, or any data issues related to caseload measures or survey response patterns;
- After establishing “face validity” of the findings, additional meetings were held with staff regarding the gaps between what the data represent in relation to current workload and resource levels – the “as is” estimate – versus the “should be” estimate reflecting case weights and staffing level needed to perform their work at a more desirable level of efficiency and efficacy;
- Historical data were analyzed, where available, to evaluate the relationship between staffing levels and case outcome measures – in particular, case disposition time – which could be used as the basis for simulating the “should be” scenarios to establish appropriate staffing levels.

The validation and adjustment processes relied on qualitative information from staff sharing their insights on various case-processing activities in terms of what works, what does not work , and where bottlenecks tend to occur. Table 8 presents an example of detailed case weight calculations that was used in meetings with OCTC staff to validate the data. The data shows that more than 50 percent of case-processing activities are related to two activity types, for a total of 18 hours per case: contacting various parties involved in the case and drafting various documents.

Drilling down to subtask for each of the two task areas, staff were also provided with the detail regarding these task areas. For contacting activities, for example, detailed data reveals significant amount of staff time devoted to communicating with complaining witnesses and other parties. Drafting memos take up 40 percent of staff time, or roughly 3 hours per case, in the area of document drafting.

Many of the time estimates at the task and subtask levels cannot be readily validated based on staff's day-to-day experience. An indirect validation of the data, however, resulted from staff review of the data in terms of the *proportion* of time spent on different activities largely reflecting their actual experience. The empirical information presented, while initially treated with varying degrees of confidence, prompted staff to engage in productive conversations about various aspects of case-processing activities. Some salient themes are worth noting, summarized below, as they provide important context in guiding further research to understand the statistical relationships between workload indicators and staffing levels with the goal of transitioning from the "as is" to "should be" scenario for establishing case weight and workload standards.

Table 8. Drill-Down of OCTC Case Weights at Task and Subtask Levels

Enforcement Case Weight by Task Type			
Task (level 1 grouped)	Percent	Case-Related Time/Case (Minutess)	Total Time/Case (Hours)
Contacting	30.4	626.7	10.4
Drafting/Creating Docs	22.2	457.6	7.6
Reviewing Docs	16.6	342.5	5.7
File Admin	10.4	213.9	3.6
Investigation	4.5	92.5	1.5
Research	4.0	83.4	1.4
Trial	4.0	82.2	1.4
Other tasks	8.0	165.6	2.8
Total	100.0	2,064.2	34.4

Subtasks Related to Contacting			Subtasks Related to Drafting/Creating Documents		
Subtask	Percent	Case-Related Time/Case (Minutess)	Subtask	Percent	Case-Related Time/Case (Minutess)
Contact Internal	22.1	138.4	Memo	40.2	184.0
Contact Parties/Counsel	30.8	192.8	Letter/Call/Email	16.4	75.0
Contacting Complaining Witness	20.0	125.3	Motion/Response	8.9	40.9
Contacting Other	11.3	70.9	Other Pleadings	7.1	32.4
Contacting Respondents	15.8	99.3	Statement of Case	6.1	27.8
Total	100.0	626.7	Investigation Plan	4.8	22.1
			NDC	3.2	14.8
			Other subtasks	13.3	60.8
			Total	100.0	457.6

One of the major themes that emerged repeatedly in discussions with OCTC staff is related to the challenge of managing effectively when caseload grows beyond a certain threshold. It was noted that in instances where an investigator carries a large caseload, it is impossible to maintain the necessary, detailed knowledge of all active cases. Absent this intimate familiarity with each of the cases in inventory, it becomes more difficult to move cases along with both care and efficiency. What can be done is often no more than maintaining the cases at a minimum. Under such circumstances, it is especially difficult to focus on complex cases

involving a large volume of documents without compromising the ability to maintain steady progress on other active cases.

The burden of large caseloads is partly related to another salient point, which is the steep learning curve for new investigators to become proficient in processing cases effectively. From setting up an Investigation Plan to writing up a final Summary of Case, the knowledge and skills required are specific to the domain of attorney discipline rules and institutional procedures in the State Bar. An experienced investigator observed that a basic task of fact finding in communicating with either the complaining witness or respondent would pose a challenge because it required the knowledge of what constitutes misconduct and violation that is often not intuitively obvious. As a result, new investigators would start out with a small caseload with relatively simple cases and gradually progress to a normal caseload over a period of six months to one year. With investigator staff at varying levels of experience, the distribution of caseload across investigators is highly uneven. At any given time, the caseload among investigators may vary from a low of 10 to more than 80 cases. Thus statistics regarding the aggregate *average* caseload fail to capture the true caseload when staffing levels are in flux.

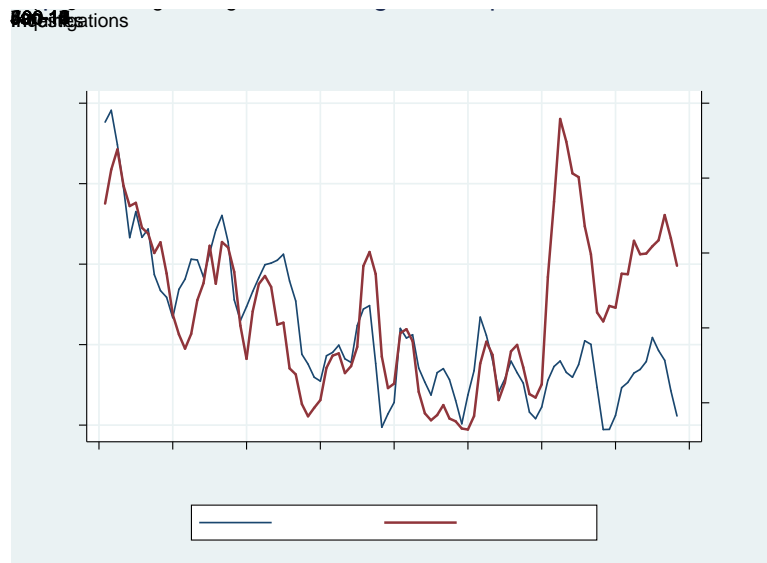
The division of labor and coordination among staff in different roles, in particular between investigators and attorneys, was noted as an important element with significant impact on staff's ability to move the cases efficiently and effectively as a team. For example, an investigation case is more likely to be handed off to attorneys for the next pre-filing phase with the necessary information and analyses properly prepared when an investigator works closely with an attorney under his/her guidance in making important decisions along the way. When an attorney is unavailable for consultation, which was noted as quite common due to their cases being tied up in trials, the progress of an investigation case would be held up.

The impact of inadequate staff resources extends beyond the difficulties that it presents for moving cases with merits; it also constrains the ability of staff to close dismissed cases with sufficient attention paid to the complaining witnesses who filed the cases. It was pointed out that the Bar plays a dual function of public protection and public service. The former requires significant resources to conduct investigation and move cases with merit toward prosecution. The latter, related to cases that were dismissed due to lack of evidence or merit, requires appropriate interactions with complaining witnesses to provide adequate status updates and explanations of case decisions when they are closed. The competing demand of resources for these two priorities – serving the public whose complaints did not result in discipline of the attorneys versus protecting the public from attorney misconduct and ethical violations – is a balancing act that is easier to achieve with adequate resources.

The balancing of resources noted above was brought up in the context of a recent organizational change in 2016 involving different procedures for screening cases at the Intake

stage versus moving the cases forward to Enforcement for further investigation. The procedural change was intended to devote more resources to conducting formal investigation of the complaints that they deserve. The upswing of investigation cases in earlier 2016, as shown in Figure 1, resulted from this organizational change. The dramatic workload shift between the Intake and Investigation stages also prompted reevaluation as to whether workload indicators based on 2- or 3-year average of new cases would be more appropriate for creating case weights.

Figure 1. Inquiries Received and Investigations Opened, by Month



Aside from organizational changes that caused a shifting of resources and the associated workload indicators to be used in the workload model, questions were also raised as to whether the number of cases closed during the current period, as opposed to new cases received or filed, would represent the current workload more accurately. In the same vein, a State Bar Court attorney noted that the work of SBC attorneys is likely to be more accurately represented by the number of cases going to trial, and there is no obvious correlation between the number of new cases filed and trials.

While the observations described above during the validation process did not lead to quantitative evidence for adjusting the workload model directly, they provided important context to identify relevant data to evaluate the adequacy of the “as is” case weights and the additional adjustments needed to estimate the appropriate staffing levels. The following sections discuss the subsequent analyses and adjustments that were used to estimate staffing need based on the adjusted workload model.

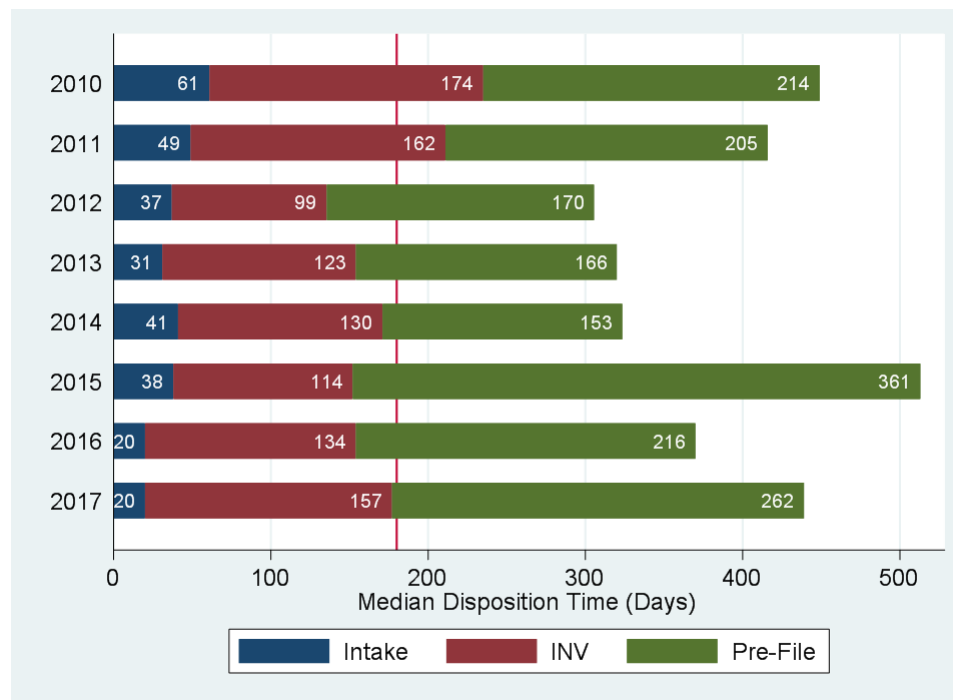
Estimates for OCTC were based on an analysis of the historical trend of case disposition time during the investigation phase and staffing of investigator positions. Adjustments for SBC were

based on a comparison with the results of a staff workload study conducted in 2014. No adjustments were made at this time for Probation due to the lack of comparative data, as well as the small number of staff performing the work as a whole. Further analysis of Probation procedures, beyond time study, would be necessary in the future to build upon the baseline data from the current study.

Staffing Need Estimated for OCTC

To explore the impact of staffing level changes and case outcomes, the analysis was focused on the length of time it takes to dispose a case at the investigation stage. The focus on the investigation stage is informed by findings related to the amount of time required for cases to reach disposition at the stages of intake, investigation, and pre-filing. As shown in Figure 2, the median time at the investigation stage often came close to the backlog timeline of 180 days already. To reduce the overall timeline it is clear that managing the caseload with sufficient resources at this stage would have the greatest impact on the overall timeline.

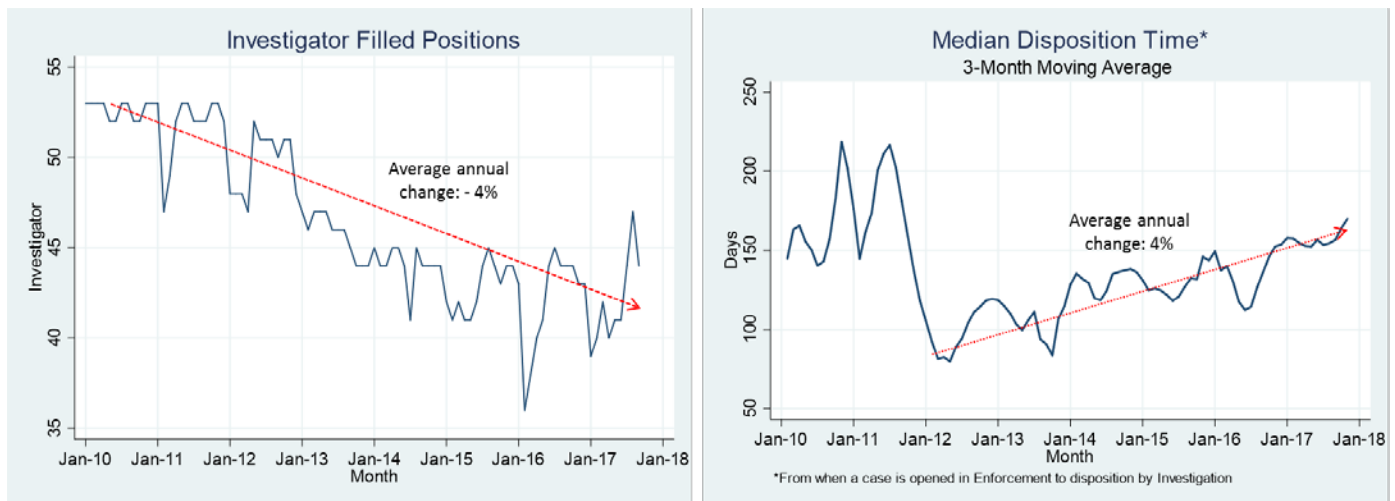
Figure 2. Median Case Disposition Time, by Case Stage and Year



An analysis of the historical trend of various data points shows that the fluctuations of investigation positions and median disposition time displayed a strong correlation from 2010 to 2017. Figure 3 shows that, while the number of filled investigator positions had fluctuated during the period, there was a steady, long-term reduction of 4 percent per year until it began to rise in mid-2017. Moving in the other direction concurrently since 2012, the median disposition time for investigation cases continued to rise at an annual rate of 4 percent. Further

analysis of the correlation between these two trends reveals that an increase of one additional investigator position is associated with a decrease of 3.6 days in median disposition time.

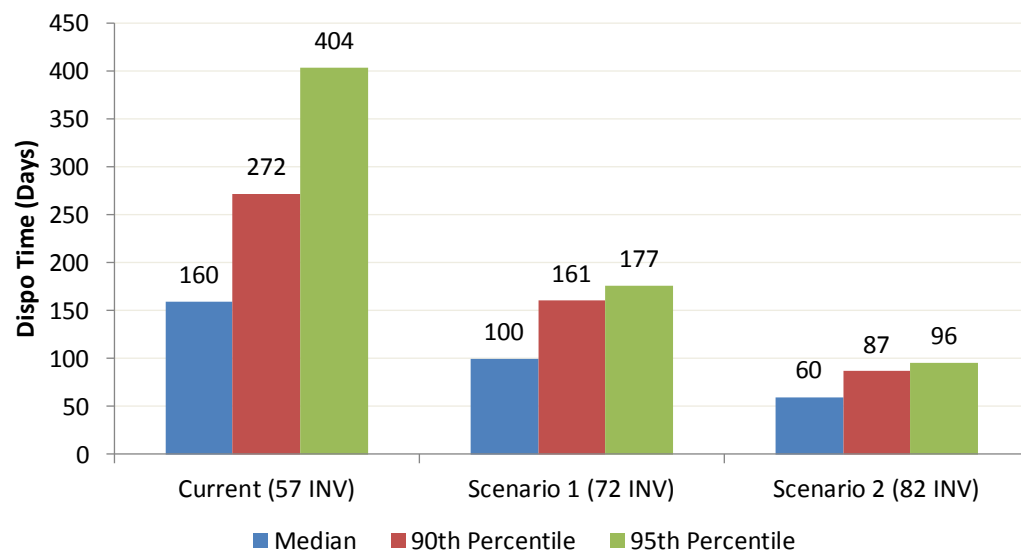
Figure 3. Correlation between Investigator Filled Positions and Disposition Time



The correlation derived above makes it possible to simulate the staffing level needed in order to achieve case disposition within certain desirable timeline. Since the median time was 159 days for investigation cases to reach disposition in 2017, it means that more than 50 percent of the cases took longer than 159 days. Adding approximately 20 days to the Intake stage, a case going through the last stage before filing with the SBC (pre-filing stage) would have approached the backlog timeline in excess of 180 days. For this reason it is necessary to review cases over the entire range of case disposition time, rather than relying on median time only.

To evaluate the impact of staffing changes on the full range of cases, further analysis was conducted to look at the 90th and 95th percentile time to measure cases that typically take longer to reach disposition. The analysis shows that, when median time was reduced by one day as a result of increased staff level, the disposition time for older cases at 90th percentile would be reduced by 1.8 days, while cases at 95th percentile would save more than 3 days to reach disposition. This pattern demonstrates a dynamic relationship between caseload size and the progression of cases through different stages as observed by staff described above. The incremental impact of caseload exceeding certain threshold appears to negatively affect more complex cases in a cumulatively non-linear fashion; thus the disposition time of older cases decreases at an accelerating rate as the median time declines.

Figure 4. Estimated Reduction of Disposition Time and Increase of Investigators – Two Scenarios in Comparison to Current Staffing Level



Following the analyses described above that modeled the full range of case disposition time associated with varying number of investigator positions, Figure 4 presents the results of two simulation scenarios. At the current level of 57 investigators (representing monthly averages in 2017), the median disposition time during the investigation phase was 160 days in median, 272 days at 90th percentile, and over 400 days at 95th percentile. When the number of investigators was increased to 72, the disposition time was projected in the model to decrease to 100, 161, and 177 days, respectively at the three points in the distribution range. Ten additional investigators would further reduce the disposition time to 60 days at median, 87 days at 90th percentile, and 96 days at 95th percentile. When the majority of cases (up to 95 percent) were disposed under 100 days during the investigation phase, as shown in scenario 2, the chance of most cases meeting the 180-day target before reaching the final stage would increase substantially.

Given the staffing need for investigators derived from the analyses above, the last step in building out the full staffing model for OCTC is to estimate the full complement of all staff types in OCTC. Based on budgeted staff positions for 2018, as shown in Table 9, staff ratios between investigators relative to other staff categories were calculated to estimate the full complements of all positions. With investigator positions established at 82, the total number of OCTC staff needed is estimated at 315.

Table 9. Estimated Staffing Need for OCTC

Staff Category	2017 Staffing (Monthly Average)*	2018 Budgeted Positions	Estimated Staffing Need
Investigator	52	67	82
Attorney	75	94	115
Paralegal	14	18	22
Legal Secretary	14	16	20
Admin Support	38	62	76
Total	192	257	315

* Temp staff are not included.

The adjustment process detailed above implies that the overall case weight for Intake cases would increase from 110 to 155 minutes per case; a parallel adjustment for Enforcement case weight would increase from 3,332 to 4,711 minutes per case.

The modeling exercise above relied on two analytical procedures: 1. the relationship between new cases received and staffing level as specific in equations 1 to 3; and 2. the empirical relationship between investigator staffing and case disposition time. Outside the model as defined by these two procedures, projected staffing need would obviously have an impact on the number of active cases carried by investigators. Estimating the caseload per investigator, however, depends on the *average* length of time cases stay active on the caseload, which often deviates from the median time that was used in the modeling exercise. Accounting for some uncertainty in projecting the *average* length of active cases, fully staffed investigator positions at 82 suggest that the caseload per investigator would decline to 16 cases, compared to approximately 50 cases per investigator in 2017.

Staffing Need Estimated for SBC

The comparison scheme to arrive at adjusted case weights and estimated staffing need for SBC followed a different procedure. First, the lack of sufficient variance in staff position changes over time at the SBC does not lend itself to similar statistical analyses as performed for the investigator workload in OCTC. A study focused on non-attorney staff in SBC, conducted in 2014 by the Justice Management Institute (JMI), provided comparable data elements for a comparative analysis. From estimated case weights capturing the “as is” staffing level at the time, it also made adjustments to project the staffing need that reflected what the appropriate staff level should be. A comparison between the “should be” scenario from the JMI 2014 study and the “as is” estimates from the current study is presented in Table 10.

A few key points are notable from the comparison. First, staffing levels during the two study periods are identical for both attorney and non-attorney staff. Workload indicator in the JMI study was based on the number of cases closed two years prior to the study time, while the current study used 3-year average filings. With staffing at the same level and workload declining between the two time periods, case weights in the current study would naturally increase relative to the case weights created in 2014, 18.5 percent higher for non-attorney staff and 21 percent higher for attorney staff. When case weights from the 2014 study were applied to the current workload, the estimated staffing need represents the staffing level needed based on the 2014 case weight standards. It shows that the current workload would require a total of 24.6 staff, as opposed to the current staffing level of 32 positions.⁶

Table 10. Comparison of SBC Case Weights and Staffing Need from Two Studies

	JMI 2014 Study	2017 Study	Difference (%)
Workload Driver			
Workload Driver	Cases closed in 2012	3-year average filings	
Workload Number	747	573	-23.3%
Non-attorney Positions and Case Weights			
Non-attorney Positions	22	22	
Non-attorney Case Weight (min)	2,924.2	3,466.2	18.5%
Attorney Positions and Case Weights			
Attorney Positions	10	10	0.0%
Attorney Case Weight (min)	1,447.2	1,751.6	21.0%
Projected Staffing Need Based on JMI Case Weight and Current Workload			
	Projected Based on		
	JMI Case Weights	Current	Difference (%)
Non-Attorney	16.4	22.0	-25.6%
Attorney	8.3	10.0	-17.4%
Total	24.6	32.0	-23.1%

⁶ When the current workload indicator was substituted by the number of cases disposed (606 cases in 2017), adopting the same metric as the 2014 study, the estimated staffing need would increase slightly to a total of 26.

Appendix A: Task and Subtask Lists for Case-Related Activities

OCTC	
Contacting Respondents	Draft/Analysis/Response Briefs/Documents
Letter/Call/Email	Letter
In Person Contact	Memo
	Investigation Plan
Contacting Complaining Witness	Statement of Case
Letter/Call/Email	Notice Intent to Issue NDC
In Person Contact	NDC
	Motion/Response
Contacting	Settlement Pleadings
Letter/Call/Email	Pleadings
In Person Contact	Stip Facts & Discipline
	Stip Facts
Contact Internal	Pretrial Statement/Pleading
OCTC	Trial Briefs
SBC	Post Trial Briefs
Probation	Review Briefs
LAP	
	Research
File administration	
Open File	Prepare/Attend
Transfer File	Meeting
Close File	ENE/Settlement Conference
Re-open File	Pretrial Hearing/Conference
Prepare for audit	Post Trial Hearing/Conference
	Review Hearing/Conference
Complaint/Document Review/Analysis	Review Oral Argument
Review SB generated documents	
Review C/W generated documents	Discovery
Revenue Respondent generated documents	Formal Discovery Demands
Review generated documents	Deposition
	Deposition Summary
Informal Mediation	Informal Discovery Demands
In-Office Investigation	
Witness Interviews/Statements	Trial
Prepare /Respond Subpoenas	Review/Prepare Exhibits
Prepare/Respond Document/Information Requests	Review/Prepare Pleadings
Follow-up Investigation	Prepare/Respond Subpoenas
	Assist with Witness
Field Investigation	Attend Trial
Witness Interviews/Statements	
Prepare /Respond Subpoenas	Prepare/Present Default
Prepare/Respond Document/Information Requests	Perfecting the Record
Follow-up Investigation	Consult/Assist OGC re Review
	Travel
Case Administration	Self
Meeting with Managers re Case	Arrangements
Meeting with Supervisors re Case	
Photocopying	

Probation	
Compose/Create documents for/regarding Respondent	File/Document Review/Analysis
Case and information Sheets	Review Court orders & any documents to open matter
Reminder letters & upload to SB website Member Profile	Compliance documents/proof from Rs
Restitution spreadsheet	Compliance documents/proof from Mental Health professional
Prepare/Respond documents & Emails Info requests	Compliance documents/proof from lab
Non-compliance letter	Compliance documents/proof from self-help groups
Referral	Compliance documents/proof from LAP
Memo	Compliance documents/proof from Certified Public Accountant
	Compliance documents/proof regarding Underlying Criminal Matter
Contact Respondents/Respondent's Counsel	Determine whether to refer R for noncompliance
Letter /Call/Email	Determine whether file is ready for closure
In Person Contact	Review 9.20s, create verification form, rejection ltr, etc.
Required Meeting	Review LOMPS
	Review MCLE
Contact Complaining Witness	Review Referrals
Letter/Call/Email	Office purchase, budget, financials
In Person Contact	Audit closed file
	Audit open file
Contact Medical Providers	Review File for Audit
Letter/Call/Email	
	MCLE/outreach
Contact CPAs	Take MCLE
Letter/Call/Email	Provide MCLE/outreach
	Add to knowledge via listserves, etc. (NOBC, NAPE, APPA, etc.)
Contact re Underlying Criminal Matter (probation officers)	
Letter/Call/Email	Office administration
	Order supplies
Contact CW's attorney	Review invoices/prepare monthly Pcard reconciliation
Letter/Call/Email	Prepare monthly department attendance calendar
	Prepare monthly reports re ADP & referrals
Contact Internal	Prepare timesheet reconciliation for supervisor's review
OCTC	Maintain logs re orders received, 9.20 declarations received, CPRA requests, etc.
SBC	
Member Services	
LAP	Research
Admissions	Verify licensing of CPA, psychiatrist, lab, etc./support group/etc.
General Services	Rules, case law, etc.
Sections	
Probation	Prepare/Attend
CSF	Testify in SBC or judicial hearing
Member Billing	OP internal monthly Meetings
OGC	Meetings with State Bar departments re CMS, changes to OP macros, changes to SBC stipulation conditions, etc.
	Settlement Conference
Draft/Analysis/Documents for the Court	Hearing Department hearing/conference
Notification of R's MPRE non-compliance	Review Department hearing/conference
ADP report	Review Oral Argument
Motion to Revoke Probation	Prepare for SBC or judicial hearing
Stipulation to resolve motion to revoke probation	
Respond to motions to modify/extend time	
Motions/stipulations to modify/extend time	File administration
Settlement Pleadings	Open physical file
Pleadings	Transfer file
Review Briefs	Close file
Motions/Petitions	Date stamp, open, & distribute mail/faxes
	Bate stamp
PM Revocation Hearing	Photocopying
Prepare CWs	File/serve documents in State Bar Court
Review/Prepare	Mail/fax letter
	Archiving/retrieving documents/files (GRM)
Travel	General file maintenance
Self	
Arrangements	

State Bar Court	
Contact Parties/Counsel	Data Input
Letter/email	Add/Accept Case
Phone calls	Enter Data into Supplemental Records
In-person contact	Discipline Entries on Computer
Interpreters	
	Calendaring/Scheduling
Contact Internal	Court Room Administration
OCTC	Preparation of Courtroom
SBC	Courtroom Support
Probation	
LAP	Counsel
	Record Review
File Administration	Meeting with/Advising Judge
Open File, Bring notice into hearing department	Meeting with/Advising Court Staff
Open file in Effectuations/Review	Draft Opinion/Decision
Create Case information Sheets, including copying	Motion Work/Orders
File maintenance, general	Post-Trial Motion Work/Orders
File consolidation	Research/memos/Statements
Assign case to Judge	Post Decision/Opinion Work
Prepare Transfer File to Eff/Rev including Copying	State Bar Court Reporter Work
Prepare Transfer File to Supreme Court including copying	Court Administration
Prepare close file	Default Work
Prepares new matter sheet	
Archiving	Prepare for/Attend
Requesting Discipline Records	ENE
	Settlement Conference
Document/Notice Preparation/Filing/Service	Oral Argument Courtroom time
Notice of Assignment (setting STC)	Formal Hearings
Notice of assignment	
Filing STC Orders	Review/Perfect Record
Filing RD Orders	Organize Exhibits Trial
Notice	Storage, Copying, Formatting CD's
Proof of Service	Organize Testimony/Declarations
Filing Referral/Interim Suspension Orders	Transcript/CD Requests
Notice of Hearing	Enter Final Discipline
Filing Pleadings (by mail)	
Filing Pleadings (thru Window)	Travel
Entry of Defaults	Self
Filing Pretrial Order	Arrangements
Filing PTC Order	
Filing Stipulations	Supervision/Management
Filing Order re:Stipulations	Employee Relations
Filing Decisions	Policy Development/Effectuation
Filing RD Notices	Internal Court/Judicial Administration
Filing Interim Order	Board Administration
Rejection of Filing	Public/Member Relations
Preparation of Judge's Instructions to Counsel	State Bar Administration
Prepare/Draft Dissent	
Prepare/Draft Order	

Appendix B: Components of Case Weights by Staff Position Type**Table B1. Estimated Case Weights for OCTC****OCTC**

Case Weight by Staff Type	Filled Positions	Case Related Time/Case (Minutes)	Non-Case Related Time/Case (Minutes)	Total Time/Case (Minutes)
Intake				
Admin	2	12	2	14
Attorney	11	52	17	68
Investigator	1	5	1	6
Paralegal	1	6	1	7
Records Coordinator	2	12	1	13
Total	18	87	22	110
Enforcement				
Admin	28	201	242	443
Attorney	68	761	456	1,216
Investigator	58	804	126	930
Legal Secretary	14	141	83	224
Paralegal	16	214	38	252
Records Coordinator	17	138	130	268
Total	200	2258	1,074	3,332

Table B2. Estimated Case Weight for Probation**Probation**

Case Weight by Staff Type	Filled Positions	Case Related Time/Case (Minutes)	Non-Case Related Time/Case (Minutes)	Total Time/Case (Minutes)
Admin	1.0	9	94	103
Attorney	1.0	84	31	114
Probation Deputy	6.0	561	57	618
Total	8.0	653	182	835

Table B3. Estimated Case Weights for SBC

Case Weight by Staff Type	Filled Positions	Case Related Time/Case (Minutes)	Non-Case Related Time/Case (Minutes)	Total Time/Case (Minutes)
Hearing				
Admin	2.3	55	411	466
Attorney	6.0	1,055	268	1,324
Case Admin	10.0	1,677	308	1,985
Legal Sec	1.0	0	199	199
Manager	1.2	9	249	259
Total	20.5	2,797	1,435	4,232
Review				
Admin	3.2	873	541	1,414
Attorney	4.0	1,325	634	1,958
Case Admin	2.0	625	257	881
Manager	0.6	11	285	296
Total	9.8	2,834	1,716	4,550
Effectuation				
Admin	0.4	4	32.5	37
Case Admin	1.0	3	79.6	83
Crt Clerk	2.0	134	31.9	166
Manager	0.2	1	19.7	20
Total	3.7	142	163.7	306