Business Management Services

Report to the Data Analytics Advisory Committee

(Action Item)

Title: Work-year Value Adjustment

Date: 11/22/2024

Contact: Nicholas Armstrong, Senior Research Analyst

415-865-7829 Nicholas.Armstrong@jud.ca.gov

Issue

The Resource Assessment Study (RAS) uses three main components for estimating full-time equivalent (FTE) staff need in the trial courts: caseweights (time in minutes), case filings (most recent 3-year average), and a staff work-year value (time in minutes). This memo focuses on updates to one of those components: the staff work-year value.

The staff work-year value (WYV) represents the amount of time available for 1.0 FTE to work annually. To calculate it, two main components are required:

- 1. The number of available working days in a year
- 2. The number of working hours court staff have each day for all duties (e.g., case-related work, meetings, work-related travel).

Historically, the work-year value has been reassessed and recalculated with each new time study, typically conducted every five years. The parameters used to calculate the WYV are outlined in Table 1. When the WYV is recalculated, some of those parameters are subject to change due to policy or other updates. The parameters that should be reexamined include: (1) the number of available working hours in a day, (2) the average number of days used annually, and (3) the number of state holidays in a year.

Table 1.

WYV Parameter	Subject to change when new time study conducted?	Current Value
Days in calendar year	No	365 days
Weekend days	No	104 days
Number of working hours in the day based on non-exempt staff (60-minute lunch and two 15-min breaks)	Yes, if there was a change (policy, other update) that requires review.	7.5 hours

Business Management Services

Report to the Data Analytics Advisory Committee

WYV Parameter	Subject to change when new time study conducted?	Current Value
Number of used leave days among study courts, excluding extended leave. Extended leave is accounted for in the caseweights by weighting up participants' minutes to represent a full complement of staff.	Yes, if there was a change (policy, other update) that requires review.	29 days
Number of state holidays during which the court is closed.	Yes, if there is a change in the state holidays observed.	13 days

There have been no changes in policy related to the number of working hours in a day for non-exempt staff since the last study update. Given that, the two parameters subject to change for the 2024 RAS WYV recalculation are (1) the number of state holidays in a year and (2) the average number of used leave days annually.

Background

Previous work-year values in the RAS model update history have ranged from 95,900 to 111,360 minutes (see Table 2). Except for the WYV of 111,360 minutes, which was used for only one year to update FTE estimates, all work-year values have been based on data collected during the time study and further substantiated by data gathered from the trial courts.

Table 2.

RAS FY	WYV (Mins)
FY 06-07 to FY 11-12	96,300
FY 12-13 to FY 17-18	95,900
FY 18-19	111,360
FY 19-20 to FY 24-25	98,550

The values used in the RAS model have generally fallen within the expected range observed from other workload studies by the National Center for State Court (NCSC), as shown in Table 3.

Business Management Services

Report to the Data Analytics Advisory Committee

Table 3.

Other State Workload Studies Conducted by NCSC	WYV (Mins)	
Missouri	104,640	
Colorado	102,720	
Vermont	99,840	
Alabama	99,680	
North Dakota	98,438	
South Dakota	98,280	
Washington	97,875	
Kansas	97,650	
Iowa	97,200	
Oregon	97,200	

Analysis

Judicial Council staff have reexamined the components of the work-year value calculation and identified two parameters in need of adjustment: (1) the number of holidays and (2) the average number of leave days used.

Since the last update, Juneteenth—commemorating the end of slavery in the United States—became an official California state holiday in 2023. As a judicial holiday, courts are now closed in observance of this day, which adds an additional day to be subtracted from the available workdays in the holiday category. This changes the number of California state holidays from 13 to 14 since the last study.

Analyzing the leave data from the recent RAS time study revealed that the amount of leave taken was consistent with values used in previous calculations. The analysis included data from all 19 participating courts (see Table 4). The median value of the courts' data showed an annualized leave of 29.3 days. The median value was used because it provides a more accurate representation of the distribution in the data by reducing the effect of outliers on the outcome. The 19 courts in the time study, and represented in this data, account for 64% of the total FTEs across the state, based on the latest Schedule 7A data report.

It's important to note that annual leave used data does not include staff on extended leave, such as FMLA. However, to account for this the NCSC has a standard practice of weighting study participants to account for missing individuals from the study. This means that vacant positions, individuals on extended leave, and non-respondents are factored in to estimate a full complement of staff. Therefore, extended leave is accounted for in caseweights, and a further reduction in the work-year value would result in an overestimation.

Business Management Services

Report to the Data Analytics Advisory Committee

Table 4.

RAS Participating Court	Median Leave Used (Annualized)
Α	17.4
В	20.8
С	22.7
D	23.5
E	24.7
F	24.7
G	24.7
Н	26.0
1	26.2
J	29.3
K	29.9
L	30.3
М	30.9
N	32.4
0	33.2
Р	34.7
Q	37.1
R	39.4
S	40.1
Average (median)	29.3

Current and Proposed WYV

The method for calculating the work-year value has stayed mostly consistent over the years, focusing on the number of available working days in a year and the available hours court staff have each day for all duties. The current work-year value, from the previous RAS model update, is based on 219 available days and a 7.5-hour workday. Table 4 shows the current values for calculating the WYV alongside the new proposed values.

Incorporating the additional holiday (14) and 29.3 leave days into the work-year value calculation results in 97,965 available minutes in a year, a decrease of 585 minutes from the previous work-year value. This figure remains consistent with past RAS WYVs and falls within range of work-year values used in other NCSC time studies.

Business Management Services

Report to the Data Analytics Advisory Committee

Table 4.

Parameter	Current Value	Proposed Value
Days in year	365	365
Less weekend days	-104	-104
Less holidays	-13	-14
Less sick/leave days	-29	-29.3
Total days available	219	217.7
Total hours per day	7.5	7.5
Work-year value =	98,550 minutes	97,965 minutes
days*hours*60(min)	(1,642.5 hours)	(1,632.8 hours)

Recommendation

Judicial Council staff recommend adopting a new work-year value of 97,965 minutes, accounting for 14 holidays and 29.3 leave days, resulting in a total of 217.7 available workdays (97,965 minutes, 1632.8 hours) per year for 1.0 FTE.