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TECHNICAL REPORT

Case Weights for Federal Defender Organizations

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Sponsored by the Administrative Office of the United States Courts



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This research was sponsored by the Office of Defender Services of the Administrative Office of the U.S. Courts and was conducted in the Safety and Justice Program within RAND Infrastructure, Safety, and Environment.

Library of Congress Cataloging-in-Publication Data

Case weights for federal defender organizations / Nicholas M. Pace ... [et al.].

p. cm.

ISBN 978-0-8330-5312-1 (pbk. : alk. paper)

1. Public defenders—United States.
2. Legal services—United States.
3. Judicial statistics—United States.
4. Judicial statistics. I. Pace, Nicholas M. (Nicholas Michael), 1955-

KF9646.C37 2011

345.73'01263—dc23

2011030899

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Published 2011 by the RAND Corporation

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Summary

Introduction

Scope of the Work

This technical report presents work performed on behalf of the Office of Defender Services (ODS), a directorate of the Administrative Office of the U.S. Courts (AOUSC).¹ The goal was to help ODS develop a set of case weights for estimating the funding and staffing requirements of federal defender organizations (FDOs) throughout the United States. Case weights provide a means for viewing FDO attorney caseloads that “weights” client matters by the average number of hours attorneys throughout the system spend on cases involving similar types of offenses or legal services. The weights are normalized so that a case type with average time expenditures that are twice the average for all cases taken together would have a weight of 2.0. Such relative case weights are not used to determine how much effort any particular case should require; rather, they can help in understanding how resource needs evolve over time as the mix of cases handled by FDOs changes from year to year.

The primary focuses of our work were twofold. First, we were asked to develop a measure of the number of attorney hours required for various types of cases, based on national averages, and to use those averages to create a statistically valid set of case weights. Our main sources of information for calculating such weights were two transactional databases: (1) Case Management System (CMS) (used for tracking client matters handled by FDO attorneys) and (2) TimeKeeper System (TKS) (an application used for recording the self-reported time expenditures of FDO attorneys and certain other office staff members). Much of our initial work in this project was focused on reviewing and evaluating data from TKS and CMS in regard to their appropriateness as data sources for developing functional case weights. We conducted site visits at five FDOs, holding confidential interviews with attorneys and support staff that centered primarily on recordkeeping practices related to TKS and CMS. The data in our extracts of TKS and CMS were refined using information we obtained during those site visits, as well as from an initial analysis conducted to identify indicators of possible quality issues. Suspect areas were noted and informed other aspects of this project. To help inform our work, we reviewed the use of case weights in justice system organizations, including an earlier effort by ODS to create and apply such weights, examining the advantages and disadvantages of various methodologies employed to collect time expenditure data and to utilize weights in assessing staffing and resource needs.

¹ Discussion in this section is based on Chapters One and Two.

Second, we were asked to examine issues related to factors, other than the type of case, that might affect the amount of resources necessary for providing an effective defense. To help us catalog the key drivers behind the amount of time attorneys spend on one case compared to another involving similar charges or other characteristics, we set up a series of semistructured interviews with attorneys from 40 different districts. We also conducted a confidential survey of Federal Public Defenders and Chief Community Defenders, seeking information about the legal environment in which their FDOs operate and their views regarding workload-influencing factors. Earlier site-visit interviews of FDO attorneys also sought input on these influences. To identify which on a list of approximately 220 potential factors we cataloged had the greatest relative influence, we built an analytic data set from the CMS and TKS extracts we received from ODS and supplemented those case-level records with additional information about the districts where the cases were located. Multivariate regression techniques were used to rank elements in the data set by the degree to which they explain case-related attorney time expenditures.

Background on Case Weights

Justice system organizations in the United States, including some court systems, probation departments, prosecutor offices, and criminal defense programs, have relied on case weights for years as a means for estimating personnel need and for allocating scarce resources. Time-based case weights are of two types: absolute (reflecting the average time measured for a particular type of case) and relative (reflecting how the average time measured for a particular type of case compares to the average for all cases taken together). For example, assume that cases classified as type A are found to require an average of 200 minutes of personnel time to process, those of type B require an average of 20 minutes, and all cases taken together (i.e., the total of all cases of types A and B) require an average of 50 minutes. As such, the absolute case weights for types A and B would be 200 and 20, respectively (essentially just the average times for the two types), while the relative case weight for type A would be 4.0 (200 minutes divided by the 50-minute average for all cases), and, for type B, it would be 0.4 (20 minutes divided by 50 minutes).

Though absolute and relative case weights can differ in terms of magnitude, both measures can be multiplied by the actual number of cases (based on case openings, disposition, or active cases) handled over a span of time to produce weighted caseloads. For example, assume that 3,000 cases of type A and 15,000 cases of type B were filed in a single year. Using the relative weights from the previous example, type A cases have a weighted case count of 12,000 because each case, on average, would require four times as much personnel time as all cases taken together (3,000 cases \times 4.0 relative weight). The more-numerous type B cases actually have a smaller weighted caseload count of 6,000 (15,000 cases \times 0.4 relative weight). Overall, the weighted caseload for type A is twice that for type B, suggesting that twice as much personnel time would be needed to process the type A caseload as for type B's. Absolute weights can also yield weighted caseloads. Here, the weighted caseload for type A would be 600,000 (3,000 cases \times 200 absolute weight) and type B would be 300,000 (15,000 cases \times 20 absolute weight). Weighted caseloads using absolute weights essentially describe the amount of time expected to be required to process the caseload; in this example, 15,000 hours would be needed for both types of cases (600,000 minutes + 300,000 minutes).

Evaluation of the Primary Data Sources for Federal Defender Organization Case Weights

We conducted interviews of FDO staff in some locations to learn more about how attorneys approach their timekeeping responsibilities.² These interviews were conducted in conjunction with an analysis of TKS and CMS data to identify patterns suggesting systematic problems with time and event entries. From what we learned during this phase of our investigation, we determined that there were issues related to timekeeping practices and quality control that need to be taken into account, both in our analysis and in the way ODS might employ our proposed set of case weights.

After reviewing these concerns, we nevertheless concluded that existing TKS/CMS data can be reliably used for the creation of relative case weights. Relative case weights reflect how the amount of work typically required to process a case of a particular type compares to the average for all cases taken together. The shortcomings we noted with FDO timekeeping practices are not fatal impediments to determining how case types compare to each other in terms of attorney time requirements. We do caution, however, against using information about average time expenditures in an absolute sense, such as for estimating the total number of attorney hours needed at an FDO or for the entire federal defender system. Some of the issues we identified during our evaluation are likely to negatively affect the accuracy of such estimates.

Workload Factor Cataloging

Based on our regression modeling of the many factors reported to us as influencing attorney time expenditures, it appeared that the CMS case type, the district, and the manner in which the case was concluded were the three identifiable factors most strongly associated with attorney time across all FDO cases.³ Case type by far exhibited the strongest association with time, suggesting that a case-weighting system based on case type would yield a reasonable measure of resource demand. The specific means of disposition was also found to be highly associated with attorney time, a somewhat obvious relationship given that disposition categories can include such outcomes as a guilty verdict following a district court jury trial, as well as potentially less resource-intensive conclusions, such as a modification of the terms of a supervised release. Our analysis also revealed that district identification was likewise associated with average FDO attorney time expenditures, but there was no single reason we could identify that might explain why districts differ in this way for the same type of case. The relatively high influence of district location in explaining attorney time suggests that location needs to be taken into account as part of any case-weight calculation. Other factors that exhibited larger influence in predicting attorney time expenditure include the staffing levels of the U.S. Attorneys' Office (USAO), the identity of the circuit court of appeals, and discovery volume information recorded in CMS, such as the number of boxes of hard-copy discovery or the number of transcript pages.

² Discussion in this section is based on Chapter Two.

³ Discussion in this section is based on Chapter Three.

Case Weights Proposed for the Federal Defender Organizations

We developed three alternative sets of case weights using attorney time records in TKS for all cases closed during the five-year period of fiscal year (FY) 2004 through FY 2008.⁴ Mean averages for time were calculated for each of 284 case types associated with the closed cases, and a set of weights was based on those averages. Because of concerns over the influence on the mean from outlier cases in which extraordinarily large amounts of time were recorded, we then used a robust statistical method known as an *M-estimator* (rather than the simple mean) to create a second set of alternative weights. Finally, we created a third set that employed an M-estimator but also used statistical modeling techniques that compare average attorney time for one case type to the average time for another case type within the same district and adjusted the weights accordingly. The purpose of doing so was to account for some of the district influences we noted during our cataloging of workload factors and to avoid the effects of a statistical quirk that can skew relative weights from what might be expected when average times are viewed at the individual district level. Though we presented various sets of candidate weights for ODS's review (including sets in which certain categories of immigration cases found in the Southern and Western Districts of Texas were dropped from our analysis), our recommendation is that ODS use a single set of nationally derived weights for all 79 FDOs based on district-adjusted M-estimation calculations (see Table S.1).

Table S.1
District-Adjusted M-Estimate Case Weights

CMS Code	Case-Type Description	Number of Cases	Case Weight
AA	Court of Appeals: Amendment Appeal	74	0.21
AC	Amicus	1	14.59
AF	Appeal: Civil Asset Forfeiture Representation	10	0.63
ANCPRO	Ancillary Proceedings	350	0.45
APM	Appeal: Magistrate Decision	544	1.02
BP	Bail/Presentment	7,110	0.06
CA	Court of Appeals: Other Matters	12,873	2.29
CAO	Circuit Argument Only	12	1.68
CCA	Co-Counsel Appointment	21	1.04
CCC	Criminal or Civil Contempt	151	0.66
CCO	Conflict Counsel	223	0.12
CD	Court Directed Prisoner Representation	1,587	0.19
CF	Civil Asset Forfeiture Representation	76	0.70
CK	Crack Cocaine Retroactive Amendment	11,493	0.13
CONSUL	Consultation	4,589	0.46
CR0100	Homicide: Murder, First Degree	384	8.61

⁴ Discussion in this section is based on Chapters Four and Six in this document.

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
CR0101	Homicide: Murder, First Degree, Government Official	4	6.33
CR0200	Homicide: Murder, Second Degree	99	7.77
CR0201	Homicide: Murder, Second Degree, Government Official	4	1.74
CR0300	Homicide: Manslaughter	136	5.73
CR0310	Homicide: Negligent	4	2.23
CR0311	Homicide: Negligent	1	2.97
CR1100	Robbery: Bank	4,350	2.59
CR1200	Robbery: Postal	73	3.30
CR1400	Robbery: Other	90	1.92
CR1500	Assault: Assault	2,535	2.27
CR1501	Assault: Felony, on a Government Official	10	1.20
CR1560	Federal Statute: Fair Housing Law	5	2.35
CR1600	Assault: Other	1,137	0.44
CR1601	Assault: Misdemeanor, on a Government Official	18	0.70
CR1602	Assault: Obstruction of Justice—Interference	16	2.12
CR1700	Racketeering: Violent Crime	155	2.81
CR1800	Carjacking	81	2.70
CR2100	Burglary: Bank	1	2.11
CR2200	Burglary: Postal	52	1.51
CR2300	Burglary: Interstate Commerce	4	1.68
CR2400	Burglary: Other	86	1.18
CR3100	Larceny and Theft: Bank	226	1.77
CR3200	Larceny and Theft: Postal	1,224	1.74
CR3300	Larceny and Theft: Interstate Commerce	236	2.72
CR3400	Larceny and Theft: U.S. Property	4,382	0.99
CR3500	Larceny and Theft: Theft Within Special Maritime Jurisdiction	350	0.26
CR3600	Larceny and Theft: Transportation Stolen Property	388	2.56
CR3700	Larceny and Theft: Felony Other	225	1.37
CR3800	Larceny and Theft: Misdemeanor Other	601	0.31
CR4100	Embezzlement: Bank	599	1.62
CR4200	Embezzlement: Postal	818	1.16
CR4310	Embezzlement: Public Moneys or Property	39	1.60
CR4320	Embezzlement: Lending, Credit, Insurance Institute	64	2.13

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
CR4330	Embezzlement: By Officers of a Carrier	5	2.94
CR4340	Embezzlement: World War Veterans Relief	8	1.45
CR4350	Embezzlement: Officer or Employee of U.S.	34	1.30
CR4390	Embezzlement: Other	415	2.26
CR4510	Fraud: Income Tax, Evade or Defeat	181	3.78
CR4520	Fraud: Income Tax, Felony Other	269	3.25
CR4530	Fraud: Income Tax, Failure to File	72	2.62
CR4540	Fraud: Income Tax, Misdemeanor Other	2	0.17
CR4600	Fraud: Lending, Credit Institution	273	1.97
CR4601	Fraud: Bank	2,115	2.09
CR4700	Fraud: Postal, Interstate Wire, Radio, etc.	2,057	3.15
CR4800	Fraud: Veterans and Allotments	21	1.24
CR4900	Fraud: Bankruptcy	214	3.50
CR4910	Fraud: Marketing Agreements and Commodity Credit	6	2.01
CR4920	Fraud: Securities and Exchange	99	4.66
CR4931	Fraud: Excise Tax, Other	2	4.72
CR4932	Fraud: Wagering Tax, Other	5	0.65
CR4933	Fraud: Other Tax	46	1.00
CR4940	Fraud: Railroad Retirement and Unemployment	11	0.86
CR4941	Fraud: Food Stamp Program	123	1.08
CR4950	Fraud: Social Security	2,056	1.50
CR4960	Fraud: False Personation	160	2.04
CR4970	Fraud: Nationality Laws	917	1.16
CR4980	Fraud: Passport	1,960	0.86
CR4991	Fraud: False Claims and Statements	3,515	1.66
CR4992	Fraud: Conspiracy to Defraud, Other	1,422	2.18
CR4993	Fraud: Conspiracy (General), Other	3	0.91
CR4994	Fraud: False Entries, Other	25	0.87
CR4995	Fraud: Credit Card	1,885	1.87
CR4996	Fraud: Computer	219	2.71
CR4997	Fraud: Telemarketing	16	4.81
CR4998	Fraud: Health Care	425	2.40
CR4999	Fraud: Other	392	2.91

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
CR5100	Transportation Stolen Vehicle; Aircraft	118	1.71
CR5200	Auto Theft: Other	248	4.00
CR5500	Forgery and Counterfeiting: Transport Forged Securities	1	0.05
CR5600	Forgery and Counterfeiting: Postal	1	0.73
CR5710	Forgery and Counterfeiting: Other U.S.	203	1.41
CR5720	Forgery and Counterfeiting: Other	13	0.87
CR5800	Forgery and Counterfeiting: Counterfeiting	2,899	1.76
CR5900	Sex Offenses: Sexually Explicit Material	1,163	2.39
CR6100	Sex Offenses: Sexual Abuse of Adult	659	4.80
CR6110	Sex Offenses: Sexual Abuse of Children	1,633	3.49
CR6120	Sex Offenses: Interstate Domestic Violence	38	6.13
CR6121	Sex Offenses: Violent Offenses, Other	48	2.85
CR6200	Sex Offenses: White Slavery and Importing Aliens	514	3.12
CR6300	Sex Offenses: Other	1,450	3.03
CR6301	Sex Offenses: Transportation for Illegal Sexual Activity	235	2.65
CR6501	Drug Offenses: Marihuana, Sell, Distribute or Dispense	9,462	1.72
CR6502	Drug Offenses: Marihuana, Importation/Exportation	3,611	1.94
CR6503	Drug Offenses: Marihuana, Manufacture	187	1.94
CR6504	Drug Offenses: Marihuana, Possession	2,092	0.34
CR6700	Drug Offenses: Narcotics, Other (Terms/Reopens)	17	0.14
CR6701	Drug Offenses: Narcotics, Sell, Distribute or Dispense	11,329	1.92
CR6702	Drug Offenses: Narcotics, Importation/Exportation	1,582	1.72
CR6703	Drug Offenses: Narcotics, Manufacture	113	2.50
CR6704	Drug Offenses: Narcotics, Possession	609	1.08
CR6705	Drug Offenses: Narcotics, Records, Prescriptions, Fraudulent	4	0.59
CR6800	Drug Offenses: Controlled Substance, Continuing Criminal Enterprise	40	1.39
CR6801	Drug Offenses: Controlled Substance, Sell, Distribute, Dispense	23,870	1.86
CR6802	Drug Offenses: Controlled Substance, Importation/Exportation	1,455	1.81
CR6803	Drug Offenses: Controlled Substance, Manufacture	452	2.55
CR6804	Drug Offenses: Controlled Substance, Possession	1,429	0.68
CR6805	Drug Offenses: Controlled Substance, Fraudulent Records, Prescription	11	1.04
CR6806	Drug Offenses: Drug Cultivation	6	1.35

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
CR6807	Drug Offenses: Illicit Drug Profits	1	5.43
CR6809	Drug Offenses: Mail Order Drug Paraphernalia	2	0.22
CR6810	Drug Offenses: Under Influence Alcohol/Drugs	43	0.71
CR6830	Drug Offenses: Under Influence Alcohol/Drugs	62	0.26
CR6905	Drug Offenses: Other	19	1.76
CR6909	Drug Offenses: Mail Order Drug Paraphernalia	38	0.51
CR6911	Drug Offenses: Other Drug Abuse Prevention and Control Act Offenses	30	2.30
CR7100	Miscellaneous: Bribery	180	2.21
CR7210	Miscellaneous: Traffic Offenses, Drunken Driving	3,399	0.26
CR7220	Miscellaneous: Traffic Offenses, Other	7,615	0.15
CR7310	Miscellaneous: Escape	1,284	0.94
CR7311	Miscellaneous: Escape, Jumping Bail	397	0.45
CR7312	Miscellaneous: Escape, Bail Reform Act of 1966	28	0.18
CR7313	Miscellaneous: Escape from Custody	60	1.35
CR7314	Miscellaneous: Criminal Default	5	0.32
CR7315	Miscellaneous: Supervision Condition Violation	23	0.56
CR7320	Miscellaneous: Escape, Aiding or Harboring	271	1.31
CR7330	Miscellaneous: Prison Contraband	136	1.20
CR7400	Miscellaneous: Extortion, Racketeering and Threats	815	3.20
CR7401	Miscellaneous: Threats Against the President	139	2.79
CR7410	Miscellaneous: Racketeering, Arson	3	0.97
CR7420	Miscellaneous: Racketeering, Bribery	1	0.03
CR7430	Miscellaneous: Racketeering, Extortion	10	6.63
CR7440	Miscellaneous: Racketeering, Gambling	4	14.99
CR7450	Miscellaneous: Racketeering, Liquor	1	0.03
CR7460	Miscellaneous: Racketeering, Narcotics	14	2.92
CR7470	Miscellaneous: Racketeering, Prostitution	1	1.93
CR7471	Miscellaneous: Racketeering, Murder	50	5.93
CR7473	Miscellaneous: Racketeering, Maim	1	0.69
CR7474	Miscellaneous: Racketeering, Conspiracy, Murder, Kidnap	5	0.14
CR7477	Miscellaneous: Racketeering, Monetary Laundering	413	2.26
CR7480	Miscellaneous: Racketeering	38	3.05
CR7481	Miscellaneous: Racketeering, Robbery	2	10.73

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
CR7482	Miscellaneous: Racketeering, Threats	3	1.15
CR7490	Miscellaneous: Racketeering, Extortion Credit Transactions	28	3.39
CR7500	Miscellaneous: Gambling and Lottery	12	1.73
CR7530	Miscellaneous: Gambling and Lottery, Transmit Wager	3	0.52
CR7600	Miscellaneous: Kidnapping (18:1201,1202)	227	3.85
CR7610	Miscellaneous: Kidnapping (18:13)	1	3.87
CR7611	Miscellaneous: Kidnapping, Hostage	43	6.34
CR7700	Miscellaneous: Perjury	98	2.34
CR7800	Miscellaneous: Firearms and Weapons	1,394	2.31
CR7820	Miscellaneous: Firearms, Unlawful Possession	5,020	2.21
CR7830	Miscellaneous: Firearms	20,255	2.59
CR7831	Miscellaneous: Furtherance of Violence	392	2.62
CR7910	Miscellaneous: Arson	55	4.01
CR7940	Miscellaneous: Malicious Destruction of Property	96	0.87
CR7941	Miscellaneous: Other, Property	2	4.42
CR7950	Miscellaneous: Disorderly Conduct	327	0.33
CR7962	Miscellaneous: Civil Disorder	7	0.23
CR7990	Miscellaneous: General Offenses, Other	2,433	0.58
CR7991	Miscellaneous: Juvenile Delinquency	136	1.72
CR8100	Miscellaneous: Failure to Pay Child Support	164	0.77
CR8200	Miscellaneous: False Claims and Services, Government	211	1.88
CR8201	Miscellaneous: Identification Documents and Information Fraud	1,565	0.80
CR8500	Miscellaneous: Mail Fraud	309	1.92
CR8600	Miscellaneous: Wire, Radio, or Television Fraud	335	2.08
CR8710	Miscellaneous: Immigration Laws, Illegal Entry	84,363	0.15
CR8720	Miscellaneous: Immigration Laws, Illegal Reentry	51,699	1.08
CR8730	Miscellaneous: Immigration Laws, Other	11,229	1.14
CR8731	Miscellaneous: Immigration Laws, Fraud and Misuse of Visa/Passport	1,186	0.57
CR8740	Miscellaneous: Immigration Laws, Illegal Entry	119	0.70
CR8750	Miscellaneous: Immigration Laws, Fraudulent Citizen	11	0.54
CR8900	Miscellaneous: Liquor, Internal Revenue	10	0.60
CR9001	Federal Statute: Waste-Treatment/Disposal/Storage	35	4.47

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
CR9110	Federal Statute: Agriculture Acts	9	0.25
CR9130	Federal Statute: Game Conservation Acts	242	1.57
CR9140	Federal Statute: Agriculture, Insecticide Act	2	0.35
CR9150	Federal Statute: National Park/Recreation Violations	205	0.96
CR9160	Federal Statute: Agriculture, Packers and Stockyard Act	5	0.12
CR9180	Federal Statute: Agriculture, Handling Animals, Research	1	4.71
CR9300	Federal Statute: Fair Labor Standards Act	63	1.04
CR9400	Federal Statute: Food and Drug Act	53	1.67
CR9500	Federal Statute: Migratory Bird Laws	25	0.88
CR9600	Federal Statute: Motor Carrier Act	2	2.04
CR9720	Federal Statute: Illegal Use of Uniform	10	1.34
CR9740	Federal Statute: Alien Registration	37	0.31
CR9741	Federal Statute: Energy Facility	5	10.90
CR9752	Federal Statute: Espionage	17	4.95
CR9753	Federal Statute: Sabotage	1	1.16
CR9754	Federal Statute: Sedition	1	4.52
CR9760	Federal Statute: Curfew, Restricted Areas	321	0.24
CR9780	Federal Statute: Trading with the Enemy Act	2	10.89
CR9790	Federal Statute: Other	80	2.93
CR9791	Federal Statute: Subversive Activities Control Act	3	0.27
CR9810	Federal Statute: Obscene Mail	25	2.08
CR9820	Federal Statute: Obscene Matter in Interstate Commerce	41	4.05
CR9901	Federal Statute: Civil Rights	83	4.68
CR9902	Federal Statute: Election Law Violators	27	1.67
CR9903	Federal Statute: Public Officers/Employees	2	0.14
CR9905	Federal Statute: Foreign Relations	65	1.28
CR9906	Federal Statute: Bank and Banking	2	0.34
CR9907	Federal Statute: Money and Finance	326	1.64
CR9908	Federal Statute: Public Health and Welfare	2	25.44
CR9910	Federal Statute: Communication Acts (Including Wire Tap)	10	1.84
CR9911	Federal Statute: Wire Interception	31	2.21
CR9912	Federal Statute: Copyright Laws	3	0.62
CR9914	Federal Statute: Coast Guard	2	4.59

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
CR9915	Federal Statute: Commerce and Trade	2	0.24
CR9921	Federal Statute: Contempt	132	1.22
CR9923	Federal Statute: Forfeiture, Criminal or Drug Related	7	1.56
CR9929	Federal Statute: Labor Laws	1	6.39
CR9930	Federal Statute: Minerals and Land Mining	1	5.89
CR9931	Federal Statute: Customs Laws (Except Narcotics and Liquor)	157	2.19
CR9938	Federal Statute: Veterans Benefits	5	0.32
CR9940	Federal Statute: Social Security	5	0.71
CR9943	Federal Statute: Railroad and Transportation Acts	1	1.08
CR9949	Federal Statute: Transportation	2	0.14
CR9950	Federal Statute: War and National Defense, Other	1	3.69
CR9954	Federal Statute: Peonage	19	2.46
CR9957	Federal Statute: Terrorist Activity	89	4.35
CR9960	Federal Statute: Liquor (except internal revenue)	30	0.43
CR9971	Federal Statute: Maritime and Shipping Laws	165	1.71
CR9972	Federal Statute: Stowaways	5	0.88
CR9973	Federal Statute: Federal Boat Safety Act of 1971	7	0.88
CR9981	Federal Statute: Postal, Non Mailable Material	16	2.06
CR9982	Federal Statute: Postal, Injury to Property	6	1.40
CR9983	Federal Statute: Postal, Obstructing the Mail	196	0.63
CR9984	Federal Statute: Postal, Violations by Postal Employees	166	0.90
CR9989	Federal Statute: Postal, Other	63	0.79
CR9991	Federal Statute: Destroying Federal Property	176	1.00
CR9992	Federal Statute: Intimidation of Witnesses, Jurors, etc.	238	3.15
CR9993	Federal Statute: Aircraft Regulations	366	1.74
CR9994	Federal Statute: Explosives (except on vessels)	461	3.64
CR9999	Federal Statute: Other	1,355	0.75
D1	Death Penalty: Habeas Corpus Challenge to State Sentence	10	39.15
D2	Death Penalty: Federal Capital Prosecution (and Direct Appeal)	163	37.00
D3	Death Penalty: Motion Attacking Sentence (2255)	1	66.87
D4	Death Penalty: Other	6	18.33
D5	Death Penalty: Redesignation from D2: No Death Sought by Government	3	366.18
EXTRAD	Extradition	660	0.62

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
FAO	First Appearance Only	17,856	0.05
HA	Appeal: Noncapital Habeas	1,092	4.04
HC	Habeas Corpus	3,954	3.04
JU	Juror Representation	8	1.66
LU	Line-Up	2	0.07
M4243A	Mental Disease 4243(a)	5	1.43
M4243C	Mental Disease 4243(c)	6	1.04
M4243E	Mental Disease 4243(e)	2	1.96
M4243F	Mental Disease 4243(f)	12	1.38
M4243G	Mental Disease 4243(g)	7	0.96
M4245A	Mental Disease 4245(a)	229	0.37
M4246A	Mental Disease 4246(a)	281	0.75
M4246E	Mental Disease 4246(e)	46	0.28
M4246F	Mental Disease 4246(f)	70	0.39
M4248A	Mental Disease 4248(a)	12	3.22
MA	Motion Attacking Sentence (2255)	578	2.06
MC	Motion to Correct or Reduce (Rule 35)	2,468	0.37
MNT	Motion for New Trial	25	1.82
MOP	Modification of Probation	1,896	0.13
ODC	Drug Court Participant	186	0.51
OT	Other	9,995	0.25
PA	Parole Revocation	2,475	0.30
PD	Pretrial Diversion	437	0.41
PL	Appeal: Parole Commission	61	0.32
PO	Petty Offenses	26,139	0.10
PP	Pre-Petition	279	0.81
PR	Probation Revocation	12,875	0.31
PT	Prisoner Transfer	2,509	0.20
PTR	Pretrial Release	1,476	0.26
RHO	Remanded: Habeas or Other	199	0.89
RTL	Remanded: Trial Level	863	0.79
SB	Standby or Advisory Counsel	6	0.42
SC	Supreme Court (Certiorari Granted)	16	52.12

Table S.1—Continued

CMS Code	Case-Type Description	Number of Cases	Case Weight
SO	Sentencing Only	1,575	0.82
SR	Supervised Release	63,281	0.41
SS	State Statutes	617	0.28
TD	Court of Appeals: Trial Disposition	11,208	3.30
WI	Witness	5,102	0.41
WW	Witness for a Grand Jury, Federal Agency, Congress	611	0.66

NOTE: FY 2004–FY 2008 closed cases.

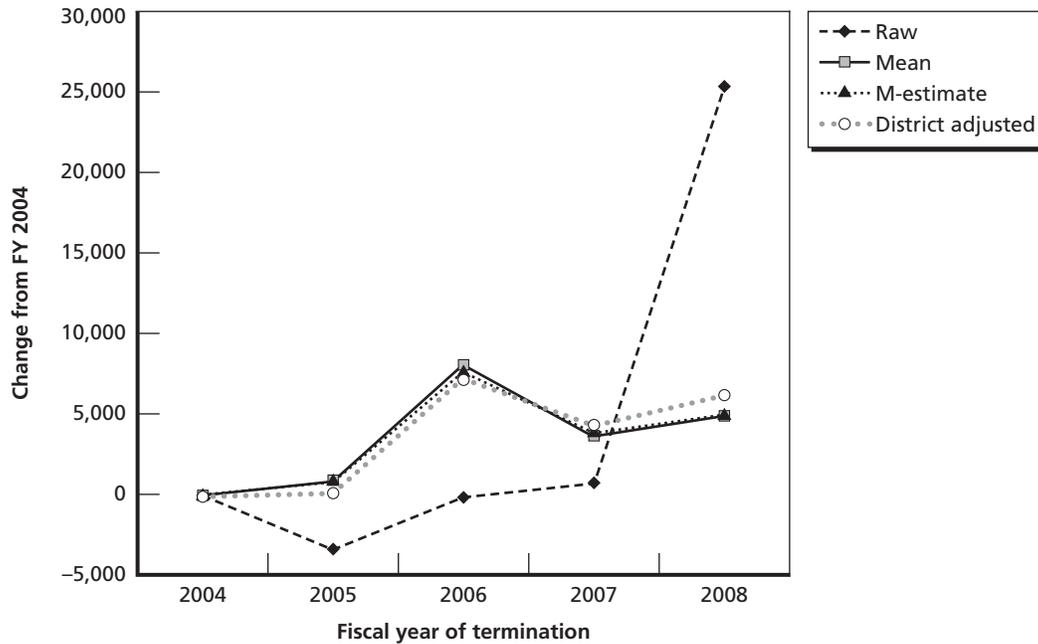
To assess the statistical reliability of the three possible weight systems, we plotted the attorney hours projected from the weighted caseloads against the actual total attorney hours in the three systems and computed the correlation coefficient between the weighted caseloads and attorney hours. Weights based on the mean or M-estimation alone had a coefficient of 0.87, indicating moderate agreement between the actual and projected attorney hours for each FDO. For district-adjusted M-estimations, there was much better agreement, with a correlation coefficient of 0.97, substantially higher than those for the other two systems. We also used the coefficient of variation (CV, the ratio of the standard errors to the case weight) as a measure to assess the variability of an estimate. CVs that exceed 1.0 are considered high variance, but all case types with at least 20 cases had CVs less than 0.45 in our data. The high correlation coefficients observed for district-adjusted M-estimation case weights and the low CVs for all but the most–infrequently used case-type categories suggest that the proposed case weights are statistically reliable.

Weighted Caseloads at the Federal Defender Organizations

We also applied the weights to the number of cases closed by the FDOs, which result in caseload counts that better reflect expected workload. Figure S.1 compares counts for unadjusted “raw” cases with those derived using the three case-weight alternatives described above (arithmetic average, M-estimates, and district-adjusted M-estimates), measuring the change in closed cases each year from FY 2004.⁵ Until FY 2007, all three weighted caseloads were increasing more quickly than the unadjusted figures, but, in FY 2008, as compared to FY 2007, 11,400 CK (Crack Cocaine Amendment) cases were added, as were 9,200 additional CR8710 (Illegal Entry) cases (all in all, there were 25 percent more cases closed in FY 2008 than in FY 2007). However, both of these case types have relatively small weights no matter which alternative weighting strategy is used, none being more than 15 percent of the overall average. When weighted, that same FY 2008 spike was far more modest in size. Using the district-adjusted approach, for example, there would be just 1,500 crack cocaine amendment and 1,350 illegal-entry cases added to the weighted totals in FY 2008 compared to FY 2007, and, when all case types are considered, the overall increase was only 2 percent.

⁵ Discussion in this section is based on Chapter Five in this document.

Figure S.1
Caseload Change During Five-Year Study Period, by Case-Weighting Method



RAND TR1007-S.1

No matter which case-weight system is adopted, some districts will find that their new weighted caseload calculations are markedly larger than the raw counts, while others see a profound decrease (see Table S.2 for a comparison of actual and weighted caseloads based on district-adjusted M-estimate weights). Of course, the real change is simply in the way cases are counted, here reflecting national average attorney case-related hours recorded in TKS. With that being understood, districts with heavy immigration caseloads or large volumes of other relatively low-weight case types have five-year totals for district-adjusted M-estimate weighted cases that are as much as 46 percent less than the unweighted figures. Some low-volume districts with a high proportion of complex or otherwise time-consuming case types can have weighted caseload totals that are at least 60 percent larger than the raw count in CMS. The rank of the largest districts (in terms of volume) stays fairly constant across the three alternative approaches.

Caseload Forecasting

We reviewed the reported methodology employed by the AOUSC's Statistics Division in its annual *Criminal Justice Act Forecasts*.⁶ The application of standard autoregressive integrated moving average (ARIMA) models and dynamic regression models to monthly case-closing patterns and trends going back to 1999 appeared to be reasonable and sophisticated techniques for predicting future FDO caseloads. However, the Statistics Division's projections are presented in terms of just seven general categories of cases handled by FDOs. In contrast, our

⁶ Discussion in this section is based on Chapter Seven in this document.

Table S.2
Effects of District-Adjusted M-Estimate Case Weights on District Caseload

District	Unadjusted			Weighted			
	Rank	Total	Change from FY 2004 to FY 2008 (%)	Rank	Total	Change from FY 2004 to FY 2008 (%)	Change from Unadjusted Total (%)
AKX	70	1,513	17.7	63	2,236	1.7	47.8
ALM	72	1,462	56.7	65	2,142	28.8	46.5
ALS	67	1,643	50.4	59	2,470	34.6	50.3
ARE	59	2,149	71.9	57	2,661	9.6	23.8
ARW	75	1,128	19.4	77	1,257	57.0	11.4
AZX	2	38,300	62.4	3	20,547	1.8	-46.4
CAC	5	16,726	12.2	4	17,915	-2.9	7.1
CAE	9	9,823	9.3	11	10,224	-14.5	4.1
CAN	26	4,623	13.0	23	6,275	-10.1	35.7
CAS	4	24,064	6.1	5	17,205	5.9	-28.5
COX	31	4,021	10.8	31	5,363	-4.0	33.4
CTX	71	1,479	12.3	68	2,108	-0.5	42.5
DCX	35	3,494	-12.2	29	5,713	-39.7	63.5
DEX	77	1,059	75.9	78	1,229	58.8	16.1
FLM	11	8,782	56.9	10	10,685	7.2	21.7
FLN	37	3,309	10.3	45	3,784	-8.4	14.4
FLS	8	10,204	-0.9	7	13,132	-13.3	28.7
GAM	90	141	—	90	137	—	-2.8
GAN	16	6,241	-10.3	19	7,203	-29.9	15.4
GUX	81	769	-18.5	87	743	-31.7	-3.4
HIX	45	2,916	-14.3	53	3,228	-45.2	10.7
IAN	64	1,691	-9.4	66	2,137	-3.8	26.4
IAS	54	2,446	22.2	55	2,756	36.9	12.7
IDX	73	1,236	1.3	74	1,755	-8.4	42.0
ILC	44	2,954	110.5	39	4,293	26.0	45.3
ILN	27	4,392	1.9	30	5,657	-8.4	28.8
ILS	40	3,203	53.6	60	2,390	8.7	-25.4
INN	66	1,661	156.1	61	2,280	31.4	37.3
INS	65	1,678	23.5	75	1,720	9.5	2.5
KSX	25	4,633	41.4	27	6,051	35.7	30.6
KYW	69	1,541	33.5	64	2,204	-5.3	43.0

Table S.2—Continued

District	Unadjusted			Weighted			
	Rank	Total	Change from FY 2004 to FY 2008 (%)	Rank	Total	Change from FY 2004 to FY 2008 (%)	Change from Unadjusted Total (%)
LAE	50	2,626	101.2	52	3,253	15.9	23.9
LAM	86	684	2.5	82	1,084	-34.0	58.5
LAW	52	2,608	67.7	49	3,402	3.1	30.4
MAX	68	1,579	36.2	62	2,250	-3.0	42.5
MDX	12	8,550	16.1	20	7,096	-4.5	-17.0
MEX	89	217	—	88	244	—	12.4
MIE	24	4,644	9.3	25	6,216	-12.4	33.9
MIW	62	1,722	64.5	58	2,552	23.4	48.2
MNX	49	2,718	35.6	48	3,414	-8.3	25.6
MOE	22	5,078	62.0	21	6,764	17.7	33.2
MOW	23	4,999	27.9	17	7,796	2.1	56.0
MSN	88	218	—	89	231	—	6.0
MSS	41	3,194	81.5	51	3,330	55.8	4.3
MTX	39	3,215	12.7	38	4,445	9.5	38.3
NCE	17	6,237	31.4	24	6,249	1.0	0.2
NCM	58	2,191	2.6	46	3,755	-16.2	71.4
NCW	60	2,126	—	50	3,362	—	58.1
NDX	84	722	—	81	1,086	—	50.4
NEX	36	3,484	61.8	33	4,758	16.4	36.6
NHX	80	826	47.4	76	1,302	11.8	57.6
NJX	18	6,209	-0.2	16	7,861	-24.4	26.6
NMX	6	11,922	7.5	6	13,616	11.7	14.2
NVX	20	5,780	-9.5	13	8,535	-25.2	47.7
NYE	28	4,384	-13.6	26	6,181	-24.4	41.0
NYN	51	2,617	9.3	56	2,679	1.3	2.4
NYS	21	5,496	1.6	14	8,395	-7.0	52.7
NYW	33	3,643	22.7	37	4,501	-1.5	23.6
OHN	47	2,729	84.7	47	3,473	42.4	27.3
OHS	34	3,593	28.8	40	4,285	-9.2	19.3
OKE	87	557	-30.1	85	967	-33.7	73.6
OKN	76	1,112	13.3	73	1,780	2.3	60.1

Table S.2—Continued

District	Unadjusted			Weighted			
	Rank	Total	Change from FY 2004 to FY 2008 (%)	Rank	Total	Change from FY 2004 to FY 2008 (%)	Change from Unadjusted Total (%)
OKW	57	2,201	8.5	67	2,118	-12.5	-3.8
ORX	13	7,728	10.2	9	11,212	-1.4	45.1
PAE	19	6,033	30.5	22	6,613	1.7	9.6
PAM	38	3,277	84.9	42	4,043	29.3	23.4
PAW	48	2,722	88.0	44	3,973	28.8	46.0
PRX	32	3,949	78.9	32	4,992	21.6	26.4
RIX	85	709	20.3	79	1,188	-6.8	67.6
SCX	15	6,574	85.1	15	8,281	7.7	26.0
SDX	55	2,433	10.9	41	4,060	-3.7	66.9
TNE	42	3,191	30.0	43	4,018	-8.5	25.9
TNM	53	2,567	4.1	54	3,208	1.1	25.0
TNW	46	2,813	39.5	35	4,635	-8.1	64.8
TXE	43	3,050	22.9	34	4,671	-5.9	53.1
TXN	14	6,611	1.4	12	10,192	6.9	54.2
TXS	1	107,265	21.4	1	57,996	17.4	-45.9
TXW	3	37,054	10.4	2	38,739	25.7	4.5
UTX	29	4,338	19.1	28	5,880	-6.4	35.5
VAE	7	11,691	26.1	8	11,490	-2.1	-1.7
VAW	78	1,020	—	83	1,082	—	6.1
VIX	79	837	-61.7	84	997	-35.0	19.1
VTX	83	724	29.0	80	1,088	-4.8	50.3
WAE	30	4,091	11.4	36	4,596	-5.7	12.3
WAW	10	9,650	24.6	18	7,484	-4.1	-22.4
WIE	56	2,337	97.8	70	1,980	58.6	-15.3
WIW	82	732	10,866.7	86	751	6,075.4	2.6
WVN	63	1,707	296.0	72	1,787	123.7	4.7
WVS	61	2,090	16.1	69	2,092	-1.4	0.1
WYX	74	1,136	0.0	71	1,965	-26.2	73.0
Total		513,491	26.0		513,491	6.2	

NOTE: FY 2004–FY 2008 closed cases. Weighted caseloads are rounded to the nearest whole number. Some FDOs were not in formal operation in FY 2004.

proposed sets of case weights were based on a much larger number of possible case-type designations, with notable differences observed in the relative case weights for certain large-volume case types that would be combined under the Statistics Division strategy. We believe that more-granulated caseload information than is currently included in the projections is needed to best represent anticipated changes in workload, though we are aware of limits to any forecasting technique, such as ARIMA, one being low case counts within individual categories.

We examined whether changes in certain case types could meaningfully change the case-weighted totals of the seven Statistics Division categories. Seven CMS case types were identified as ones for which a 10-percent increase in their share of the larger Statistics Division category would most notably affect the weighted caseload for that entire group. Of these seven, two codes related to immigration violations and one for matters involving petty offenses were deemed to be the most-compelling candidates for separate treatment as part of Statistics Division caseload forecasts.

Conclusions

Applying Nationally Derived Case Weights to Local Caseloads

Average FDO attorney hours required over the life of a case vary by case type; districts vary in the mix of cases they handle; and districts vary in average attorney time requirements for the same types of cases.⁷ These realities appear to be inherent in the current approach taken by ODS, one that considers adjustments in staffing levels when a district's unweighted caseload is expected to change markedly from the current fiscal year while informing such decisions with information about local conditions. FDOs are given an opportunity to document their experiences and expectations regarding their changing mix of cases and unique needs, and argue for either adjusting staff numbers or maintaining the current level. But caseload counts that are weighted by expected attorney time would do a much better job of initially identifying new resource requirements in this regard than do raw case numbers, although, no matter which workload metric was used, additional information about operational challenges in each district would still be required before making an informed decision on staffing levels.

Many case types exhibit wide variation in regard to attorney time consumption, and, in about half of all categories, the difference between the least amount of time recorded in TKS for any case within a particular type and the most time intensive can be a factor of 1,000 or more. Average time expenditures for the same type of case also show high variability across districts, though some of that variation is due to low numbers of cases within certain case-type categories at the district level. National weights smooth out some, though not all, of these issues. The differences observed between districts in attorney time for the same type of case, coupled with what we learned during our site visits, interviews, and surveys, convinced us that nationally derived case weights should not be used as a means of comparing weight caseload per attorney (WCLPAs) in one district to those in another or for establishing a national WCLPA to be used as an inflexible formula for assessing productivity, quality, or other evaluative standard in individual districts. They do present a much better way, however, of assessing evolving needs across the entire FDO program and within individual offices than using raw case counts. The need to make any such adjustments will be clearer, since more than minor

⁷ Discussions in this section are based on Chapter Eight in this document.

changes in WCLPA make an even more compelling case for closer scrutiny of external demand versus attorney supply.

Case weights help policymakers understand what the relative impact of changes in caseload size and mix might be. But employing them successfully is a process that must be informed by much more than simply an analysis of timekeeping data, caseload trends, and office staff levels. Examination of qualitative, location-specific factors that might differentially affect the need for resources is required as well. Such is the approach taken by many other justice system organizations, including the federal judiciary, due to their understanding that local-level distinctions can override nationally derived weights. We believe that there are too many district-level differences in the larger legal environment, client characteristics, and other factors for ODS to use nationally derived case weights as a *stand-alone* way of assessing individual FDO performance or adjusting staff levels by way of comparison to those found in other districts.

Limitations of a Weighted Caseload Approach

One drawback to maintaining an existing WCLPA in a district from year to year is the risk of unquestioningly preserving the status quo. In districts where attorneys are consistently working far in excess of 40 hours each week in the interests of their clients and in districts where staff address far lighter workloads, keeping WCLPA constant over time simply means that the same level of effort will be required from year to year in those locations despite changes in total cases, the case mix, and staff resources.

Concerns that the calculations of national case weights based on data for every district could result in the setting of standards that reflect the experiences of only the largest FDOs in the country are legitimate ones. Nevertheless, our recommendation is to use a single set based on data from all 90 districts because doing so makes the most sense when the goal is making systemwide resource assessments. If an assessment needs to be made at the local level, qualitative considerations can be taken into account to inform estimates derived from nationally based weights.

Although we believe that issues related to current timekeeping practices in the FDOs do not adversely affect the functionality of our proposed relative case weights, they limit what can be done with time expenditure data generally. Using TKS-based averages to calculate, for example, the total number of attorney hours likely to be required at an individual office given a particular caseload mix and size is not advised.

Finally, case weights based on attorney time consumption do not account for nonattorney needs at an FDO. Examining the methods used for assessing nonattorney staff levels and other resource requirements is beyond the scope of this work, but it is clear that weighted caseloads might not be the best way to make that assessment.

Additional Recommendations

Standardize procedures across and within FDOs in regard to how CMS case-type codes are assigned to newly opened cases and in regard to how TKS is used for first appearances and bail settings. New client matters might not always be coded in a uniform way, and timekeeping entries might not be consistently made for clients with minimal attorney contact—practices that, in the aggregate, can adversely affect case-weight calculations.

Reinforce the purpose of TKS in the minds of attorney staff as an important means of balancing caseload demand with appropriate office resources. Attorneys throughout the system should

be made aware of the possible impact that submitting inaccurate or incomplete time records could have on FDO budget requests.

Provide better ways for attorneys to make near–real-time entries into TKS. The lack of a capability to routinely make TKS entries outside of the office appears to be a significant problem for accurate timekeeping.

Determine what event and activity information is truly needed for TKS’s primary purposes. Event coding should be either eliminated in order to streamline timekeeping responsibilities or collapsed into just a handful of the most-useful categories.

Elicit the opinion of the federal defender community as to the most-constructive ways to categorize cases in CMS. Creating new categories that better capture differences in the scope and severity of the offenses charged could help in developing more-accurate case weights.

Revisit case-weight calculations on a regular basis. Given that continued use of TKS provides a way to generate new case weights at a relatively modest cost when compared to a traditional time study, our proposed set of weights should be revisited periodically and, if warranted, be updated.

Determine whether the need for updated case weights justifies TKS’s existence. If time records are rarely used for management or case-weight calculation purposes, ODS should reconsider its requirement of daily timekeeping.

Continue to make qualitative assessments of conditions not explained by weighted caseloads. FDOs should continue to provide reasoned and locally informed arguments for adjusting or maintaining current staff levels because doing so will result in more-accurate and more-reliable projections of district needs than the application of case weights alone.