

**MONTANA DISTRICT COURTS  
JUDICIAL WORKLOAD  
ASSESSMENT STUDY**

*Final Report*  
**January 2007**

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**Courts of justice shall be open to every person  
and speedy remedy afforded for every injury  
of person, property or character.**

*Article II, Section 16, Montana Constitution*



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## Executive Summary

State judicial leaders are increasingly turning to more sophisticated techniques to provide data that show how many judges state trial courts need to manage their workload. The Montana District Court Council commissioned the National Center for State Courts (NCSC) to conduct a judicial workload assessment study. Assessing judicial workload through a workload assessment model is a rational, credible, and practical method for evaluating the need for judges and judges.

Workload assessment is a methodology that assigns weights to defined case categories based on their complexity and need for judicial attention. This is an improvement over counting the number of case filings irrespective of their relative impact on judicial resources. We commend the state of Montana for its willingness to undertake a project of this scope and bring it to successful completion. This final report presents the steps, methodology, and a summary of the data used in the study. Some of the principal issues and findings are discussed below:

- The NCSC designed this judicial workload assessment study to measure the workload of the Montana District Courts, including the work of district judges and special masters in 22 judicial districts. *(Note: Montana has only two special masters located in the 4<sup>th</sup> Judicial District, who handle limited judicial duties.)*
- The objectives of the study were to
  - Conduct a quantitative evaluation of current judicial resources on a statewide basis.
  - Provide accurate and easily understood criteria to periodically assess the need for additional judicial resources.
  - Provide a valid method for allocating new judicial resources among the state's judicial districts.
  - Provide a methodology for ascertaining the need for judicial resources in light of the mandate in Article II, Section 16 of the Montana Constitution to provide access to courts of justice and speedy remedy.
  - Provide a mechanism to measure how changes in case filings for individual case types or case management procedures affect judicial resource demand.

- Thirty-three of the 45 judges in Montana participated in the study, for a participation rate of 73.3%. Judges recorded their time for a six week period between the dates of May 1 through June 9, 2006.
- Two workload assessment models were developed: one which includes case weights as they were reported (“As Reported”) and the second includes case weights which have been adjusted to reflect quality adjustments made by the Advisory Committee (“Quality/Adequacy of Time Adjustments”). These models account for all judicial activities, both case-specific workload and non-case-specific workload, and include case weights for 13 different case categories. Non-case-specific workload factors tracked in the study include community activities and speaking engagements; work-related meetings; non-case related administration and time required to participate in this study. Travel time was also tracked and accounted for separately in the models.
- An Adequacy of Time Survey was conducted. The purpose of this survey was to evaluate whether judges felt they had sufficient time to conduct essential case-related and non-case-related activities in accordance with the requirements of the Montana Constitution. This qualitative element of the Judicial Workload Assessment Study provided the Committee additional information to help evaluate case weights and ensure that the needs assessment model provides adequate time for judges to consider cases in a timely manner. The case weights derived from the time study represent “what is,” or the average amount of time judges currently spend on each case type and the survey data provide information to help determine “what should be.”
- The two models indicate a need for judges in the state of Montana. **The difference between total judicial resource needs and the current level of staffing is between 5.59 and 9.81 judges**, depending on the model used. Determining how this need translates into staffing requirements is a policy decision to be determined by Montana state decision makers.
- The methodology used to develop the case weights has been validated over many years and in many jurisdictions. The case weights developed for Montana’s District Courts should be reliable and will be representative of the work in the absence of any significant changes in constitutional and legislative mandates, case management, disposition rates, court structure, or jurisdiction in Montana’s District Courts.

- Periodic updating is necessary to maintain the integrity of the case weights and ensure that they continue to represent the judicial workload and court environment.
- The workload assessment study results indicate that the Montana District Court Judicial Workload Assessment Model is sound and valid for several reasons:
  - There was a high rate of participation by all judges in the time study data collection: 73.3% percent of all district judges and special masters. The demonstrated cooperation and conscientiousness of the district judges in the time study collection were critical to the success of the study.
  - The large volume of detailed data collected during the six week time study minimizes the likelihood of error.

This model compares need against existing district court resources; as such, some courts will appear adequately staffed and others will not. The Montana Constitution requires all citizens have access to the courts, and statute requires that courts must be open each judicial day requiring staff regardless of caseload. Workload assessment models need to be viewed in context with other considerations, including budget constraints, population trends, and other more qualitative, court-specific factors that may affect the demand for judicial or staff resources differently from district to district. For example, the model may suggest that a rural, less densely settled district needs less than one judge position; however, a rural court often has more scheduling problems than an urban court for a variety of reasons. Because a quantitative model often does not account for such qualitative factors, administrators and policymakers must be aware of the limitations of any model in defining exact resource demand and allocation.

## **Introduction**

State judicial leaders face continual challenges of effectively managing rising caseloads, disposing of court business without delay, and delivering quality service to the public. Two constant and recurring problems are inherent within these challenges:

- (1) Objectively assessing the number of judges required to handle current and future caseloads.
- (2) Deciding whether judicial resources are being allocated and used appropriately.

In response to the multiple and sometimes conflicting challenges and problems, state judicial leaders are increasingly turning to more sophisticated techniques to provide data that show how many judges the state trial courts need to manage their workload. Assessing judicial workload through a workload assessment (weighted caseload) model is a rational, credible, and practical method for evaluating the need for judges.

The Montana Judiciary has for several years been experiencing the process of administrative and budgetary unification. One result of unification has been the standardization of methods for numbering, classifying and counting cases.<sup>1</sup> The process centralized allocation of resources and a broader statewide perspective of resource needs, particularly the need for judicial positions. The District Court Council determined there was a need to assess judicial resource levels through the use of a systematic study of judicial workload. The District Court Council appointed the study's Advisory Committee.

Workload assessment is a resource assessment methodology that weights cases to account for the varying complexity and need for judicial attention among court cases. By weighting court cases a more accurate assessment can be made of the amount of judicial time required to resolve the courts' caseload and judge workload. Moreover, workload models have the advantage of providing objective and standardized assessments of need among courts that vary in geography, population and caseload composition.

This report details the Montana Judicial Workload Assessment Study methodology and presents the workload assessment model for the Montana District Courts. A workload assessment model is a quantitative representation of the interrelated variables, or characteristics, that work together to predict resource needs. A change in one variable will affect other variables

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<sup>1</sup> The Montana Courts implemented the Uniform Case Filing Standards to standardize case reporting beginning January 1, 2006.



in the model and the predicted judicial resource demand. Specific objectives of the Montana judicial workload assessment study were to:

- Conduct a quantitative evaluation of current judicial resources on a statewide basis.
- Provide accurate, easily understood criteria to assess the need for additional judicial resources as conditions change.
- Provide a valid method for allocating new judicial resources among the state’s judicial districts.
- Provide a methodology for ascertaining the need for judicial resources in light of the mandate in Article II, Section 16 of the Montana Constitution to provide access to courts of justice and speedy remedy.
- Provide a mechanism to measure how changes in case filings for individual case types or case management procedures affect judicial resource demand.

## **Overview of the Judicial Workload Assessment Model**

State court caseloads vary in complexity. Different types of cases require different amounts of time and attention from judges and court support staff. Focusing on raw case counts without allowing for differences in the amount of work associated with each case type creates an opportunity for the misperception that equal numbers of cases filed for two different case types result in an equivalent amount of work for the court. For example, a typical criminal felony case has a much greater impact on court resources than does a typical probate case.

The core of the workload assessment model is a time study wherein judges keep track of the amount of time they spend on the various case type categories and on non-case-specific responsibilities such as court administration and work-related travel time. The combination of the case-specific time study data and the filing and disposition data for the same time period creates a “case weight” for each case type category. The case weights represent the average total in-court and in-chambers time (in minutes) for each case type category. Applying the case weights to current or projected case filings results in a measure of case-specific workload. Case-specific workload divided by the amount of time available per judge for case-specific work provides an estimate of judicial resources required to resolve cases. This approach, which

involves few complicated procedures, is sufficiently rigorous to provide a model for measuring resource demands and evaluating resource allocations.

Even the most widely used and accepted resource assessment techniques, including the workload assessment model, do not predict the *exact* number of judges needed to stay current with caseloads or to resolve most cases effectively. No *quantitative* resource assessment model by itself can accomplish that goal. To that end, this needs assessment study utilized a statewide Adequacy of Time survey of judges to assess the working conditions in the Montana Courts. The results of this survey were used to obtain important performance perspectives useful for benchmarking current practice and in forming case weight adjustment decisions.<sup>2</sup> Given that 60% of judges completed the survey, the results provide a reasonable assessment of time sufficiency among judges.

## Key Concepts

Two fundamental pieces are necessary to determine judicial resources required to handle the total workload demand in Montana. These include:

- *Workload.* Workload is generated from two components: (1) the case weights which are the average time spent on case management as determined by the time study; and (2) the annual number of case filings. Multiplying these two values produces the workload estimate.
- *Resource Assessment.* The assessment of judge resources is based upon: (1) judge workload and (2) judge availability. Dividing the total expected workload by the judges' time availability results in (3) the total judge resource requirement.

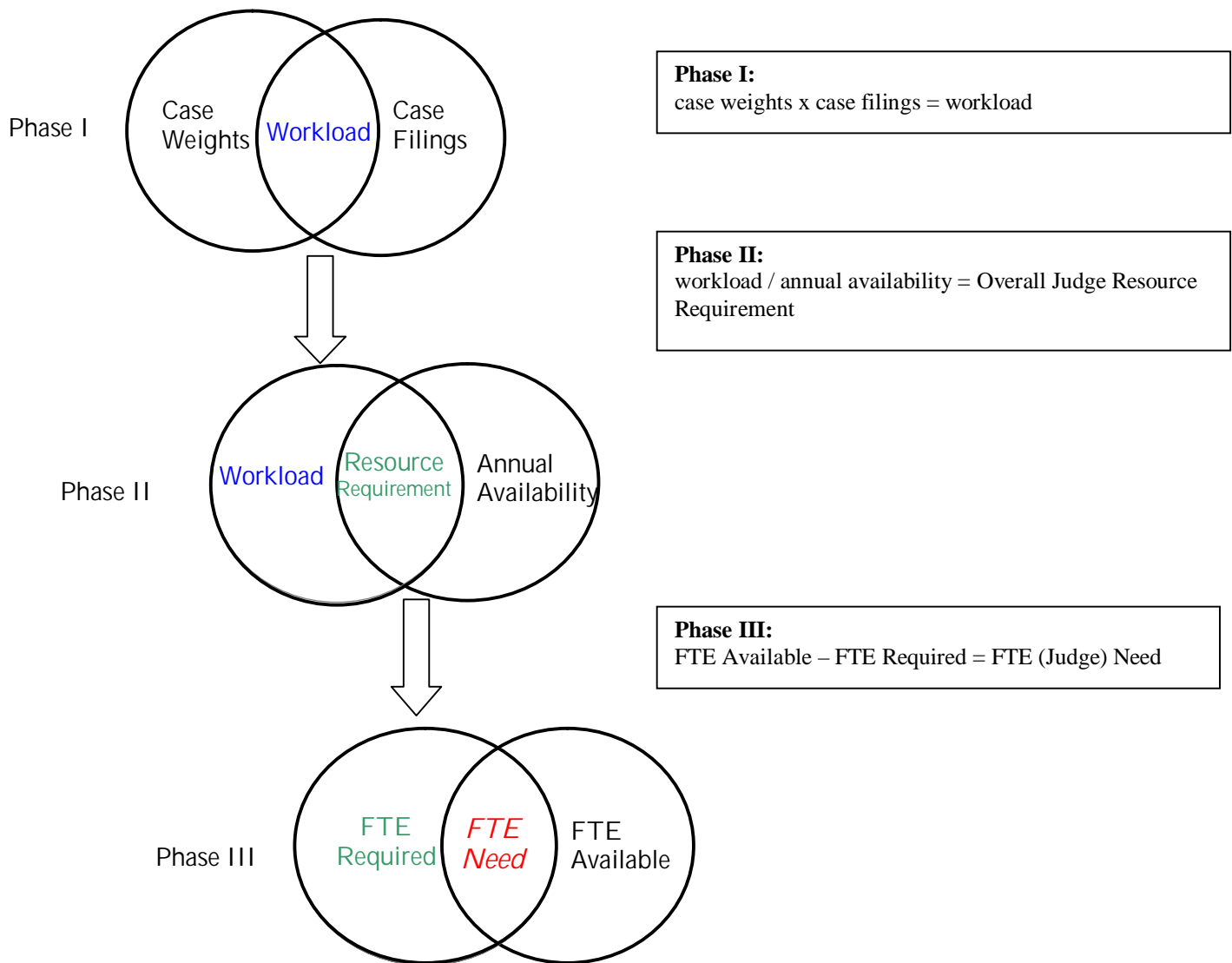
The primary goal of the Montana Judicial Workload Assessment Study is to provide an accurate picture of the amount of time judges need to resolve different types of cases in a manner that gives appropriate recognition to the constitutional provision on access to courts and speedy remedy to justice. The basic components of the study are shown as Figure 1. There are three phases to the study and each phase builds upon the product of the previous phase. First the data collected during the time study were analyzed to produce a workload value. The workload value is a combination of the case weights (average time for each case type under investigation) and the annual case filings. Phase two applies the judge annual availability value to the workload

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<sup>2</sup> These adjustments will be discussed later in this report.

value to determine the overall judge resource requirement. Finally, in phase III, overall judicial resource requirements are compared to current judge numbers to calculate a judge need for the state. The result of this calculation is the difference between the number of judges required to complete all of the work and the current number of judges.

**Figure 1:  
Methodology Overview**



## Montana Judicial Workload Assessment Model

The NCSC consultants used a filing-based workload assessment algorithm to construct the Montana Judicial Workload Assessment Model. The model is straightforward and the basic methodological steps are listed below. The remainder of this report section describes in detail the steps, which were used to build the Montana Judicial Workload Assessment Model.

### *Steps in the Workload Assessment Methodology*

- Decide which types of cases should be studied and how each should be categorized.
- Decide how long the participating judges will record their time.
- Record all of the time that participating judges spend on all activities related to their jobs as judges.
- Count case filings for a one-year period.
- Build case weights by dividing the sum of the minutes recorded for any given case type by the number of cases that were disposed during the study.
- Calculate workload by multiplying the case weights by the filings.
- Survey judges to determine which, if any, activities require more time to complete than is currently available during the course of a typical day (Adequacy of Time Survey).
- Determine how much time the judges have available in a year to do work.
- Divide the workload by the amount of judge time available to determine judicial resource need.
- Count the number of current judges.
- Compare the current number of judges to the calculated need.
- Revise case weights, if necessary, to account for additional time required to properly discharge judicial work based upon the Adequacy of Time Survey results.
- Review and approve the workload assessment model.

Although the steps in a workload assessment algorithm are straightforward and require only arithmetic calculations, model construction must address hidden pitfalls and assumptions. The Advisory Committee made some assumptions based on reasonable and supportable estimates to define the average annual availability value, which is the average amount of time a

judge has available to manage the case-specific workload. For example, the model must account for the average amount of time a judge takes for vacation, illness, and professional development. Judges, like other elected officials, do not have a set amount of days that must be taken for vacation and illness, and they work both during and outside the traditional workweek. However, the average time judges have available annually to manage cases must be estimated as accurately as possible, usually based on the standard work week's days and hours when the courts are open to the public for case resolution and other business.

### **Phase I: Calculation of Judge Workload**

Phase I of the study involves the time study data collection, generation of case weights, and workload calculations. Each of these steps is discussed in detail.

#### ***Time Study***

A time study measures case complexity in terms of the average amount of judge time actually spent managing different types of cases, from the initial filing to final resolution, including any post-judgment activity. The essential element in a time study is collecting time data on *all* judge activities. For this study, judges recorded all time spent on various case types on a daily time log and then entered their time on a web-based data collection instrument. Judges' activities include time spent resolving cases, case-related work, non-case-related work, and travel time. Non-case-related activity is a broad category and included activities that cannot be attributed to a specific case, such as staff meetings, general office, and administrative tasks.

The NCSC project team provided training on how study participants should record their time using the web-based data collection tool. The accuracy and validity of the data also depends on the participation rate: the more participants the more reliable the data. The participation rate was 73.3% for all district court judges, which sufficiently high to ensure confidence in the accuracy and validity of the resulting case weights.

#### ***Data Elements***

NCSC project staff met with the Advisory Committee in March, 2006 to determine the case type categories, case-related, and non-case-related activities to be included in the study. A more detailed description of all of the time study elements is provided in Appendix A.

### **Case Types**

In defining case type categories, the goal is to have case types of similar kind and complexity in the same group. A major consideration in making these decisions was how Montana's automated case management system captured case statistics. If filing statistics were not available, then a case type could not be included. Members of the Advisory Committee finalized the case type categories, which are shown in the Figure 2.

### **Figure 2: District Court Case Type Categories**

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- Criminal
- Civil
- Adoptions
- Guardian/Conservator
- Juvenile
- Child Abuse and Neglect
- Probate
- Domestic Relations
- Paternity
- Commitment of a Person with Developmental Disability
- Commitment of a Person with a Mental Illness
- Investigative Subpoena /Search Warrant
- Treatment Court Cases

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### **Case-Related Activities**

Case-related activities are the essential functions that judges perform in resolving a case from initial filing to final disposition. As with the case types, the essential functions were categorized into manageable groups for the time survey. Figure 3 outlines the case-related activities measured in the time study.

**Figure 3:  
Case-Related Activities**

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Pre-Trial  
 Jury Trial  
 Bench Trial  
 Post-Trial  
 Case-Related Administration  
 Treatment Court - In Session

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***Non-Case Related Activities***

Activities that do not relate to the resolution of a specific case but must be done by judges are defined as non-case-related activities. The key distinction between case-related and non-case-related activities is whether the activity can be tied to a specific case. Figure 4 lists the non-case-related activities measured in this study.

**Figure 4:  
Non-Case-Related Activities**

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Education and Training/General Legal Research  
 Community Activities, Speaking Engagements  
 Work-Related Meetings/Committee Work  
 Travel (work-related)  
 Vacation/Sick Leave  
 Non-Case Related Administration  
 Time Study Project (Filing out form and entry)  
 Other

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***Adequacy of Time Survey***

In addition to the time study, all judges were invited to complete a web-based Adequacy of Time Survey. This qualitative element of the Judicial Workload Assessment Study provided the Committee additional information to help evaluate case weights and ensure that the needs assessment model provides adequate time for quality performance. The case weights derived from

the time study represent “what is,” or the average amount of time judges currently spend on each case type and the survey data provide information to help determine “what should be.”

The Adequacy of Time Survey indicated the areas in which judges feel they *do* and *do not* have sufficient time to effectively attend to essential job-related activities. Thus, where survey results demonstrate that judges believe more time is necessary to meet constitutional mandates, case weights should be adjusted to indicate the greater need. Survey respondents were asked to rank five activities pertaining to each case type by responding to the following statement: During the course of a typical 8-hour day, I typically have enough time to complete:

- Post-trial related activities for [case type] Cases
- Pre-trial related activities for [case type] Cases
- Jury trial related activities for [case type] Cases
- Necessary case-related administration activities for [case type] Cases
- Bench trial related activities for [case type] Cases

The corresponding response options were “almost always,” “frequently,” “occasionally,” “seldom,” or “almost never.” An average rating<sup>3</sup> of 3.5 or greater indicates that, as a group, judges reported having adequate time to perform the specified task most of the time. NCSC staff compiled the responses and analyzed results for each court. The results are expressed as the average response for questions in each specific functional area for each case type. Thus, an average rating for activities of less than 3.5 indicated to the committee that weights should be adjusted to provide for more time.

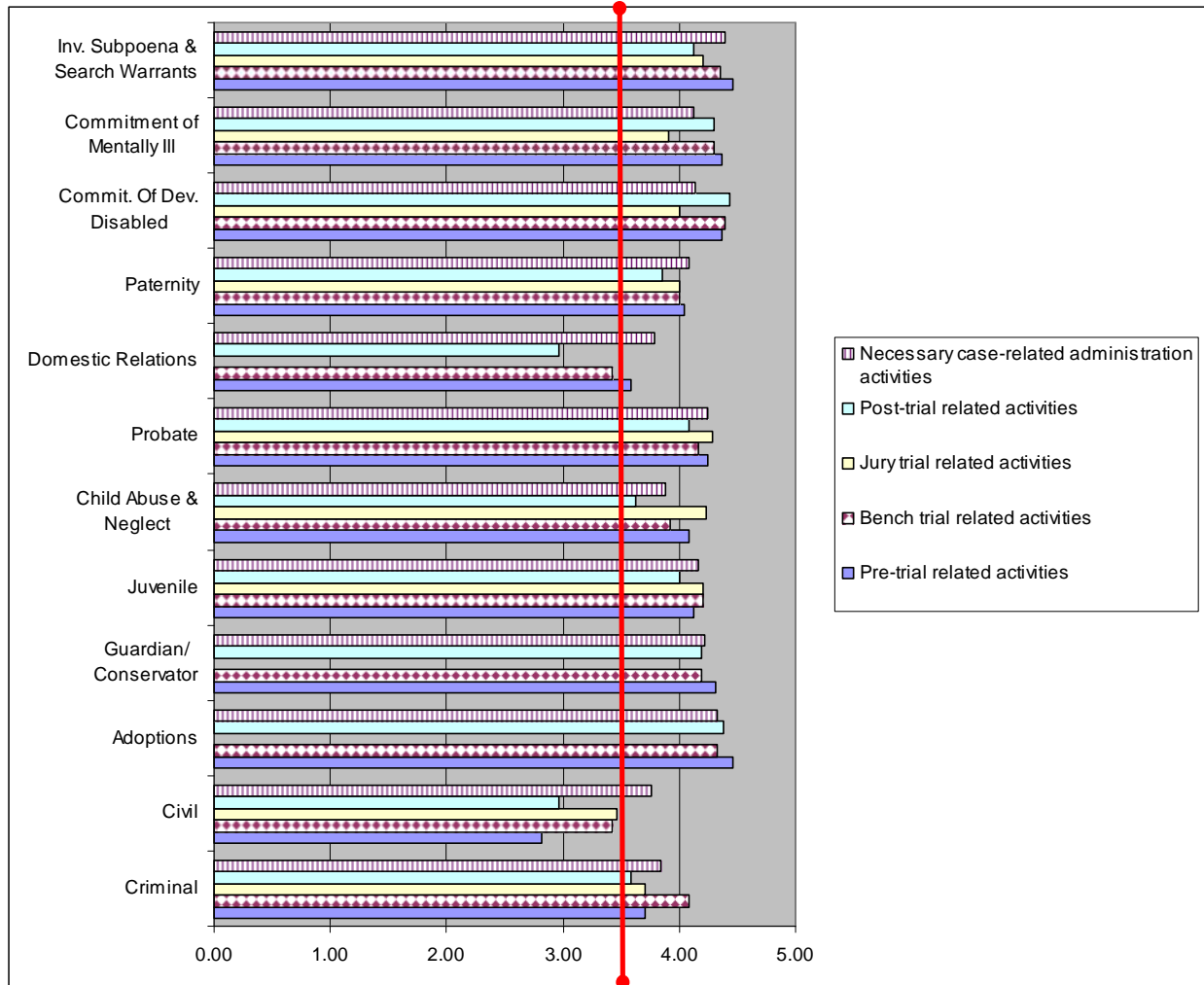
Figures 6 and 7 below represent the findings from the Adequacy of Time Survey. Detailed results from the Adequacy of Time Survey can be found in Appendix B. The vertical line running down the figures represents the cutoff point of 3.5, the score that was considered to indicate adequate time to complete the activity for each case type.

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<sup>3</sup> 5=almost always, 4= frequently, 3=occasionally, 2=seldom, 1=almost never.



**Figure 6: Adequacy of Time Survey Results:  
Average Responses to Functional Area Survey Items**



**Figure 7:  
Adequacy of Time Survey Results: Average Responses to Non-Case Related Survey Items**

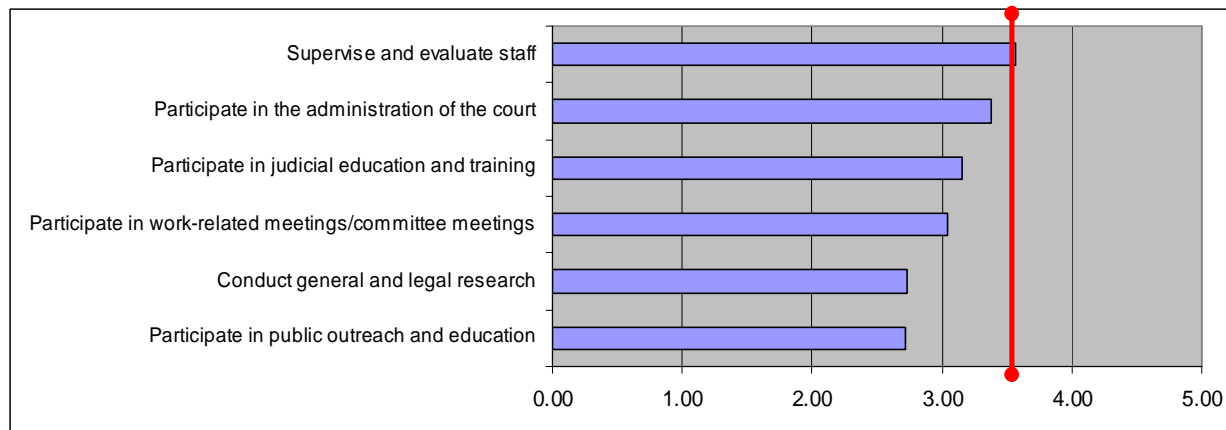


Figure 6 indicates that survey participants do not feel adequate time is available for the following case related activities and case types:

- Pre-trial related activities in **civil** cases 2.81
- Bench trial related activities in **civil** cases 3.42
- Jury trial related activities in **civil** cases 3.46
- Post-trial related activities in **civil** cases 2.96
- Bench trial related activities in **domestic relations** cases 3.42
- Post-trial related activities in **domestic relations** cases 2.96

Figure 7 indicates that survey participants do not feel adequate time is available for the following non-case related activities:

- Participate in public outreach and education 2.72
- Conduct general and legal research 2.73
- Participate in work-related meetings/committee meetings 3.04
- Participate in judicial education and training 3.15
- Participate in the administration of the court 3.38

The lower average scores related to civil and domestic relations cases and the non-case related activities prompted the Advisory Committee to adjust the original case weights (“As Reported”) to better reflect the needs of the judiciary to manage these case types and non-case related activities in compliance with constitutional mandates. These adjustments are shown below in Figure 8 in the column titled *Quality/Adequacy of Time Adjustments*.

### Case Weight Calculation

The case weights for each case type were generated by summing the time recorded for each case type category and dividing by the number of case filings for each case type category during the data collection period (i.e., six weeks of filings extrapolated from annual filings). The weights were provided to the Advisory Committee for review, as were the results of the Adequacy of Time Survey (discussed above). The initial, or “*As Reported*” case weights and suggested increases, or “*Quality/Adequacy of Time Adjustments*” based on the Adequacy of Time Survey are provided in Figure 8 below (Full models can be found in Appendix C. Case Weight Compositions can be found in Appendix D).

#### Figure 8:

#### Case Weights in Minutes: As Reported and Quality/Adequacy of Time Adjustments

District Case Type	Case Weights As Reported	Case Weights: Quality/Adequacy of Time Adjustments
Child Abuse & Neglect	148	148
Criminal	141	141
Juvenile	108	108
Civil	93	109
Domestic Relations	77	85
Commitment of a Person with Developmental Disability	74	74
Paternity	61	61
Commitment of a Person with a Mental Illness	53	53
Guardian/Conservator	40	40
Adoptions	26	26
Probate	19	19
Investigative Subpoena /Search Warrant	10	10
Drug & Other Treatment Court Cases	189	189

*The shaded areas highlight the reported case weights that were adjusted based on the Adequacy of Time Survey.*

The case weights generally reflect the priority of case types as determined by state statutes enacted by the Montana Legislature. That is, child abuse and neglect, juvenile and

criminal cases are set as priority cases for the courts and, accordingly, these are the highest case weights. These priorities notwithstanding, the Advisory Committee agreed that the findings from the Adequacy of Time Study prompted the need to adjust case weights for both civil and domestic relations case types to better meet constitutional mandates for all parties seeking redress in the court system.

To determine how case weights should be adjusted, the Advisory Committee compared the Adequacy of Time Survey responses for criminal cases to both civil and domestic relations cases. The criminal case type was selected as a benchmark because the survey results indicated that judges generally felt they had adequate time to devote to all activities associated with criminal cases. The percent of the difference between the average responses for each activity was used to calculate the increase for each activity in both civil and domestic relations cases. For example, as a group, judges scored criminal pre-trial activities as 3.70 and civil cases as 2.81. The difference between these two scores (2.81 divided by 3.70) is 75.95%. To equate the criminal and civil scores, each activity within the civil case weight was adjusted mathematically to equal 100% (e.g.  $1 - 75.95\% = 24.05\%$  for pre-trial activities). The amount of time associated with each activity was also multiplied by that difference to determine the case weight adjustment. Specifically, 48 minutes of the original case weight for civil cases was associated with pre-trial activities. This figure was increased by 24.05% ( $100\% - 75.95\%$ ), which equates to 11.55 minutes, or 59.55. The case weight adjustments were summed and the total amount was rounded for a final adjustment of 16 minutes added to the civil case weight, and 8 minutes added to the domestic relations case weight. The computations for these increases are shown in Appendix E.

### ***Workload Calculation***

Applying the case weights to annual filings produces the overall judicial case-related workload for the state. The case related workload value represents the total number of minutes, on an annual basis, of case-related work based upon 2006 baseline data and current practices.<sup>4</sup> The challenge is to provide judges with reasonably sufficient time to resolve each case type

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<sup>4</sup> Case filing figures for calendar year 2006 were used for this calculation. Data were only available through September (and through June in Missoula County), so the case filing figures were annualized to approximate the most recent year of case filings by case type.

effectively and efficiently. Two workload calculations are presented in Appendix C; the first uses the “As Reported” case weights, the second uses the “Quality/Adequacy of Time Adjustments.” The first model indicates a statewide workload value of 3,723,177 minutes required to maintain the status quo in Montana District Courts. The adjusted workload value of 3,999,541 minutes found in the second model considers the time felt necessary to adequately provide judicial services mandated by Article II, Section 16 of the Montana Constitution.

## **Phase II: Determination of Judge Demand**

The second phase in the generation of a needs assessment model involves the calculation of the judge demand to manage the workload of the Montana District Courts. Determination of the judge demand involves the definition of the judge year value.

### **Judge Year Value**

Once we know how much work needs to be done (workload), we need to determine how much time is available to do the work. The judge-year value is the average amount of work time a judge has available to manage *cases*, including both in-court activities and in-chambers case-specific administrative activities that are accounted for in the case weights. Calculating the judge-year value is a two-step process:

- (1) Determine the number of days actually available per year for judges to resolve cases.
- (2) Determine the number of hours per day that judges can spend on case-specific work.

#### *Days Available Per Year*

Many model assumptions underlie the judge-year value. Weekends, state holidays, and time related to vacations, illness, attending statewide judicial conferences, and other professional development are subtracted from the calendar year to determine the number of days available to handle cases. While determining the number of weekend days and state holidays in a year is easy, determining the average time taken (or that is reasonable for judges to take) for vacation, illness, judicial conferences, and other professional development is more difficult. Because a state’s study period may not be representative for all factors, the project team relied on the Advisory Committee to estimate the average time taken for vacation, illness, judicial conferences, and professional development.

Development of the judge-year value begins with a baseline of 365 days in the year and subtracts the 104 weekend days and 11 state holidays.<sup>5</sup> With input from the Advisory Committee, the NCSC estimated that on average, 8 days a year are a reasonable amount for education and training (judicial conferences and related travel) and 30 days are a reasonable amount for personal leave (18 vacation and 12 sick, funeral, military, etc.).<sup>6</sup> The number of days available, after subtracting an average amount of time away from the bench, is 212 days per year.

#### *Hours Available Per Day*

To determine the number of average available hours per year, the model must first estimate a reasonable average of available work hours per day. Again, the NCSC project team consulted the Advisory Committee to develop these estimates. The Advisory Committee concluded that a reasonable average of available working time is eight hours a day (excluding breaks, meals, or personal time). Assuming 212 days a year on average that are available to a judge for all judicial work, the base judge-year value is 101,760 minutes (212 days x 8 hours x 60 minutes) for all work. The calculation for the judge-year value is shown in Figure 9.

**Figure 9:**  
**Judge Year Value**  
(Based upon an 8 hour day)

	Days	Minutes
Available	365	175,200
	<i>Less</i>	
Weekends	104	49,920
Holidays	11	5,280
Vacation	18	8,640
Sick Leave	12	5,760
Education/Training	8	3,840
Net Available Days	<b>212</b>	101,760

The judge year value estimates a *reasonable* amount of time a judge should work in a year. This value is used even though many judges in Montana work more than an 8 to 5 day and

<sup>5</sup> Developing a model requires the use of a consistent amount of time available for judges to work. While many judges in Montana work more than 40 hours per week, such schedules have been associated with professional and personal burnout. When judges suffer burnout, the quality of justice mandated by the Constitution will not be provided.

<sup>6</sup> The estimates for vacation leave were based on the state's average for state employees (between 15-20 per year) and sick leave were based on the state's sick leave policy for state employees.

may frequently work on evenings, weekends and holidays. The model assumes that a judge who continually works long hours and weekends to keep up with a heavy workload will suffer professionally and personally. In those circumstances, the quality of justice mandated by the Constitution will not be provided. A reasonable workload must allow sufficient time to resolve cases properly and timely within a reasonable work week. One limitation of the “As Reported” model is that it measures only time, not quality of work.

### ***Calculation of Total Needs***

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- Step 1 For Each Case Type:  
Case Weight X Case Filings = Workload*
- Step 2 Sum the Workloads for Each Case Type to  
obtain Total Workload for each Court*
- Step 3 Divide the Total Workload by the Annual  
Judge Availability (101,760) to obtain Judicial Resource Needs*
- 

Judicial case related demand is calculated by dividing the Judicial Workload value (3,723,177 or 399,541 found on line 15 of the Models in Appendix C) by the Annual Judge Availability value (101,760 found on line 22 of these Models) and the resulting number represents the judicial case-related full time equivalents (FTE) needed to manage the work of the court (found on line 26 of these Models).

### **Phase III: Determination of Judicial Resource Need**

The final phase in the generation of a needs assessment model involves the calculation of the court judge need. During this phase of the model development the total judge resource needs value is compared to the current judge supply in the court. The first step is to determine the number of judges currently available to handle the case-related work of the court (supply). It is in this step that the non-case-related work of the court is taken into account.

To determine current available judicial resources, the number of funded FTE judge positions was used for each court. To adjust for the amount of time spent on non-case-related activities and travel, the average amount of time recorded during the time study as pertaining to non-case-related activities and travel was extrapolated to estimate an annual time value and

converted to FTE. The number of FTE required to conduct non-case-related activities was then subtracted from the number of funded FTE judge positions.

The Adequacy of Time Survey also indicated that judges do not have enough time to attend to necessary non-case related activities, specifically community activities and general legal research. To better provide for these activities, the committee adjusted this figure from the actual amount reported in each district to the state-wide average across all districts. In the models, this activity is described as a portion of a Full Time Equivalent (FTE) Judge. This figure ranged from a low of .06 per FTE to a high of .42 FTE per district in the “As Reported” model. This figure was adjusted to .25 per FTE in the “Quality/Adequacy of Time Adjustments” model. (These figures can be found on the Models in Appendix C.)

### **Judicial Availability and Judicial Need**

The judge resources required to perform case-related activities needs to be compared with judge availability to determine how many additional judges are needed to handle the workload in Montana.

The time study data were used to generate the amount of time spent on both case-related and non-case-related activities in each court. These values will be translated to FTE (full time equivalent) rates to determine the judge need. Two sets of calculations are provided, the first (Figure 10) represents Judicial Need using the “As Reported” model, the second (Figure 11) uses the “Quality/Adequacy of Time Adjustments” model. Note that the state total judicial resource difference cell reflects the absolute difference in need and current staffing levels; that is, it takes into account those districts whose resources are above the current need and those that are below. If only those districts in which judicial resources are required are considered, the total need is somewhat higher.



**Figure 10: Judicial Resource Needs: “As Reported” Model**

<b>Judicial District</b>	<b>Total Judge Resource Needs</b>	<b>Current Judicial FTE Positions</b>	<b>Judicial Resource Difference</b>
<b>1</b>	<b>4.56</b>	<b>3</b>	<b>-1.56</b>
<b>2</b>	<b>2.06</b>	<b>2</b>	<b>-.06</b>
<b>3</b>	<b>1.24</b>	<b>1</b>	<b>-.24</b>
<b>4</b>	<b>4.45</b>	<b>6</b>	<b>1.55</b>
<b>5</b>	<b>1.43</b>	<b>1</b>	<b>-.43</b>
<b>6</b>	<b>1.11</b>	<b>1</b>	<b>-.11</b>
<b>7</b>	<b>1.49</b>	<b>2</b>	<b>.51</b>
<b>8</b>	<b>5.21</b>	<b>4</b>	<b>-1.21</b>
<b>9</b>	<b>1.52</b>	<b>1</b>	<b>-.52</b>
<b>10</b>	<b>1.12</b>	<b>1</b>	<b>-.12</b>
<b>11</b>	<b>4.41</b>	<b>3</b>	<b>-1.41</b>
<b>12</b>	<b>1.25</b>	<b>1</b>	<b>-.25</b>
<b>13</b>	<b>5.90</b>	<b>5</b>	<b>-.90</b>
<b>14</b>	<b>.65</b>	<b>1</b>	<b>.35</b>
<b>15</b>	<b>.76</b>	<b>1</b>	<b>.24</b>
<b>16</b>	<b>1.85</b>	<b>2</b>	<b>.15</b>
<b>17</b>	<b>.85</b>	<b>1</b>	<b>.15</b>
<b>18</b>	<b>3.48</b>	<b>3</b>	<b>-.48</b>
<b>19</b>	<b>1.02</b>	<b>1</b>	<b>-.02</b>
<b>20</b>	<b>2.41</b>	<b>2</b>	<b>-.41</b>
<b>21</b>	<b>2.35</b>	<b>2</b>	<b>-.35</b>
<b>22</b>	<b>1.46</b>	<b>1</b>	<b>-.46</b>
<b>State Total</b>	<b>50.59</b>	<b>45</b>	<b>-5.59</b>

**Figure 11: Judicial Resource Needs: “Quality/Adequacy of Time Adjustments” Model**

<b>Judicial District</b>	<b>Total Judge Officer Resource Needs</b>	<b>Current Judicial FTE Positions</b>	<b>Judicial Resource Difference</b>
1	4.97	3	-1.97
2	2.12	2	-.12
3	1.38	1	-.38
4	5.18	6	.82
5	1.40	1	-.40
6	1.18	1	-.18
7	1.69	2	.31
8	5.79	4	-1.79
9	1.57	1	-.57
10	1.10	1	-.10
11	5.10	3	-2.10
12	1.37	1	-.37
13	6.56	5	-1.56
14	.7	1	.30
15	.82	1	.18
16	1.84	2	.16
17	.97	1	.03
18	3.77	3	-.77
19	1.28	1	-.28
20	2.32	2	-.32
21	2.12	2	-.12
22	1.58	1	-.58
<b>State Total</b>	<b>54.81</b>	<b>45</b>	<b>-9.81</b>

The difference between total judicial resource needs and the current level of staffing is between 5.59 and 9.81 judges. Determining how this need translates into staffing requirements is a policy decision to be determined by Montana state decision makers.

## **Conclusion**

Both the “As Reported” model and the “Quality/Adequacy of Time Adjustments” models of workload assessment for the Montana District Courts indicate a shortage of judicial resources to handle the current workload. Specifically, the “As Reported” models indicates an absolute need of 5.59 judge FTE, and the “Quality/Adequacy of Time Adjustments” models indicates an absolute need of 9.81 judge FTE.

The case weights generated in this study are valid and credible due to the techniques employed. The TIME STUDY provided a quantitative basis for assessing judicial need, and forms the “As Reported” model. The “Quality/Adequacy of Time Adjustments” model allowed for qualitative adjustments to the case weights based upon the ADEQUACY OF TIME SURVEY.

The 2006 case filing data were used to validate this model. The real power of the model lies in its applicability in predicting future judicial resource needs with caseload projection analysis. Projected caseloads can be easily inserted into the model to provide an estimate of future judicial requirements.

Although the case weights generated in this study should be valid, periodic updating needs to be conducted to ensure the continued accuracy and integrity of the case weights. Multiple factors may impact the affect of case weights, such as changes in court rules, jurisdiction, technology and legal practices. Periodic reviews should be conducted to evaluate whether changes have occurred that are acting to impact the judicial workload.

## Appendix A: Time Study Data Elements

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### Case Type Categories

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Criminal (DC)  
Civil (DV)  
Adoptions (DA)  
Guardian/Conservator (DG)  
Juvenile (DJ)  
Child Abuse and Neglect (DN)  
Probate (DP)  
Domestic Relations (DR)  
Paternity (Pat)  
Commitment of a Person with Developmental Disability (DD)  
Commitment of a Person with a Mental Illness (DI)  
Investigative Subpoena (IS)/Search Warrant (SW)  
Treatment Court Cases

- Adult treatment court
- Juvenile treatment court
- Family treatment court

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## Case Related Activities

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### Pre-Trial Activities

- 1<sup>st</sup> appearance/arraignment
- preliminary and other pre-trial hearings
- pre-trial motions (includes hearing, reviewing, and ruling)
- change of plea
- pleas, default judgments, uncontested hearings
- motions for summary judgment
- warrant/failure to appear
- prepare and issue orders
- adequately review the case file

### Jury Trial Activities

- juror voir dire
- all trial-related activities

### Bench Trial Activities

- all trial-related activities

### Post-Trial Activities

- disposition/sentencing hearings researching and reviewing disposition/sentencing options
- writing and drafting decisions/opinions
- review pre-sentencing reports
- motions for new trial, motions to alter or amend a judgment, motions for supersedeas
- bond, motion for attorneys fees

### Case-Related Administration (general case management activities)

- calendaring
- signing orders
- review writs/motions
- docket call
- treatment court staffing

### Treatment court – in session

- time spent in court or formal situation
-

<b>Non-Case Related Activities</b>
<b>Education and Training/ General Legal Research</b>
<ul style="list-style-type: none"> <li>• continued legal education (CLE)</li> <li>• judicial education courses and training</li> <li>• court-related training</li> <li>• keeping current on the law, reading case law</li> </ul>
<b>Community Activities, Speaking Engagements</b>
<b>Committee Work and Meetings</b>
<b>Travel Time (work-related)</b>
<b>Vacation/Sick Leave</b>
<b>Non-Case-Related Administration</b>
<ul style="list-style-type: none"> <li>• jury questionnaires</li> <li>• juror dismissals</li> <li>• non-case-related phone calls</li> <li>• budget activities</li> <li>• personnel issues</li> </ul>
<b>Time Study Project (Filing out form and entry)</b>
<ul style="list-style-type: none"> <li>• time spent completing data collection forms</li> </ul>
<b>Other</b>
<ul style="list-style-type: none"> <li>• any non-case-related time that does not fit into any of the above categories</li> </ul>

## Appendix B: Adequacy of Time Survey Results

An average rating below of 3.5 indicates that survey participants do not feel they have adequate time to complete the activity for that case type. Average responses scoring at or below 3.5 are highlighted in the tables below.

**Table B-1:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Criminal Cases**

<b>With Respect to Criminal Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:</b>	<b>N</b>	<b>Average</b>	<b>Median</b>
Pre-trial related activities for Criminal Cases	27	3.70	4.00
Bench trial related activities for Criminal Cases	26	4.08	5.00
Jury trial related activities for Criminal Cases	27	3.70	4.00
Post-trial related activities for Criminal Cases	27	3.59	3.50
Necessary case-related administration activities for Criminal Cases	25	3.84	4.00

**Table B-2:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Civil Cases**

<b>With Respect to Civil Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:</b>	<b>N</b>	<b>Average</b>	<b>Median</b>
Pre-trial related activities for Civil Cases	26	2.81	3.00
Bench trial related activities for Civil Cases	26	3.42	4.00
Jury trial related activities for Civil Cases	26	3.46	4.00
Post-trial related activities for Civil Cases	25	2.96	3.00
Necessary case-related administration activities for Civil Cases	25	3.76	4.00

**Table B-3:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Adoption Cases**

<b>With Respect to Adoptions Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:</b>	<b>N</b>	<b>Average</b>	<b>Median</b>
Pre-trial related activities for Adoptions Cases	24	4.46	5.00
Bench trial related activities for Adoptions Cases	25	4.32	5.00
Post-trial related activities for Adoptions Cases	24	4.38	5.00
Necessary case-related administration activities for Adoptions Cases	24	4.33	5.00

**Table B-4:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Guardian/Conservator Cases**

**With Respect to Guardian/Conservator (DG) Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:**

	N	Average	Median
Pre-trial related activities for Guardian/Conservator (DG) Cases	26	4.31	5.00
Bench trial related activities for Guardian/Conservator (DG) Cases	26	4.19	5.00
Post-trial related activities for Guardian/Conservator (DG) Cases	26	4.19	5.00
Necessary case-related administration activities for Guardian/Conservator (DG) Cases	23	4.22	5.00

**Table B-5:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Juvenile Cases**

**With Respect to Juvenile Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:**

	N	Average	Median
Pre-trial related activities for Juvenile Cases	26	4.12	4.00
Bench trial related activities for Juvenile Cases	25	4.20	4.50
Jury trial related activities for Juvenile Cases	25	4.20	5.00
Post-trial related activities for Juvenile Cases	26	4.00	4.00
Necessary case-related administration activities for Juvenile Cases	23	4.17	5.00

**Table B-6:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Child Abuse and Neglect Cases**

**With Respect to Child Abuse & Neglect Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:**

	N	Average	Median
Pre-trial related activities for Child Abuse & Neglect Cases	26	4.08	4.00
Bench trial related activities for Child Abuse & Neglect Cases	26	3.92	4.00
Jury trial related activities for Child Abuse & Neglect Cases	14	4.23	5.00
Post-trial related activities for Child Abuse & Neglect Cases	27	3.63	4.00
Necessary case-related administration activities for Child Abuse & Neglect Cases	25	3.88	4.00

**Table B-7:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Probate Cases**

**With Respect to Probate Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:**

	N	Average	Median
Pre-trial related activities for Probate Cases	25	4.24	5.00
Bench trial related activities for Probate Cases	25	4.16	5.00
Jury trial related activities for Probate Cases	21	4.29	5.00
Post-trial related activities for Probate Cases	25	4.08	4.50
Necessary case-related administration activities for Probate Cases	24	4.25	5.00



**Table B-8:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Domestic Relations Cases**

<b>With Respect to Domestic Relations Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:</b>	<b>N</b>	<b>Average</b>	<b>Median</b>
Pre-trial related activities for Domestic Relations Cases	27	3.59	4.00
Bench trial related activities for Domestic Relations Cases	26	3.42	3.00
Post-trial related activities for Domestic Relations Cases	27	2.96	3.00
Necessary case-related administration activities for Domestic Relations Cases	24	3.79	4.00

**Table B-9:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Paternity Cases**

<b>With Respect to Paternity Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:</b>	<b>N</b>	<b>Average</b>	<b>Median</b>
Pre-trial related activities for Paternity Cases	26	4.04	4.00
Bench trial related activities for Paternity Cases	25	4.00	4.50
Jury trial related activities for Paternity Cases	14	4.00	4.00
Post-trial related activities for Paternity Cases	26	3.85	4.00
Necessary case-related administration activities for Paternity Cases	24	4.08	5.00

**Table B-10:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Persons with Developmental Disabilities Cases**

<b>With Respect to Commitment of Person with Developmental Disabilities Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:</b>	<b>N</b>	<b>Average</b>	<b>Median</b>
Pre-trial related activities for to Commitment of Person with Developmental Disabilities Cases	25	4.36	5.00
Bench trial related activities for to Commitment of Person with Developmental Disabilities Cases	25	4.40	5.00
Jury trial related activities for to Commitment of Person with Developmental Disabilities Cases	13	4.00	5.00
Post-trial related activities for to Commitment of Person with Developmental Disabilities Cases	25	4.44	5.00
Necessary case-related administration activities for to Commitment of Person with Developmental Disabilities Cases	21	4.14	5.00

**Table B-11:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Persons with Mental Illness Cases**

**With Respect to Commitment of a Person with Mental Illness Cases: During the course of a typical 8-hour workday, I generally have enough time to complete:**

	N	Average	Median
Jury trial related activities for Commitment of a Person with Mental Illness Cases	23	3.91	4.00
Necessary case-related administration activities for Commitment of a Person with Mental Illness Cases	25	4.12	5.00
Bench trial related activities for Commitment of a Person with Mental Illness Cases	27	4.30	5.00
Post-trial related activities for Commitment of a Person with Mental Illness Cases	27	4.30	5.00
Pre-trial related activities for Commitment of a Person with Mental Illness Cases	27	4.37	5.00

**Table B-12:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Investigative Subpoenas and Search Warrants**

**With Respect to Investigative Subpoena/Search Warrants : During the course of a typical 8-hour workday, I generally have enough time to complete:**

	N	Average	Median
Pre-trial related activities for to Investigative Subpoena/Search Warrants:	25	4.46	5.00
Bench trial related activities for to Investigative Subpoena/Search Warrants:	18	4.35	5.00
Jury trial related activities for to Investigative Subpoena/Search Warrants:	11	4.20	5.00
Post-trial related activities for to Investigative Subpoena/Search Warrants:	16	4.13	5.00
Necessary case-related administration activities for to Investigative Subpoena/Search Warrants:	21	4.40	5.00

**Table B-13:**  
**Adequacy of Time Survey Results: Average Responses to Survey Items for Non-Case Related Activity**

**With Respect to Non-Case-Related Activity: During the course of a typical 8-hour workday, I generally have enough time to complete:**

	N	Average	Median
Participate in public outreach and education	25	2.72	3.00
Conduct general and legal research	26	2.73	3.00
Participate in work-related meetings/committee meetings	26	3.04	3.00
Participate in judicial education and training	26	3.15	3.00
Participate in the administration of the court	26	3.38	4.00
Supervise and evaluate staff	25	3.56	4.00

The highlighted rows in Tables 1 through 12 identify the specific case types and functions for which survey participants do not feel adequate time is available. The following three activities fall into this category:

- Pre-trial related activities in **civil** cases 2.81
- Bench trial related activities in **civil** cases 3.42
- Jury trial related activities in **civil** cases 3.46
- Post-trial related activities in **civil** cases 2.96
- Bench trial related activities in **domestic relations** cases 3.42
- Post-trial related activities in **domestic relations** cases 2.96

Two highlighted rows in Table 13 indicate that, on average, survey participants do not feel adequate time is available for the following non-case related activities:

- Participate in public outreach and education 2.72
- Conduct general and legal research 2.73
- Participate in work-related meetings/committee meetings 3.04
- Participate in judicial education and training 3.15
- Participate in the administration of the court 3.38

The lower average scores related to civil, domestic relations cases and the non-case related activities provided the justification for the Advisory Committee to adjust the “As Reported” case weights derived from the data collection portion of this study.

### Appendix C: Montana District Court Model: As Reported

Montana District Court Judicial Need Model: As Reported

Line #	Case Type Category	Case Wgt (Minutes)	Judicial District																						STATE	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		
Cases filed: 2006 (annualized based on filings January through September, 2006)			cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed		
1	Child Abuse and Neglect	148.00	61	49	44	88	15	31	8	168	39	61	165	101	116	16	1	63	16	59	48	55	27	72	1,389	
2	Criminal	141.00	791	302	177	830	192	154	126	763	210	132	774	274	1,334	55	39	168	49	743	161	347	325	265	8,210	
3	Juvenile	108.00	70	140	24	142	37	15	29	311	36	17	180	44	188	17	23	31	100	37	27	61	51	1,609		
4	Civil	93.00	1,490	347	325	1,119	299	243	237	1,874	451	219	1,510	203	1,365	124	192	251	188	793	329	646	605	418	13,226	
5	Domestic Relations	77.00	1,069	325	129	801	158	136	169	633	173	129	866	158	1,386	56	51	166	112	766	222	277	227	86	8,094	
6	Commitment of a Person with Dev. Disability	74.00	0	1	1	12	32	0	0	0	0	0	0	0	3	0	0	0	0	5	1	1	4	0	61	
7	Paternity	61.00	9	3	0	1	1	0	3	0	1	1	1	1	31	0	1	3	0	4	0	4	0	1	0	63
8	Commitment of a Person with a Mental Illness	53.00	86	136	238	92	13	29	11	32	9	37	145	13	108	4	7	60	5	48	21	21	17	9	1,142	
9	Guardian/Conservator	40.00	53	59	25	106	19	21	7	39	19	24	102	20	134	5	5	53	4	59	20	31	35	12	851	
10	Adoptions	26.00	60	37	11	67	41	11	13	112	15	5	63	12	108	4	8	12	4	67	16	33	28	19	743	
11	Probate	19.00	286	133	72	186	93	63	152	281	128	49	200	134	301	51	105	106	90	160	68	81	90	102	2,930	
12	Investigative Subpoena/Search Warrant	10.00	157	23	24	120	24	8	16	146	5	16	126	33	305	23	0	17	11	69	1	0	43	35	1,201	
13	Drug & Other Treatment Courts	189.00	0	12	12					62		16			40		16		32						190	
14	Total Annual Filings	4,134	1,565	1,069	3,575	924	710	770	4,420	10,855	708	4,131	998	5,413	354	431	946	509	2,899	928	1,519	1,463	1,068	39,621		
15	Case-Specific Workload (minutes)= Sum (Weights x Filings)	371,352	145,319	99,227	335,496	82,681	70,084	66,363	418,987	103,417	72,463	386,166	99,084	497,999	34,103	37,352	89,266	45,711	278,937	90,368	151,089	140,288	107,427	3,723,177		
16	Annual Per Judge Availability (365 days * 480 minutes)	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	125,280	
17	Weekend days (-104 days)	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	5,280	
18	State holidays (- 11 days)	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	
19	Vacation (-18 days)	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	
20	Sick leave (-12 days)	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	
21	Education/training (-8 days)	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	
22	Annual Per Judge Availability for Judicial Workload	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	
23	Judicial Resource FTE Calculations																									
24	Travel FTE per district	0.25	0.11	0.09	0.14	0.28	0.19	0.49	0.33	0.22	0.09	0.25	0.10	0.09	0.09	0.17	0.41	0.23	0.09	0.07	0.21	0.13	0.20	4.23		
25	Non-Case-Related Activity FTE per district	0.66	0.52	0.17	1.01	0.34	0.23	0.35	0.76	0.28	0.32	0.37	0.18	0.92	0.22	0.22	0.56	0.17	0.65	0.06	0.72	0.84	0.20	9.76		
26	Judicial Case-Related FTE per district (line 15 / line 22)	3.65	1.43	0.98	3.30	0.81	0.69	0.65	4.12	1.02	0.71	3.79	0.97	4.89	0.34	0.37	0.88	0.45	2.74	0.89	1.48	1.38	1.06	36.72		
27	Total Judicial Resource Needs (line 24 + line 25+ line 26)	4.56	2.06	1.24	4.45	1.43	1.11	1.49	5.21	1.52	1.12	4.41	1.25	5.90	0.65	0.76	1.85	0.85	3.48	1.02	2.41	2.35	1.46	50.59		
28	Current FTE Judge Positions (includes special masters)	3.00	2.00	1.00	6.00	1.00	1.00	2.00	4.00	1.00	1.00	3.00	1.00	5.00	1.00	1.00	2.00	1.00	3.00	1.00	2.00	2.00	1.00	45.00		
29	Judicial Resource (Difference (line 27 - line 28))	-1.56	-0.06	-0.24	1.55	-0.43	-0.11	0.51	-1.21	-0.52	-0.12	-1.41	-0.25	-0.90	0.35	0.24	0.15	0.15	-0.48	-0.02	-0.41	-0.35	-0.46	-5.59		

Legend/Comments:  
 1 1 day = 480 minutes (8 hours)  
 2 On line 29, "-" numbers indicate Judicial position need. For example, in District 1, -1.56 indicates the need for 1.56 judges; in other words, the first district is under-staffed by 1.56 judges.  
 3 Judge FTE figures (on line 27) include 2 Special Masters in the 4th judicial district.  
 4 FTE refers to Full Time Equivalent positions.  
 5 Filing figures are based on 9 months of reported filings, except for Missoula County, where 6 months of filing data were reported. All filing data have been annualized.

### Appendix C: Montana District Court Model: Quality/Adequacy of Time Adjustments

Montana District Courts Judicial Need Model: Quality/Adequacy of Time Adjustments

Line #	Case Type Category	Case Wgt (Minutes)	Judicial District																						STATE
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
	Cases filed: 2006 (annualized based on filings January through September, 2006)		cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	cases filed	
1	Child Abuse and Neglect	148.00	61	49	44	88	15	31	8	168	39	61	165	101	116	16	1	63	16	59	48	55	27	72	
2	Criminal	141.00	791	302	177	830	192	154	126	763	210	132	774	274	1,334	55	39	168	49	743	161	347	325	265	
3	Civil	109.00	1,490	347	325	1,119	299	243	237	1,874	451	219	1,510	203	1,365	124	192	251	188	793	329	646	605	418	
4	Juvenile	108.00	70	140	24	142	37	15	29	311	36	17	180	44	188	17	23	31	31	100	37	27	61	51	
5	Domestic Relations	85.00	1,069	325	129	801	158	136	169	633	173	129	866	158	1,386	56	51	166	112	766	222	277	227	86	
6	Commitment of a Person with Dev. Disability	74.00	0	1	1	12	32	0	0	0	0	0	0	3	0	0	0	0	5	1	1	4	0		
7	Paternity	61.00	9	3	0	1	0	3	0	1	1	1	1	1	31	0	1	3	0	0	4	0	1	0	
8	Commitment of a Person with a Mental Illness	53.00	86	136	238	92	13	29	11	32	9	37	145	13	108	4	7	60	5	48	21	21	17	9	
9	Guardian/Conservator	40.00	53	59	25	106	19	21	7	39	19	24	102	20	134	5	5	53	4	59	20	31	35	12	
10	Adoptions	26.00	60	37	11	67	41	11	13	112	15	5	63	12	108	4	8	12	4	67	16	33	28	19	
12	Probate	19.00	286	133	72	186	93	63	152	281	128	49	200	134	301	51	105	106	90	160	68	81	90	102	
11	Investigative Subpoena/Search Warrant	10.00	157	23	24	120	24	8	16	146	5	16	126	33	305	23	0	17	11	69	1	0	43	35	
13	Drug & Other Treatment Courts	189.00	0	12		12				62		16			40		16		32					190	
14	Total Annual Filings		4,134	1,565	1,069	3,575	924	710	770	4,420	1,085	708	4,131	998	5,413	354	431	946	509	2,899	928	1,519	1,463	1,068	
15	Case-Specific Workload (minutes)= Sum (Weights x Filings)		403,740	153,469	105,452	359,797	88,735	75,064	71,502	454,035	112,014	77,007	417,245	103,606	530,919	36,528	40,820	94,618	49,605	297,749	97,401	163,645	151,790	114,800	
16	Annual Per Judge Availability (365 days * 480 minutes)		175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	175,200	
17	Weekend days (-104 days)		49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	49,920	
18	State holidays (- 11 days)		5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280	
19	Vacation (-18 days)		8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	8,640	
20	Sick leave (-12 days)		5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	
21	Education/training (-8 days)		3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	
22	Annual Per Judge Availability for Judicial Workload		101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	101,760	
23	Judicial Resource FTE Calculations																								
24	Travel FTE per district		0.25	0.11	0.09	0.14	0.28	0.19	0.49	0.33	0.22	0.09	0.25	0.10	0.09	0.09	0.17	0.41	0.23	0.09	0.07	0.21	0.13	0.20	
25	Non-Case-Related Activity FTE per district		0.75	0.50	0.25	1.50	0.25	0.25	0.50	1.00	0.25	0.25	0.75	0.25	1.25	0.25	0.25	0.50	0.25	0.75	0.25	0.50	0.50	0.25	
26	Judicial Case-Related FTE per district (line 15 / line 22)		3.97	1.51	1.04	3.54	0.87	0.74	0.70	4.46	1.10	0.76	4.10	1.02	5.22	0.36	0.40	0.93	0.49	2.93	0.96	1.61	1.49	1.13	
27	Total Judicial Resource Needs (line 24 + line 25+ line 26)		4.97	2.12	1.38	5.18	1.40	1.18	1.69	5.79	1.57	1.10	5.10	1.37	6.56	0.70	0.82	1.84	0.97	3.77	1.28	2.32	2.12	1.58	
28	Current FTE Judge Positions (includes special masters)		3.00	2.00	1.00	6.00	1.00	1.00	2.00	4.00	1.00	1.00	3.00	1.00	5.00	1.00	1.00	2.00	1.00	3.00	1.00	2.00	2.00	1.00	
29	Resource (Supply)/Overall Need Difference (line 27 - line 28)		-1.97	-0.12	-0.38	0.82	-0.40	-0.18	0.31	-1.79	-0.57	-0.10	-2.10	-0.37	-1.56	0.30	0.18	0.16	0.03	-0.77	-0.28	-0.32	-0.12	-0.58	

Legend/Comments:  
 1 1 day = 480 minutes (8 hours)  
 2 On line 29, "-" numbers indicate Judicial position need. For example, in District 1, 1.97 indicates the need for 1.97 judges; in other words, the first district is under-staffed by 1.97 judges.  
 3 Judge FTE figures (on line 27) include 2 Special Masters in the 4th judicial district.  
 4 FTE refers to Full Time Equivalent positions.  
 5 Filing figures are based on 9 months of reported filings, except for Missoula County, where 6 months of filing data were reported. All filing data have been annualized.

**Appendix D: Case Weight Composition****Case Weights Breakdowns: “As Reported” Model**

<b>Case Type</b>	<b><u>Case Weight</u> Minutes per Activity</b>	<b>Case Type</b>	<b><u>Case Weight</u> Minutes per Activity</b>
<b>Child Abuse &amp; Neglect</b>	<b>148</b>	<b>Commit. Of Person with a Mental Illness</b>	<b>53</b>
Pretrial	71	Pretrial	22
Bench trial	40	Bench trial	18
Jury trial	0	Jury trial	8
Post trial	20	Post trial	2
Case related admin.	17	Case related admin.	3
<b>Criminal</b>	<b>141</b>	<b>Guardian – Conservator</b>	<b>40</b>
Pretrial	67	Pretrial	22
Bench trial	5	Bench trial	7
Jury trial	23	Post trial	1
Post trial	26	Case related admin.	10
Case related admin.	20		
<b>Juvenile</b>	<b>108</b>	<b>Adoptions</b>	<b>26</b>
Pretrial	72	Pretrial	8
Bench trial	9	Bench trial	14
Jury trial	2	Post trial	1
Post trial	13	Case related admin.	3
Case related admin.	12		
<b>Civil</b>	<b>93</b>	<b>Probate</b>	<b>19</b>
Pretrial	48	Pretrial	7
Bench trial	4	Bench trial	7
Jury trial	14	Post trial	3
Post trial	12	Case related admin.	2
Case related admin.	15		
<b>Domestic Relations</b>	<b>77</b>	<b>Investigative Subpoena &amp; Search Warrant</b>	<b>10</b>
Pretrial	27	Pretrial	6
Bench trial	21	Case related admin.	4
Post trial	20		
Case related admin.	9		
<b>Commit. Of a Person with a Dev. Disability</b>	<b>74</b>	<b>Drug &amp; Other Treatment Courts</b>	<b>189</b>
Pretrial	36	In-session	56
Bench trial	16	Case related admin.	133
Post trial	17		
Case related admin.	5		
<b>Paternity</b>	<b>61</b>		
Pretrial	20		
Bench trial	15		
Post trial	25		
Case related admin.	1		

## Case Weights Breakdowns: “Quality/Adequacy of Time Adjustments” Model

<b>Case Type</b>	<b>Case Weight Minutes per Activity</b>	<b>Case Type</b>	<b>Case Weight Minutes per Activity</b>
<b>Child Abuse &amp; Neglect</b>	<b>148</b>	<b>Commit. Of Person with a Mental Illness</b>	<b>53</b>
Pretrial	71	Pretrial	22
Bench trial	40	Bench trial	18
Jury trial	0	Jury trial	8
Post trial	20	Post trial	2
Case related admin.	17	Case related admin.	3
<b>Criminal</b>	<b>141</b>	<b>Guardian – Conservator</b>	<b>40</b>
Pretrial	67	Pretrial	22
Bench trial	5	Bench trial	7
Jury trial	23	Post trial	1
Post trial	26	Case related admin.	10
Case related admin.	20		
<b>Civil</b>	<b>109</b>	<b>Adoptions</b>	<b>26</b>
Pretrial	56	Pretrial	8
Bench trial	5	Bench trial	14
Jury trial	17	Post trial	1
Post trial	13	Case related admin.	3
Case related admin.	18		
<b>Juvenile</b>	<b>108</b>	<b>Probate</b>	<b>19</b>
Pretrial	72	Pretrial	7
Bench trial	9	Bench trial	7
Jury trial	2	Post trial	3
Post trial	13	Case related admin.	2
Case related admin.	12		
<b>Domestic Relations</b>	<b>85</b>	<b>Investigative Subpoena/ Search Warrant</b>	<b>10</b>
Pretrial	30	Pretrial	6
Bench trial	23	Case related admin.	4
Post trial	22		
Case related admin.	10		
<b>Commit. Of a Person with a Dev. Disability</b>	<b>74</b>	<b>Drug &amp; Other Treatment Courts</b>	<b>189</b>
Pretrial	36	In-session	56
Bench trial	16	Case related admin.	133
Post trial	17		
Case related admin.	5		
<b>Paternity</b>	<b>61</b>		
Pretrial	20		
Bench trial	15		
Post trial	25		
Case related admin.	1		

## Appendix E: Calculations Used to Determine Quality/Adequacy of Time Adjustments

### Civil and Domestic Relations Case Types

To equate the criminal and civil Adequacy of Time Survey scores, each activity within the civil case weight was adjusted mathematically to equal 100% of the criminal score (e.g.  $1 - 75.95\% = 24.05\%$  for pre-trial activities). The amount of time associated with each activity was also multiplied by that difference to determine the case weight adjustment. Specifically, 48 minutes of the original case weight for civil cases was associated with pre-trial activities. This figure was increased by 24.05%, which equates to 11.55 minutes, or 59.55. The case weight adjustments were summed and the total amount was rounded for a **final adjustment of 16 minutes added to the civil case weight, and 8 minutes added to the domestic relations case weight.** The computations for these increases are shown below.

#### Civil Case Weight Adjustments based on the Adequacy of Time Survey Results

Activity	Criminal Score	Civil Score	Difference	As Reported Minutes Associated with Civil Cases	Minutes Added to Equate to Criminal ((As Reported Minutes * (1-Difference))
Pre-trial Activities	3.70	2.81	75.95%	48	11.55
Bench Trial Activities	4.08	3.42	83.82%	4	.65
Jury Trial Activities	3.70	3.46	93.51%	14	.91
Post Trial Activities	3.59	2.96	82.45%	12	2.11
Case Related Administration	3.84	3.76	97.92%	15	.31
<b>Total</b>	NA	NA	NA	93	15.52

#### Domestic Relations Weight Adjustments based on the Adequacy of Time Survey Results

Activity	Criminal Score	Domestic Relations Score	Difference	As Reported Minutes Associated with Civil Cases	Minutes Added to Equate to Criminal ((As Reported Minutes * (1-Difference))
Pre-trial Activities	3.70	3.59	97.03	27	.80
Bench Trial Activities	4.08	3.42	83.82	21	3.40
Post Trial Activities	3.59	2.96	82.42	20	3.51
Case Related Administration	3.84	3.79	98.70	9	.12
<b>Total</b>	NA	NA	NA	77	7.83