**RUSH TO JUDGMENT?
TRIAL LENGTH AND OUTCOMES IN PATENT CASES**

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I. INTRODUCTION

Although the vast majority of patent cases settle before trial, the fact that a jury waits at the end of the road affects most aspects of patent litigation. The possibility of jury trial influences where parties file their cases, who they sue (and in what groups), what discovery the parties consider important to challenge, and whether particular doctrines are questions of law or questions of fact.¹ In fact, most patent trials in the last decade have been before juries.² Litigants on both sides go to great lengths to get an edge before the jury, hiring jury consultants, practicing their cases before mock juries, and choosing districts and judges based on how they will manage the case before the jury.³

For the last decade, the received wisdom in the patent bar has been that the best place for patentees to file their suit is the Eastern District of Texas.⁴ One of us recently challenged that wisdom in an empirical study, pointing out that the popularity of the district has slowed proceedings there considerably.⁵ Nevertheless, the Eastern District remains the most popular venue for patent plaintiffs because plaintiffs believe the district's juries and judicial management of cases are pro-patentee.⁶ Further, the Eastern District of Texas has a reputation for fast trials;⁷ there is a general perception in the patent bar that quick trials (especially those involving multiple defendants) favor patentees.⁸ Fast trials

¹ See Kimberly Moore, *Forum Shopping In Patent Cases: Does Geographic Choice Affect Innovation?*, 79 N.C. L. REV. 889, 899-900 (2001).

² See *infra* notes 11-16 and accompanying text.

³ See Moore, *supra* note 1, at 899.

⁴ See, e.g., Yan Leychkis, *Of Fire Ants and Claim Construction: An Empirical Study of the Meteoric Rise of the Eastern District of Texas as a Preeminent Forum for Patent Litigation*, 9 YALE J.L. & TECH. 193, 204-05 (2007); Megan Woodhouse, *Shop 'til You Drop: Implementing Federal Rules of Patent Litigation Procedure to Wear Out Forum-Shopping Patent Plaintiffs*, 99 GEO. L.J. 227, 228 (2010).

⁵ Mark A. Lemley, *Where to File Your Patent Case*, 38 AIPLA Q.J. 401, 415 (2010).

⁶ See Leychkis, *supra* note 4, at 206.

⁷ See, e.g., Tim Malloy, *Trial Time in the ED Texas—One Size Fits All, Or Does It?* 3 (Working Paper, 2011) (finding significant variation in the time allotted for patent trials, and noting that plaintiffs favor the Eastern District of Texas for its short trials); Woodhouse, *supra* note 4, at 234-35.

⁸ See Leychkis, *supra* note 4, at 202.

prevent defendants from dragging the case into a technical morass of prior art. They keep the jury's attention focused on the patentee's invention, not on all the other things the defendant may have developed. And they are particularly tough for defendants in multi-defendant cases, who must share their time and can't present individual counter-narratives.

In this paper, we set out to test the conventional wisdom that short trials favor patentees. Using the Lex Machina database,⁹ we collected data on every patent trial conducted in the United States between January 1, 2000, and June 30, 2011. We first report outcome statistics, then we discuss the role of trial length, and finally, we consider the role of jurisdiction in driving outcomes.¹⁰

II. DECISIONMAKER

There were 624 patent trials leading to 679 separate judgments in the United States between January 1, 2000, and June 30, 2011. Overall, patentees won 59.9% of those trials, accused infringers won 32.9%, and 7.2% resulted in split decisions.¹¹ We report this general data in Table 1.

⁹ LEX MACHINA, <https://lexmachina.com> (last visited Apr. 1, 2013).

¹⁰ Throughout this paper, we report wins for "Claimants (C)" —patentees— and "Claim Defendants (CD)" —accused infringers. We do this rather than study plaintiff and defendant wins because a significant fraction of patent suits are declaratory judgment actions in which the plaintiff is the accused infringer.

¹¹ To win a patent case, a patentee must have a patent claim held valid and infringed. Infringement of a single valid claim was sufficient to count as a patentee win. We did not attempt to make a judgment as to whether the patentee won on most issues or assess the size of the damage award.

The mixed decisions, which we count as separate judgments, often involved two parties suing each other for patent infringement; if one party won the whole case, that was a win for that patentee but also a loss for the other patentee. Mixed decisions also frequently involved cases in which multiple patents were asserted by a single party; if one patent was held invalid or not infringed while a claim in a second patent was held valid and infringed, we deemed it a mixed decision.

Table 1: National Trial Outcomes

Variable	No. of Variable	Total No.	% of Total	Mean Time (Days)	Median Time	Standard Deviation
Total Bench	158	624	25.3%	5.74	5	4.22
Total Jury	466	624	74.7%	8.60	8	4.59
Bench for C Win	81	158	51.3%	5.74	5	4.33
Bench for CD Win	67	158	42.4%	5.40	5	4.12
Bench for C; CD Win	10	158	6.3%	8.00	7.5	3.28
Jury Trial for C Win	293	466	62.9%	8.32	7	4.60
Jury Trial for CD Win	138	466	29.6%	8.87	8	4.60
Jury Trial for C; CD Win	35	466	7.5%	9.83	9	4.14

Figure 1: Jury vs. Bench Trials

Of the 624 total trials, 466 trials, or 74.7%, were tried before juries. This number may seem surprisingly low given that patentees today virtually always request juries.¹² But there are certain circumstances in which juries are not an option, including patent lawsuits against the government¹³ and lawsuits under the Hatch-Waxman Act against generic drug manufacturers seeking only injunctive relief.¹⁴ And indeed, as we will see, districts that hear more generic pharmaceutical patent cases tend to have more bench trials.¹⁵

¹² This is a very recent development; as recently as 40 years ago less than 5% of patent cases were tried to juries. See Mark A. Lemley, *Why Do Juries Decide If Patents Are Valid?*, __ VA. L. REV. __ (forthcoming 2014).

¹³ See 28 U.S.C. § 1498 (2006) (limiting the venue for patent claims against the government to the Court of Federal Claims).

¹⁴ *Tegal Corp. v. Tokyo Electron Am., Inc.*, 257 F.3d 1331, 1339 (Fed. Cir. 2001) (holding that accused infringer has no right to jury trial where patentee requests only equitable relief and accused infringer raises only affirmative defenses). See generally Brian D. Coggio & Timothy E. DeMasi, *The Right to a Jury Trial Under The Waxman-Hatch Act: The Question Revisited and Resolved*, 57 FOOD & DRUG L.J. 155 (2002) (summarizing cases following *Tegal* and concluding no right to a jury trial arises in a typical Hatch-Waxman case).

¹⁵ See discussion *infra* Part IV.

This data strongly supports the received wisdom that, compared to judges, juries favor patentees.¹⁶ Of the 158 bench trials, 51.3% ruled for the patentee, 42.4% for the accused infringer, and 6.3% were split decisions. By contrast, of the 466 jury trials, 62.9% ruled for the patentee, 29.6% for the accused infringer, and 7.5% were split decisions. We report the data in Figure 2.

Figure 2: Decision for Patentee by Decisionmaker

The results are also robust in the multivariate regressions. We report the various regressions in Appendix A.¹⁷ Jury trials are strongly correlated with rulings for patentees (coefficient of $-.249$, $p=0.005$).¹⁸ When we exclude mixed

¹⁶ See also John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AIPLA Q.J. 185, 212 (1998) (finding that patentees won on validity 57% of the time in bench trials and 67% before juries in cases between 1989 and 1996); Kimberly A. Moore, *Judges, Juries, and Patent Cases—An Empirical Peek Inside the Black Box*, 99 MICH. L. REV. 365, 390 (2000) [hereinafter Moore, *Judges, Juries, and Patent Cases*] (finding that patentees won 64% of bench trials and 71% of jury trials in cases between 1983 and 1999).

¹⁷ See *infra* Appendix A pp. 188-95. We used single variable linear probability models in the regressions.

¹⁸ In our regression analysis, patentee wins are coded as a 1, accused infringer wins as a 3, and mixed outcomes as a 2. A negative coefficient in the

verdicts from the results, the findings are even stronger (coefficient of $-.269$, $p=0.007$).¹⁹

One possible explanation for this strong correlation is that there is something different about bench trials. There are two types of cases where a party cannot request a jury trial: generic pharmaceutical patent disputes seeking injunctions under the Hatch-Waxman Act²⁰ and proceedings against the United States in the Court of Federal Claims.²¹ If patentees are systematically less likely to win those types of cases, the judge-jury disparity may be an artifact of these limitations. To test this, we re-ran our numbers excluding the pharmaceutical and ANDA cases. Not only did the disparity remain, it grew stronger: the coefficient grew to $-.429$ ($p=0.000$). Patentees, then, are right to want jury trials.

Interestingly, it does not appear to matter how sophisticated the jury pool is about patents. We constructed a measure of patent-intensity by district based on the number of patents issued per capita to residents of that district.²² The most patent-intensive district is the Northern District of California, with 5.5 patents in force per thousand residents. The least patent-intensive is the District of Hawaii, with 0.3 patents per thousand residents. Among the five most popular litigation districts, the Northern District of California ranked first, with 5.5 patents per thousand; the District of Massachusetts ranked ninth, with 2.3 patents per thousand; the District of Delaware ranked seventeenth, with 1.9

regression reflects a greater likelihood of a patentee win, but in assessing magnitude of the effects, note that the range is from 1 to 3, not 0 to 1.

¹⁹ We think excluding mixed verdicts is the preferable approach because mixed verdicts are rulings both for and against patentees.

We did not include other variables of possible interest in the multivariate regressions, such as technology category or the characteristics of individual patents, because the small number of trials would have prevented the results from having any possible predictive power.

²⁰ *Tegal Corp.*, 257 F.3d at 1339.

²¹ See 28 U.S.C. § 1498 (2006).

²² We constructed this measure based on raw data collected by Michael Meehan. See Michael Meehan, *Untapped Inventive Potential in U.S. Communities* (Mar. 2009) (unpublished paper), http://works.bepress.com/michael_meehan/2/. Meehan collected data on patents by Metropolitan Statistical Measurement Area ("MSMA"). *Id.* We then converted MSMA data into judicial districts, which in some cases required estimation of residents on each side of a district boundary, and determined the population of each district.

patents per thousand; the Central District of California ranked forty-third, with 1.2 patents per thousand; and the Eastern District of Texas ranked seventy-third, with 0.6 patents per thousand.²³ Nonetheless, the patent sophistication of the jury pool had no statistically significant effect on trial outcomes.²⁴

III. TRIAL TIMES

On average, patent trials last approximately eight court days, though the actual trial lengths range from one day to forty-four days.²⁵ The length of a trial depends heavily on whether the trial involves a jury. Jury trials took an average of 8.60 days and a median of 8 days, compared with an average of 5.74 days and a median of 5 days for bench trials.²⁶ We present the data in Table 1.²⁷

Contrary to the conventional wisdom, however, the length of trial had no effect on outcome. The trial times were virtually identical for patentee wins and accused infringer wins. Patentee wins took 7.76 days on average, while accused infringer wins took 7.74 days. The median was 7 days for both sets of cases. This difference was not statistically significant even when no other variables were considered in the regression. This is not merely a failure to reject

²³ We report the full results in Appendix C. *See infra* Appendix C pp. 201-03. The inclusion of district fixed effects in our data set for five of the sixty districts that had at least one patent trial creates some risk of multicollinearity with district-based patents-per-thousand measure.

²⁴ This casts some doubt on the efficacy of proposals to allow district jury specialization. *See, e.g.,* Jeanne C. Fromer, *Patentography*, 85 N.Y.U. L. REV. 1444, 1481-82 (2010) (proposing court specialization based on local industry clusters).

²⁵ Trial events result in daily docket entries, so we can use Lex Machina to measure the number of days actually in trial, skipping days when the court is dark or hearing other matters. We did not attempt to determine the number of trial hours in any given day.

²⁶ One possible explanation is that the docket reports for jury trials include the time the jury spends in deliberation. Judges instead write their opinions at some later time rather than devoting trial days to deliberation. We do not have a simple way to back out jury deliberation time, but we are skeptical that juries deliberate for an average of three days after a five-day presentation of evidence. So jury deliberation time is, at most, a partial explanation for this disparity.

²⁷ *See supra* Table 1 p. 173.

the null hypothesis out of statistical caution; our results suggest no real relationship between trial time and outcome.

Split decisions took longer: 9.42 days on average, with a median of 9 days. This is unsurprising; those cases are likely to be more complicated, as they tend to involve multiple patents or patent owners on both sides.

While bench trials are significantly shorter than jury trials, both bench and jury trials are approximately the same length in patentee wins and accused infringer wins. Patentee wins in bench trials took slightly longer than accused infringer wins, with a mean of 5.74 days for patentee wins compared to 5.40 days for accused infringer wins. By contrast, patentee wins in jury trials took slightly less time (8.32 days compared to 8.87 days for accused infringer wins), but the differences are not statistically significant even when only trial length and bench or jury are included in the regression.²⁸ We present the results in Table 1.²⁹

Trial length can also be affected by the characteristics of particular trials. Trials with multiple patents, multiple defendants, or both, can render a trial more complex and hence longer. Accordingly, we included these trials in our multivariate regression, but they didn't change the significance of any of the trial outcome results.³⁰

IV. CHOICE OF FORUM

A significant number of the 624 patent trials were held in just five districts: the Eastern District of Texas (77 trials), the District of Delaware (110 trials), the Northern District of California (33 trials), the Central District of California (25 trials), and the District of Massachusetts (28 trials). Together, those districts held more than 40% of the patent trials in the last ten years.

Different districts vary in the length of their trials, the percentage of bench trials, and the outcomes of those trials. In the Eastern District of Texas, the vast majority of trials are before juries (72 out of 77 trials). Both bench and jury

²⁸ To avoid possible collinearity between the jury trial and trial length variables, we first ran these numbers including both sets and then ran those specific to jury trials. We found no significant difference in the results.

²⁹ See *supra* Table 1 p. 173.

³⁰ We ran the regressions using actual trial length. We also ran the regressions using quartiles to control for heteroskedasticity in trial lengths, but the results were similar.

trials took less time than average: 6.18 days for jury trials and 3.6 days for bench trials. Patentees won one of the five bench trials in the Eastern District of Texas, accused infringers won three, and one case was a split decision. These percentages aren't particularly meaningful, however, because of the small number of cases. More significantly, patentees won 70.8% of jury trials in the Eastern District of Texas, accused infringers won 25.0%, and 4.2% were split decisions. We report the results in Table 2.

Table 2: Trial Outcomes in the Eastern District of Texas

Variable	No. of Variable	Total No.	% of Total No.	Mean Time (Days)	Median Time	Standard Deviation
Total Bench	5	77	6.5%	3.60	3	1.62
Total Jury	72	77	93.5%	6.18	6	2.12
Bench for C Win	1	5	20.0%	3.00	3	0.00
Bench For CD Win	3	5	60.0%	3.00	2	1.41
Bench For C; CD Win	1	5	20.0%	6.00	6	0.00
Jury Trial for C Win	51	72	70.8%	6.14	6	1.78
Jury Trial for CD Win	18	72	25.0%	6.11	5	2.86
Jury Trial for C; CD Win	3	72	4.2%	7.33	7	2.05

In the Northern District of California, twenty-seven out of thirty-three trials were before juries. The bench trials were somewhat shorter than average at 5.5 days, but jury trials took much longer, averaging 12.7 days. Patentees won two of six bench trials, accused infringers won three, and one case was a split decision. Again, because of the small number of cases, the bench trial percentages don't seem particularly meaningful. Juries were far less favorable to patentees in the Northern District of California than in the Eastern District of Texas. In the Northern District of California, patentees won only 44.4% of jury trials, accused infringers won 48.1%, and 7.4% were split decisions. We report the results in Table 3.

Table 3: Trial Outcomes in the Northern District of California

Variable	No. of Variable	Total No.	% of Total No.	Mean Time (Days)	Median Time	Standard Deviation
Total Bench	6	33	18.2%	5.50	4.5	3.15
Total Jury	27	33	81.8%	12.67	12	4.28
Bench for C Win	2	6	33.3%	7.00	7	5.00
Bench For CD Win	3	6	50.0%	4.33	4	0.47
Bench For C; CD Win	1	6	16.7%	6.00	6	0.00
Jury Trial for C Win	12	27	44.4%	13.75	12	5.46
Jury Trial for CD Win	13	27	48.1%	11.46	11	2.65
Jury Trial for C; CD Win	2	27	7.4%	14.00	14	2.00

In the Central District of California, twenty-one out of twenty-five trials were before juries. The bench trials were substantially shorter than average, at 3.75 days, and jury trials took slightly less than average at 8.24 days. Patentees won two of four bench trials in the Northern District of California and accused infringers won two. These numbers too are too small to draw any meaningful conclusions about bench trials. Juries were generally favorable to patentees in the Central District of California, though not quite as favorable as in the Eastern District of Texas. In the Central District of California, patentees won 66.7% of jury trials, accused infringers won 28.6%, and 4.8% were split decisions. We report the results in Table 4.

Table 4: Trial Outcomes in the Central District of California

Variable	No. of Variable	Total No.	% of Total No.	Mean Time (Days)	Median Time	Standard Deviation
Total Bench	4	25	16.0%	3.75	4	1.30
Total Jury	21	25	84.0%	8.24	7	5.00
Bench for C Win	2	4	50.0%	2.50	2.5	0.50
Bench For CD Win	2	4	50.0%	5.00	5	0.00
Bench For C; CD Win	0	4	0.0%	0.00	0	0.00
Jury Trial for C Win	14	21	66.7%	7.00	6.5	3.14
Jury Trial for CD Win	6	21	28.6%	8.50	7.5	4.43
Jury Trial for C; CD Win	1	21	4.8%	24.00	24	0.00

In the District of Delaware, 70 out of 110 trials (or 63.6%) were before juries, a far lower percentage than in the other districts we investigated. This is likely an artifact of the prevalence of generic pharmaceutical patent cases in Delaware, which are not normally tried to juries. Bench trials in Delaware were slightly shorter than average, at 5.08 days, as were jury trials, at 7.96 days. Patentees won 57.5% of bench trials in the District of Delaware, accused infringers won 37.5%, and 5% were split decisions. Juries were somewhat less favorable to patentees in the District of Delaware than in the Eastern District of Texas. In Delaware, patentees won only 55.7% of jury trials, accused infringers won 22.9%, and 21.4% were split decisions. Delaware was the only district of the five we broke out in which judges ruled for patentees at a higher rate than juries did, though the large number of split jury decisions may be a partial explanation. We report the results in Table 5.

Table 5: Trial Outcomes in the District of Delaware

Variable	No. of Variable	Total No.	% of Total No.	Mean Time (Days)	Median Time	Standard Deviation
Total Bench	40	110	36.4%	5.08	5	1.84
Total Jury	70	110	63.6%	7.96	8	2.86
Bench for C Win	23	40	57.5%	5.09	5	1.69
Bench For CD Win	15	40	37.5%	4.60	5	1.58
Bench For C; CD Win	2	40	5.0%	8.50	8.5	1.50
Jury Trial for C Win	39	70	55.7%	7.82	8	2.85
Jury Trial for CD Win	16	70	22.9%	8.19	8	3.11
Jury Trial for C; CD Win	15	70	21.4%	8.07	8	2.57

In the District of Massachusetts, twenty-three out of twenty-eight trials were before juries. Both bench and jury trials were substantially longer than average, at a mean of 7.80 days and 11.04 days, respectively. Patentees won one out of five bench trials in the District of Massachusetts, accused infringers won three, and the final case was a split decision. As in other districts, the small number of cases renders these percentages less meaningful. Juries in the District of Massachusetts were slightly less favorable to patentees than in the country as a whole. Patentees won 56.5% of jury trials, accused infringers won 39.1%, and 4.3% were split decisions. We report the results in Table 6.

Table 6: Trial Outcomes in the District of Massachusetts

Variable	No. of Variable	Total No.	% of Total No.	Mean Time (Days)	Median Time	Standard Deviation
Total Bench	5	28	17.9%	7.80	5	5.64
Total Jury	23	28	82.1%	11.04	9	8.38
Bench for C Win	1	5	20.0%	3.00	3	0.00
Bench For CD Win	3	5	60.0%	7.67	5	6.02
Bench For C; CD Win	1	5	20.0%	13.00	13	0.00
Jury Trial for C Win	13	23	56.5%	12.85	9	9.92
Jury Trial for CD Win	9	23	39.1%	8.44	6	5.08
Jury Trial for C; CD Win	1	23	4.3%	11.00	11	0.00

The results show some substantial differences in trial outcomes by district, though the magnitude of those differences is smaller than expected. In particular, the conventional wisdom that juries in the Eastern District of Texas always vote for patentees is not true. While juries in that district do find for patentees more often than the national average, the difference between 70.8% in the Eastern District of Texas and 62.9% overall is not as large as expected. Indeed, as the multiple regression analysis in the appendices shows, it is not statistically significant once we factor in the number of patents, the number of defendants, whether a judge or a jury decided the issue, whether there were non-patent issues in the case, and whether the case resulted in a split decision. Similarly, although the Northern District of California seems to have a much

lower jury win rate at 44.4% compared to 62.9% overall, the effects are not statistically significant in the overall regression analysis, in part because of the small number of jury trials in that district.

Figure 3: Jury Trial Favorable to Patentee Rate By District

The evidence shows some differences in line with the conventional wisdom that patentees win more before juries in the Eastern District of Texas and the District of Delaware than in the Northern District of California. But it does not support the conclusion that the district in which a case is litigated significantly affects the likelihood that the jury will find for the patentee.³¹

V. PREDICTING THE LENGTH OF PATENT TRIALS

So far, we have been trying, and failing, to predict the outcome of patent trials based on their length or location. In this section, we reverse the process to look at the factors that best predict the length of a patent trial. Here, when holding all other variables constant, we find abundant and strongly significant evidence of relationships. Trial before a jury is a significant predictor of a long trial, adding 3.04 days to the length of the trial ($p < 0.001$). Certain trial complexities also correlate with greater length. For example, adding an

³¹ For discussion of technology-specific clustering of cases and the effect of the jury pool in particular districts, see Fromer, *supra* note 24, at 1450.

additional patent to the case adds 0.83 days ($p < 0.001$), while adding an additional defendant to the case adds 0.38 days ($p = 0.012$). Adding non-patent issues to the case, by contrast, does not have a statistically significant effect. We report these results in Appendix B.³²

This evidence suggests that trial lengths will likely decrease now that joining multiple defendants in a single case is difficult under the America Invents Act of 2011.³³ The new joinder provisions limit the defendants that can be joined in the same suit.³⁴ The number of defendants per case has dropped significantly, simplifying each trial and predicting shorter overall lengths.³⁵

The district of choice also affects the length of trials. Conducting a trial in the Eastern District of Texas, the Central District of California, or the District of Delaware is significantly correlated with a shorter trial ($p < 0.001$, $p < 0.001$, and $p = 0.013$, respectively).³⁶ Conducting a trial in the Northern District of California is not significantly correlated with a longer trial ($p = 0.437$). The Northern District of California and the District of Massachusetts do, however, take longer on average than districts other than the five we broke out for analysis. Those remaining districts were associated with trials that were 2.07 days shorter, all else remaining equal ($p = 0.013$).

Curiously, the number of patents per thousand people in the jury pool correlated significantly with a longer trial ($p < 0.001$).³⁷ It is not clear what explains

³² See *infra* Appendix B pp. 196-200.

³³ See James C. Pistorino & Susan J. Crane, 2011 *Trends in Patent Case Filings: Eastern District of Texas Continues to Lead Until America Invents Act Is Signed*, 83 PAT. TRADEMARK & COPYRIGHT J. (BNA) 710, 713-14 (Mar. 2012) (documenting a significant drop in the number of defendants per case after the AIA took effect in September 2011).

³⁴ 35 U.S.C.A. § 299(b)-(c) (West 2013).

³⁵ See Pistorino & Crane, *supra* note 33, at 713-14.

³⁶ The differences between the five broken out districts were substantial. Holding other variables constant, trials took 4.82 fewer days in the Eastern District of Texas, 3.26 fewer days in the District of Delaware, and 2.84 fewer days in the Central District of California than in the District of Massachusetts.

³⁷ The significance of the effect disappeared when we added district dummy variables, however, as did the significance of the individual district effects, though that is likely the result of collinearity.

this result; it might be a function of longer trial times in the Northern District of California and the District of Massachusetts, both of which rank high on the patent-intensity list, and shorter trial times in the less patent-intense Eastern District of Texas. Alternatively, an unobserved variable may explain both results. Perhaps trials conducted in higher-tech districts tend to involve more complex technology than trials in other districts, resulting in longer trials. To test the strength of this relationship, we ran a version of the regression that omitted the Northern District of California and the Eastern District of Texas. The significance of the patents-per-thousand measure disappeared ($p=0.363$), while the other predictors remained significant. That suggests the effect is an artifact of something particular about one or both of those districts. While certain unknowns do remain, juries, trial complexity, and the district of choice all have significant effects on the overall length of a trial.

VI. CONCLUSION

Short trials don't benefit patentees, as the conventional wisdom suggests. In fact, trial length seems to have no effect on outcomes at all. There are some predictors of success—juries rule for patentees more than judges, and juries in some districts appear to be more likely to find for patentees than are others. But the inter-district results are much more modest than most people suspect. We think this is an encouraging sign; some of the anxiety around the Eastern District of Texas and District of Delaware juries seems unwarranted.

In the absence of any evidence that trial length affects outcomes, predictors of trial length may be significant for policy purposes. If the length of a trial doesn't skew outcomes, one might reasonably argue that long trials are a waste of party and judicial resources. Far from a rush to judgment, a short patent trial may produce the same outcome more quickly and cheaply.

APPENDIX A:

REGRESSIONS WITH OUTCOME AS DEPENDENT VARIABLE FROM THE DATA SET USING
TWO OUTCOMES AND SPLITTING C/CD INTO BOTH C AND CD: C=1 CD=3³⁸

Jury trial = 1; bench trial = 0

Descriptive stats:

. summarize

<i>Variable</i>	<i>Obs</i>	<i>Mean</i>	<i>Std.Dev.</i>	<i>Min</i>	<i>Max</i>
Caseid	669	7.18E+07	2.91E+08	11	2.00E+09
districtec~r	0				
district_c	669	4.366218	2.002721	1	6
edtx	669	0.1210762	0.3264599	0	1
ddel	669	0.1898356	0.3924644	0	1
Cdcal	669	0.038864	0.1934153	0	1
Ndcal	669	0.0538117	0.2258145	0	1
Dmass	669	0.044843	0.2071141	0	1
Dothet	669	0.5515695	0.4977056	0	1
trial_len~h	669	7.977578	4.650778	1	44
trial_len~_	669	2.657698	1.105656	1	4
jury_trial	669	0.7488789	0.4339825	0	1
patents~l	669	1.982063	1.615691	1	14
patents~_	669	2.168909	1.297114	1	4
patents_1	669	0.4663677	0.4992409	0	1
plaintif~	669	1.313901	0.6856972	1	8
defenda~l	669	1.606876	1.077539	1	11
defenda~_	669	1.859492	1.186748	1	4
defenda~1	669	0.3587444	0.4799909	0	1
prevailing~	669	1.747384	0.9682906	1	3
additional~	669	0.0523169	0.2228319	0	1

³⁸ We ran separate regressions treating split decisions as a half-decision for each party, as a full decision for each party, and excluding split decisions entirely. The results were not meaningfully different. We have chosen to report here the regression that treats split decisions as both patentee and accused infringer wins; the number of observations is larger than 624 in this regression because each split decision was processed twice.

. regress prevailing_party_in_trial trial_length

Source	SS	Df	MS
Model	0.0674188	1	0.067418808
Residual	626.2405	667	0.93889131
Total	626.30792	668	0.93758671

Number of obs	669
F(1, 667)	0.07
Prob > F	0.7888
R-squared	0.0001
Adj R-squared	-0.0014
Root MSE	0.96896

prevailing~	Coef.	Std.Err.	t	P> t	[95% Conf. Interval]
trial_len~h	0.0021601	0.0080611	0.27	0.789	-0.0136681 0.0179883
_cons	1.730152	0.0744241	23.25	0	1.584018 1.876285

. regress prevailing_party_in_trial trial_length jury_trial

Source	SS	df	MS
Model	7.34523299	2	3.67261649
Residual	618.962689	666	0.929373407
Total	626.307922	668	0.93758671

Number of obs	669
F(2, 666)	3.95
Prob>F	0.0197
R-squared	0.0117
AdjR-squared	0.0088
RootMSE	0.96404

prevailing~	Coef.	Std.Err.	t	P> t	[95% Conf. Interval]
trial_len~h	0.0082529	0.0083104	0.99	0.321	-0.0080649 0.0245706
jury_trial	-0.249219	0.0890586	-2.8	0.005	-0.4240884 -0.0743496
_cons	1.868181	0.0889704	21	0	1.693485 2.042877

. regress prevailing_party_in_trial trial_length jury_trial __patents_in_trial

Source	SS	df	MS
Model	8.32555858	3	2.77518619
Residual	617.982364	665	0.929296788
Total	626.307922	668	0.93758671

Number of obs	669
F(3, 665)	2.99
Prob>F	0.0306
R-squared	0.0133
AdjR-squared	0.0088
RootMSE	0.964

prevailing~	Coef.	Std.Err.	T	P> t	[95% Conf. Interval]
trial_len~h	0.0058215	0.0086407	0.67	0.501	-0.0111448 0.0227878
jury_trial	-0.2404299	0.0894651	-2.69	0.007	-0.416098 -0.0647618
__patents~l	0.0246593	0.0240089	1.03	0.305	-0.0224831 0.0718018
_cons	1.832119	0.0956443	19.16	0	1.644318 2.01992

. regress prevailing_party_in_trial trial_length jury_trial __patents_in_trial edtx
ddelcdcal ndcal dmass dother __plaintiffs_in_trial __defendants_in_trial
additional_issues

Source	SS	df	MS
Model	14.5490892	11	1.32264447
Residual	611.758833	657	0.931139776
Total	626.307922	668	0.93758671

Number of obs	669
F(11, 657)	1.42
Prob>F	0.1588
R-squared	0.0232
AdjR-squared	0.0069
RootMSE	0.96496

<i>prevailing~</i>	<i>Coef.</i>	<i>Std.Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
trial_len~h	-0.0003208	0.0091685	-0.03	0.972	-0.0183239 0.0176823
jury_trial	-0.217106	0.0924617	-2.35	0.019	-0.398662 -0.03555
__patents~l	0.0274261	0.0244632	1.12	0.263	-0.0206095 0.0754617
edtx	-0.0589709	0.2191022	-0.27	0.788	-0.4891958 0.3712541
ddel	-0.0023012	0.2101053	-0.01	0.991	-0.41486 0.4102575
cdcal	(dropped)				
ndcal	0.3551943	0.2506972	1.42	0.157	-0.13707 0.8474587
dmass	0.2102005	0.2606164	0.81	0.42	-0.3015409 0.7219419
dothor	0.0032854	0.1966267	0.02	0.987	-0.3828072 0.3893779
__plaintif~	0.053418	0.0558458	0.96	0.339	-0.0562398 0.1630758
__defenda~l	-0.0084891	0.035005	-0.24	0.808	-0.0772242 0.060246
additional~	0.0479934	0.1691918	0.28	0.777	-0.2842286 0.3802153
_cons	1.776339	0.2252098	7.89	0	1.334121 2.218556

**_regress prevailing_party_in_trial jury_trial edtx ddel cdcal ndcal dmass dothor
__plaintiffs_in_trial additional_issues trial_length__quartile__patents__quartile_
__defendants__quartile_**

<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>
Model	14.8323317	11	1.34839379
Residual	611.475591	657	0.930708662
Total	626.307922	668	0.93758671

<i>Number of obs</i>	<i>669</i>
F(11, 657)	1.45
Prob>F	0.1466
R-squared	0.0237
AdjR-squared	0.0073
RootMSE	0.96473

<i>prevailing~</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
jury_trial	-0.2370499	0.0938834	-2.52	0.012	-0.4213977 -0.0527022
edtx	-0.0591904	0.2184353	-0.27	0.786	-0.4881059 0.369725
ddel	-0.0086152	0.2101201	-0.04	0.967	-0.4212032 0.4039727
cdcal	(dropped)				
ndcal	0.3351314	0.2509773	1.34	0.182	-0.157683 0.8279457
dmass	0.2123572	0.2603434	0.82	0.415	-0.2988482 0.7235626
dothor	0.0005423	0.1968305	0	0.998	-0.3859504 0.3870349
__plaintif~	0.0572742	0.0554537	1.03	0.302	-0.0516138 0.1661621
additional~	0.0491457	0.1696762	0.29	0.772	-0.2840273 0.3823188

REGRESSIONS OMITTING DISTRICT DUMMIES
BUT INCLUDING PATENT INTENSITY

```
. regress prevailing_party_in_trial trial_length jury_trial __patents_in_trial
__defendants_in_trial additional_issues patents_per_thousand_people
```

Source	SS	df	MS
Model	10.7812888	6	1.79688146
Residual	615.526633	662	0.92979854
Total	626.307922	668	0.93758671

Number of obs	669
F(6, 662)	1.93
Prob>F	0.0733
R-squared	0.0172
AdjR-squared	0.0083
RootMSE	0.96426

<i>prevailing~</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
trial_len~h	0.0028521	0.0089021	0.32	0.749	-0.0146276 0.0203318
jury_trial	-0.2278377	0.0902234	-2.53	0.012	-0.4049963 -0.0506791
__patents~l	0.0275462	0.0241051	1.14	0.254	-0.0197855 0.074878
__defenda~l	-0.0069157	0.0348787	-0.2	0.843	-0.0754019 0.0615704
additional~	0.0334596	0.168087	0.2	0.842	-0.2965883 0.3635074
patents_pe~	0.0557953	0.0347711	1.6	0.109	-0.0124796 0.1240702
_cons	1.754362	0.1230094	14.26	0.000	1.512826 1.995898

```
. regress prevailing_party_in_trial trial_length jury_trial __patents_in_trial
__plaintiffs_in_trial __defendants_in_trial additional_issues
patents_per_thousand_people
```

Source	SS	df	MS
Model	11.6887109	7	1.66981585
Residual	614.619211	661	0.929832392
Total	626.307922	668	0.93758671

<i>Number of obs</i>	669
F(7, 661)	1.8
Prob>F	0.0853
R-squared	0.0187
Adj R-squared	0.0083
RootMSE	0.96428

<i>prevailing~</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
trial_len~h	0.0020016	0.0089438	0.22	0.823	-0.01556 0.0195633
jury_trial	-0.2160602	0.0910093	-2.37	0.018	-0.3947625 -0.037358
__patents~l	0.0259666	0.0241586	1.07	0.283	-0.0214701 0.0734034
__plaintif~	0.0547899	0.0554623	0.99	0.324	-0.0541136 0.1636934
__defenda~l	-0.0088168	0.0349324	-0.25	0.801	-0.0774085 0.059775
additional~	0.0397401	0.1682102	0.24	0.813	-0.2905507 0.3700308
patents_pe~	0.0576487	0.0348223	1.66	0.098	-0.0107269 0.1260244
_cons	1.683018	0.1426448	11.8	0	1.402927 1.96311

. regress prevailing_party_in_trial jury_trial __plaintiffs_in_trial additional_issues
patents_per_thousand_people trial_length__quartile__patents__quartile__
__defendants__quartile__

<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>
Model	11.935029	7	1.70500415
Residual	614.372893	661	0.929459748
Total	626.307922	668	0.93758671

<i>Number of obs</i>	669
F(7, 661)	1.83
Prob>F	0.078
R-squared	0.0191
Adj R-squared	0.0087
Root MSE	0.96408

<i>prevailing~</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
jury_trial	-0.2317575	0.0924892	-2.51	0.012	-0.4133656 -0.0501495
__plaintif~	0.0592926	0.0550335	1.08	0.282	-0.0487689 0.167354
additional~	0.0410023	0.1688328	0.24	0.808	-0.290511 0.3725156
patents_pe~	0.055087	0.0347801	1.58	0.114	-0.0132058 0.1233797
trial_len~_	0.0168431	0.0378376	0.45	0.656	-0.0574533 0.0911395
__patents~_	0.0302969	0.0299484	1.01	0.312	-0.0285085 0.0891024
__defenda~_	0.0118745	0.0316896	0.37	0.708	-0.0503498 0.0740989
_cons	1.613896	0.1542296	10.46	0	1.311057 1.916735

APPENDIX B:

REGRESSIONS WITH TRIAL LENGTH AS DEPENDENT VARIABLE

```
. regress trial_length jury_trial __patents_in_trial __defendants_in_trial
```

Source	SS	df	MS
Model	2049.51076	3	683.170252
Residual	11563.4876	620	18.6507865
Total	13612.9984	623	21.8507197

Number of obs	624
F(3, 620)	36.63
Prob>F	0
R-squared	0.1506
AdjR-squared	0.1464
RootMSE	4.3187

<i>trial_len~h</i>	Coef.	Std.Err.	t	P> t	[95% Conf. Interval]
jury_trial	2.91791	0.398071	7.33	0	2.136179 3.699641
__patents~l	0.7974824	0.1130367	7.06	0	0.5755012 1.019464
__defenda~l	0.4136399	0.1586138	2.61	0.009	0.1021546 0.7251252
_cons	3.527112	0.4813596	7.33	0	2.581819 4.472404

```
. regress trial_length jury_trial __patents_in_trial __defendants_in_trial edtx ddel cdcal  
ndcal dmass dother additional_issues
```

Source	SS	df	MS
Model	3145.48955	9	349.498838
Residual	10467.5089	614	17.04806
Total	13612.9984	623	21.8507197

<i>Number of obs</i>	624
F(9,614)	20.5
Prob>F	0
R-squared	0.2311
AdjR-squared	0.2198
RootMSE	4.1289

<i>trial_len~h</i>	<i>Coef.</i>	<i>Std.Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
jury_trial	3.0421	0.3888019	7.82	0	2.278558 3.805643
__patents~l	0.8294364	0.1087359	7.63	0	0.615897 1.042976
__defenda~l	0.3818595	0.1520433	2.51	0.012	0.0832715 0.6804474
Edtx	-4.8225	0.9132535	-5.28	0	-6.615979 - 3.029021
ddel	-3.258465	0.877902	-3.71	0	-4.98252 -1.53441
cdcal	-2.840284	1.140161	-2.49	0.013	-5.079373 - 0.601195
ndcal	0.8272674	1.06259	0.78	0.437	-1.259484 2.914019
dmass	(dropped)				
dother	-2.029112	0.8143683	-2.49	0.013	-3.628398 - 0.4298274
additional~	0.5970442	0.7443868	0.8	0.423	-0.8648086 2.058897
_cons	5.774669	0.8967826	6.44	0	4.013536 7.535802

**. regress trial_length__quartile_jury_trial __patents_in_trial __defendants_in_trial edtx
ddel cdcal ndcal dmass dother additional_issues**

<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>
Model	159.729991	9	17.7477768
Residual	605.255586	614	0.985758283
Total	764.985577	623	1.22790622

<i>Number of obs</i>	624
F(9, 614)	18
Prob>F	0
R-squared	0.2088
Adj R-squared	0.1972
Root MSE	0.99285

<i>trial_len~_</i>	<i>Coef.</i>	<i>Std.Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
jury_trial	0.8974448	0.0934924	9.6	0	0.7138413 1.081048
__patents~l	0.1507489	0.0261469	5.77	0	0.0994007 0.2020972
__defenda~l	0.0866565	0.0365607	2.37	0.018	0.0148572 0.1584558
Edtx	-0.6660263	0.2196034	-3.03	0.003	-1.097291 -0.2347615
Ddel	-0.2339763	0.2111027	-1.11	0.268	-0.6485471 0.1805946
Cdcal	-0.4033284	0.2741663	-1.47	0.142	-0.9417457 0.135089
Ndcal	0.488929	0.2555133	1.91	0.056	-0.0128569 0.990715
Dmass	(dropped)				
Dother	-0.1099155	0.1958252	-0.56	0.575	-0.4944839 0.2746529
additional~	0.0850569	0.1789973	0.48	0.635	-0.2664643 0.436578
_cons	1.697758	0.2156428	7.87	0	1.274271 2.121245

REPEATS OF THE REGRESSIONS IN APPENDIX B,
BUT WITH "PATENTS PER THOUSAND PEOPLE" ADDED AS AN INDEPENDENT VARIABLE

. regress trial_length jury_trial __patents_in_trial __defendants_in_trial
patents_per_thousand_people

Source	SS	df	MS
Model	2624.3169	4	656.079226
Residual	10988.6815	619	17.7523126
Total	13612.9984	623	21.8507197

Number of obs	624
F(4, 619)	36.96
Prob>F	0
R-squared	0.1928
Adj R-squared	0.1876
Root MSE	4.2133

trial_len~h	Coef.	Std.Err.	t	P> t	[95% Conf. Interval]
jury_trial	3.00058	0.3886361	7.72	0	2.237375 3.763785
__patents~l	0.8047	0.1102877	7.3	0	0.5881167 1.021283
__defenda~l	0.4047019	0.1547541	2.62	0.009	0.1007952 0.7086085
patents_pe~	0.8746775	0.1537145	5.69	0	0.5728125 1.176543
_cons	1.976835	0.5429274	3.64	0	0.9106321 3.043038

. regress trial_length jury_trial __patents_in_trial __defendants_in_trial
patents_per_thousand_people edtx ddel cdc al ndcal dmass dother additional_issues

Source	SS	df	MS
Model	3158.57381	10	315.857381
Residual	10454.4246	613	17.0545262
Total	13612.9984	623	21.8507197

Number of obs	624
F(10, 613)	18.52

Prob>F	0
R-squared	0.232
Adj R-squared	0.2195
Root MSE	4.1297

<i>trial_len~h</i>	<i>Coef.</i>	<i>Std.Err.</i>	<i>t</i>	<i>P> t </i>	<i>[95% Conf. Interval]</i>
jury_trial	3.050881	0.3890048	7.84	0	2.286937 3.814824
__patents~l	0.8356528	0.1089879	7.67	0	0.6216179 1.049688
__defenda~l	0.3878576	0.1522262	2.55	0.011	0.0889094 0.6868057
patents_pe~	0.3121257	0.3563483	0.88	0.381	-0.3876858 1.011937
edtx	-1.803608	0.9747163	-1.85	0.065	-3.717796 0.1105801
ddel	-0.6617432	0.964104	-0.69	0.493	-2.555091 1.231604
cdcal	(dropped)				
ndcal	2.298423	1.910281	1.2	0.229	-1.453065 6.049912
dmass	2.475019	1.214234	2.04	0.042	0.0904562 4.859581
dothor	0.6969727	0.8671899	0.8	0.422	-1.006051 2.399996
additional~	0.5905773	0.7445646	0.79	0.428	-0.8716294 2.052784
_cons	2.54928	1.036234	2.46	0.014	0.5142819 4.584278

APPENDIX C:

<i>District</i>	<i>Total Population</i>	<i>Number of Patents in the 1990s</i>	<i>Number of Patents Cumulative (over all time)</i>	<i>1990s Patents per 10,000 population</i>
CAND Totals:	7388948.00	40832.00	72490.00	55.26
NYWD Totals:	2715695.00	11345.00	23907.00	41.78
IDD Totals:	1112950.00	3694.00	4718.00	33.19
VTD Totals:	359831.00	1092.00	1760.00	30.35
MIED Totals:	6218621.00	16900.00	38882.00	27.18
CTD Totals:	3405565.00	8726.00	23779.00	25.62
MND Totals:	4474754.00	11259.00	22304.00	25.16
NYND Totals:	3155204.00	7336.00	17849.00	23.25
MAD Totals:	6575368.25	15217.75	35488.25	23.14
TXND Totals:	7735042.00	17809.00	32090.00	23.02
COD Totals:	3918709.00	8935.00	17078.00	22.80
PAED Totals:	4350439.20	9325.50	24523.30	21.44
WIED Totals:	2918923.50	5788.00	14155.50	19.83
ILND Totals:	9760932.00	19179.00	53332.00	19.65
CASD Totals:	15318152.00	29717.00	70066.00	19.40
OKND Totals:	935437.00	1813.00	7385.00	19.38
DED Totals:	1705407.50	3277.00	8650.75	19.22
WAWD Totals:	4652017.75	8866.25	17152.25	19.06
OHSD Totals:	5024564.00	9121.25	21971.25	18.15
UTD Totals:	2117076.00	3823.00	7345.00	18.06
LAMD Totals:	699220.00	1183.00	2996.00	16.92
AZD Totals:	4935585.00	8120.00	15325.00	16.45
NYSD Totals:	6718833.00	11002.00	29435.00	16.37
TXSD Totals:	6828439.00	11163.00	26640.00	16.35
OHND Totals:	5431011.67	8798.33	26731.00	16.20
INSD Totals:	3172461.00	5139.00	13209.00	16.20
NJD Totals:	20677307.30	32816.50	91224.95	15.87
INND Totals:	1668179.00	2630.00	7046.00	15.77
ORD Totals:	3206105.25	5043.75	9580.75	15.73
WIWD Totals:	1445683.50	2263.00	4503.50	15.65

NHD Totals:	894665.00	1330.00	2594.00	14.87
NYED Totals:	18309939.00	27051.00	75258.00	14.77
DCD Totals:	1201401.25	1677.25	3850.00	13.96
MIWD Totals:	2862711.00	3900.00	10342.00	13.62
IASD Totals:	1639972.00	2148.00	4837.50	13.10
MDD Totals:	4313179.50	5516.00	12981.25	12.79
IAND Totals:	786645.00	998.00	2751.00	12.69
FLSD Totals:	5646636.00	6973.00	14213.00	12.35
ILCD Totals:	1859278.80	2295.30	6369.00	12.35
NCED Totals:	2750154.00	3316.00	5537.00	12.06
PAWD Totals:	4009223.33	4707.67	15129.00	11.74
NMD Totals:	1711849.00	1987.00	3945.00	11.61
CACD Totals:	4656014.00	5358.00	11136.00	11.51
TNED Totals:	2273632.00	2616.00	6129.00	11.51
GAND Totals:	4842046.00	5424.00	9766.00	11.20
VAED Totals:	5070771.50	5569.50	12843.00	10.98
KYWD Totals:	2310813.50	2534.25	6243.75	10.97
PAMD Totals:	2785507.00	2987.00	7770.00	10.72
RID Totals:	1187247.75	1271.25	2631.75	10.71
MOED Totals:	3117968.70	3186.70	7411.00	10.22
NCMD Totals:	3586107.00	3635.50	7012.00	10.14
OKWD Totals:	1579783.00	1574.00	4429.00	9.96
VAWD Totals:	1450069.00	1403.00	3423.50	9.68
WAED Totals:	1093508.00	1032.00	2424.00	9.44
NCWD Totals:	1858759.00	1742.50	3870.00	9.37
FLND Totals:	1288730.00	1111.00	2422.00	8.62
MTD Totals:	578166.00	465.00	856.00	8.04
SCD Totals:	3415545.00	2723.00	6023.00	7.97
NED Totals:	1048670.50	815.00	1842.50	7.77
KYED Totals:	1014317.50	781.00	1763.00	7.70
TNWD Totals:	1518855.00	1151.00	2204.00	7.58
NVD Totals:	1917027.00	1395.00	2609.00	7.28
FLMD Totals:	8696343.00	6276.00	12817.00	7.22
KAD Totals:	2424276.50	1719.00	4408.00	7.09

WYD Totals:	331612.00	233.00	563.00	7.03
WVSD Totals:	777237.00	537.00	1739.00	6.91
ILSD Totals:	278508.00	190.00	351.00	6.82
ALND Totals:	2454089.00	1576.00	4235.00	6.42
MOWD Totals:	2169280.50	1388.00	3397.00	6.40
MSND Totals:	555587.00	346.00	700.00	6.23
NDD Totals:	351678.00	216.00	519.00	6.14
CAED Totals:	6268054.00	3846.00	8072.00	6.14
TXED Totals:	1561689.00	888.00	2267.00	5.69
LAED Totals:	1684629.00	929.00	2639.00	5.51
AKD Totals:	461020.00	250.00	442.00	5.42
TXWD Totals:	3386373.00	1821.00	3835.00	5.38
TNMD Totals:	1823310.00	912.00	1810.00	5.00
SDD Totals:	513647.00	255.00	622.00	4.96
ALSD Totals:	588816.00	290.00	568.00	4.93
MED Totals:	894980.00	416.00	1028.00	4.65
LAWD Totals:	1755831.00	814.00	2094.00	4.64
WVND Totals:	534023.25	246.75	654.75	4.62
ARWD Totals:	911997.00	408.50	820.50	4.48
MSSD Totals:	1477904.00	591.00	1236.00	4.00
GAMD Totals:	1399105.00	554.00	1244.00	3.96
ALMD Totals:	858602.00	339.00	675.00	3.95
GASD Totals:	1264849.00	476.00	949.00	3.76
ARED Totals:	1194892.00	442.50	998.50	3.70
OKED Totals:	281739.00	99.00	281.00	3.51
HID Totals:	1211390.00	419.00	882.00	3.46