



Civil Justice Initiative: **Criteria for Automating Pathway Triage in Civil Case Processing**

In July 2016, the Conference of Chief Justices and the Conference of State Court Administrators endorsed the [report and recommendations of the CCJ Civil Justice Improvements Committee \(CJI Committee\)](#). The 13 recommendations are intended to reduce cost and delay in civil litigation and improve customer service to litigants. The recommendations envision a civil justice system in which courts align the rules, procedures, and court resources, including judicial case management practices, with the needs and characteristics of similarly situated cases. The CJI Committee specifically advocated the use of technology to “right-size” case management at the time of filing and to monitor case progression throughout its lifetime to adjust the amount of resources allocated for case management as needed.

The dilemma for court policymakers is reliably identifying the case characteristics that best predict the need for judicial involvement so that the case can be assigned to the appropriate pathway. To inform this discussion, the National Center for State Courts (NCSC) analyzed data on a sample of disposed civil cases extracted from the case management systems (CMS) of the Arizona superior and justice courts, the Missouri circuit courts, and the Palm Beach County (FL) circuit and county courts. The analysis focused on data elements that are routinely captured in state court CMS. This paper describes the data and methods employed for these analyses; descriptive statistics about case characteristics and events related to case complexity; and recommended criteria for implementing an automated triage process for civil cases that conforms to the pathway approach recommended by the CJI Committee.

The Pathway Approach to Civil Case Management

Recommendation 3 describes a three-tiered pathway assignment system designed to achieve “right-sized” case management. The Pathway Approach differs from traditional Differentiated Case Management (DCM) in several respects. It relies on a broader array of case characteristics than case type or amount-in-controversy as the basis for the pathway assignment. It envisions that initial pathway assignment takes place at filing, rather than at a case management conference after the case is fully joined. It is also flexible, allowing cases to be reassigned to a new pathway as the case unfolds and issues arise or resolve.

Recommendation 3: Courts should use a mandatory pathway-assignment system to achieve right-sized case management.

- 3.1: To best align court management practices and resources, courts should utilize a three-pathway approach: Streamlined, Complex, and General.**
- 3.2: To ensure that court practices and resources are aligned for all cases throughout the life of the case, courts must triage cases at the time of filing based on case characteristics and issues.**
- 3.3: Courts should make the pathway assignments mandatory upon filing.**
- 3.4: Courts must include flexibility in the pathway approach so that a case can be transferred to a more appropriate pathway if significant needs arise or circumstances change.**
- 3.5: Alternative dispute resolution mechanisms can be useful on any of the pathways provided that they facilitate the just, prompt, and inexpensive disposition of civil cases.**

Recommendations 4 through 6 propose assignment criteria and procedural rules for each of the three pathways. The Streamlined Pathway provides an expedited process for cases with a limited number of parties, routine legal and evidentiary issues, limited discovery and few anticipated pretrial motions. Based on the [Landscape of Civil Litigation in State Courts](#), the CJI Committee estimated that 85 percent or more of the civil caseload should be assigned to the Streamlined Pathway. The Complex Pathway is reserved for the small proportion of cases (3 percent or less) involving highly complex legal or factual issues, multiple parties or lawyers, and other characteristics that indicate the case would benefit from close judicial supervision. The remaining 12 percent or less of civil cases are assigned to the General Pathway, which provides right-sized case management with increased judicial involvement as needed to ensure that cases progress toward efficient resolution.

Conceptually, the pathway framework provides a logical and compelling vision for effective case management. Empirical research on civil case management has found that case type and amount-in-controversy alone are imprecise indicators of the amount of court resources, especially individual judicial attention, needed to resolve civil cases. Some of the most facially complex cases involving millions of dollars settle with little or no judicial involvement; others are closed or placed on inactive status with the filing of a bankruptcy stay or removal to federal court. Meanwhile, some cases that would be ordinarily assigned to the Streamlined Pathway can benefit from additional court involvement, especially cases that raise novel claims or defenses. Uncontested cases also tend to need little judicial involvement, but nevertheless should be monitored to

ensure steady, timely progress toward a resolution that conforms to basic norms of procedural fairness.¹

An important precondition of the pathway approach is an effective system of case management with specially trained court staff who are attentive to issues or problems when they arise in the litigation and can bring those to the attention to the trial judge. Upon being alerted to those issues, the judge may decide that the case needs more oversight than the current pathway assignment provides and can reassign the case to a higher pathway. Although the pathway assignments are mandatory, the pathway approach also permits the parties to request reassignment for good cause, especially if unique case-specific issues require more time to resolve than the timeframes associated with the assigned pathway permit.

Case Characteristics and Events in the Participating Courts

To conduct this analysis, the NCSC enlisted the aid of the judicial branches in Arizona, Missouri, and Palm Beach County, Florida in providing case-level data from their respective CMS. The NCSC sought participation by both single-tier and multiple-tier courts as well as a variety of urban and rural courts to be able to identify potential differences in triage criteria based on differing organization structure or caseloads.

The Missouri judicial branch is a single-tier court that operates a statewide CMS for its 46 judicial circuit courts located in each county and in the City of St. Louis. Upon filing, civil cases are calendared in either the associate division (small claims and civil cases involving damages up to \$25,000) or the circuit division (cases involving damages more than \$25,000). The final dataset consisted of 204,513 civil cases disposed between July 1, 2015 and June 30, 2016.

The Arizona judicial branch consists of a general jurisdiction superior court and one or more limited jurisdiction justice of the peace courts (justice courts) in each of the state's 15 counties. The justice court has jurisdiction over civil cases involving damages up to \$10,000 including exclusive jurisdiction of small claims cases up to \$3,500. The superior court has concurrent jurisdiction with the justice court for cases involving damages between \$1,000 and \$10,000, and exclusive jurisdiction for cases involving damages greater than \$10,000. The superior and justice courts in Maricopa County and Pima County, the two largest counties in Arizona, operate the CMS for their respective courts. The Arizona Administrative Office of the Courts provides a statewide CMS for the superior courts and justice courts for the remaining 13 counties in the state. For this study, the NCSC obtained data for 263,549 civil cases filed statewide in the superior courts and in the justice courts in 12 counties.²

¹ Recommendation 12, CCJ CIVIL JUSTICE IMPROVEMENTS COMMITTEE, CALL TO ACTION: ACHIEVING CIVIL JUSTICE FOR ALL (2016)(*hereinafter* CALL TO ACTION).

² At the time that the NCSC conducted this study, the Arizona Administrative Office of the Courts was in the process of migrating from separate CMS for each of the justice courts to a statewide CMS. Due to questions about data quality in many of the justice courts as well as the logistical difficulty associated with extracting data from different CMS databases, the AOC provided data for 10 justice courts for civil cases disposed between 1/1/2013 and 12/31/2013. Maricopa and Pima County provided data for their respective justice courts.

The circuit and county courts for Palm Beach County, Florida also participated in the study. The county court has exclusive jurisdiction over civil cases up to \$15,000 including small claims up to \$5,000, and the circuit court has exclusive jurisdiction over civil cases more than \$15,000. The circuit and county courts employ a common CMS, but do not necessarily code data consistently across the two courts. The datasets consisted of 13,724 and 25,691 civil cases disposed between December 1, 2015 and November 30, 2016, for the circuit and county courts, respectively.

The NCSC requested two types of data elements in each dataset. The first set of data elements were those identified in the CJI recommendations as indicative of case complexity and increased need for judicial involvement. For example, civil cases appropriate for assignment to the Streamlined Pathway are those involving a limited number of parties, routine issues related to liability and damages, few anticipated pretrial motions, limited need for discovery, few witnesses, minimal documentary evidence, and an anticipated trial length of one to two days.³ In contrast, cases appropriate for the Complex Pathway are those involving complex legal issues, numerous parties or witnesses, a large volume of documentary evidence, and high interpersonal conflict.⁴ The General Pathway is reserved for cases that do not fit the criteria for either the Streamlined or Complex Pathways.⁵ The data elements requested by the NCSC related to case complexity included case type, the number and types (individual or organization) of plaintiffs and defendants, the amount in controversy, the representation status of the parties, whether the parties requested equitable or injunctive relief or demanded a jury trial, whether the defendant filed an answer or other responsive pleading including a cross-claim, counterclaim, or third-party claim, and the existence of related cases filed in each court.

An implicit assumption in the CJI Recommendations is a strong relationship between case complexity and the need for judicial involvement in case management. Although specially trained court staff can be authorized to monitor case progress and to carry out routine case management tasks, some tasks will require the unique legal expertise of an experienced trial judge. The pathway approach is designed to ensure that the trial judge is presented with those tasks in a timely manner and the judge can dedicate sufficient time to those tasks to ensure fair and effective decisions that move the case toward final resolution. The data elements requested by the NCSC related to judicial involvement included the number of pretrial conferences, adversarial or dispositive motions,⁶ and court hearings scheduled or that occurred while the case was pending with the court, and manner of disposition, especially summary judgment and bench or jury trial.

Not all participating courts were able to provide all requested data elements, but they did share a core set of data elements that could be used to assess complexity and to identify factors for civil

³ CALL TO ACTION, *supra* note 1, at Recommendation 4.

⁴ *Id.* at Recommendation 5.

⁵ *Id.* at Recommendation 6.

⁶ Adversarial and dispositive motions refer to filings that require a judicial decision before the case can move forward toward resolution (e.g., motions related to discovery disputes, default motion, summary judgment motion, motion to dismiss for failure to state a cause of action). These motions exclude filings involving primarily administrative matters (e.g., notice of substitution of counsel) that do not typically require judicial involvement.

case triage (see Table 1). All courts provided data on the number of plaintiffs and defendants and their respective representation status, whether an answer or other responsive pleading was filed including the existence of any counterclaims, cross claims or third-party claims, and the number of adversarial and disposition motions filed.⁷ The Missouri and Arizona courts were also able to provide data on the number of pretrial conferences and court hearings including trials.

⁷ The justice courts in Maricopa County were unable to differentiate between adversarial and disposition motions, but did provide data on the number of non-administrative motions.

Table 1: CMS Data Elements Provided by Participating Courts

Data Elements	Arizona						Florida		Missouri
	Arizona Superior Courts (13 counties)	Arizona Justice Courts (10 counties)	Maricopa County Superior Court	Maricopa County Justice Courts	Pima County Superior Court	Pima County Justice Courts	Palm Beach Circuit	Palm Beach County	Circuit Court
Case type	X	X	X	X	X	X	X	X	X
Number of plaintiffs	X	X	X	X	X	X	X	X	X
Number of defendants	X	X	X	X	X	X	X	X	X
Plaintiff(s) represented or pro se	X	X	X	X	X	X	X	X	X
Defendant(s) represented or pro se	X	X	X	X	X	X	X	X	X
Answer filed	X	X	X	X	X	X	X	X	X
Counter-claim, cross-claim, or 3rd-party claim filed	X	X	X	X	X	X	X	X	X
Jury demand	X	X	X	X	X		X	X	X
Number of adversarial motions	X	X	X		X	X	X	X	X
Number of dispositive motions	X	X	X	X*	X	X	X	X	X
Number of pretrial conferences	X	X	X	X	X	X		X	X
Number of in-court hearings set	X	X	X	X	X	X			X
Number of in-court hearings held	X	X	X	X	X	X			X
Disposed by Court Trial			X		X	X	X	X	X
Disposed by Jury Trial			X		X	X	X	X	X
Disposed by Summary Judgment			X		X	X			
Case commenced by complaint/petition	X	X	X						X
Claims for equitable or injunctive relief			X						X
Plaintiff type(s) (individual, organization, government)	X	X		X	X	X			
Defendant type(s) (individual, organization, government)	X	X		X	X	X			
Amount in controversy		X							
Existence of related cases (if known)			X						

* Maricopa County Justice Court provided the number of non-administrative motions filed, but could not differentiate between adversarial and dispositive motions.

Collectively, the case characteristics reflected in the CMS data are remarkably consistent with the [*Landscape of Civil Litigation in State Courts*](#), which informed the deliberations of the CJ Committee. There is some variation in the distribution of contract and “other civil” cases, largely due to differences in the specificity of codes for case type. Just under half (49%) of the cases are contract disputes and another third (33%) are classified as “other civil” cases. Small claims also comprise a smaller proportion of the civil caseload (7%) compared to the *Landscape*, but this is likely due to the lower monetary threshold for small claims for courts participating in this analysis.⁸ The proportion of tort cases was only 5 percent, and real property cases were the same at 1 percent. Representation status was also similar to the *Landscape* findings. Overall 84 percent of plaintiffs were represented by counsel, but only 6 percent of defendants were represented.

The data elements collected for this study reflect different degrees of judicial involvement that might be employed at different periods over the lifetime of a civil case. Bench and jury trials are considered the most time-consuming court events for judicial officers, but only a very small proportion of cases are disposed by trial. Instead, the daily calendars for most trial judges are focused on holding case management and pretrial conferences, and conducting hearings and issuing decisions on a variety of adversarial and dispositive motions. Moreover, the majority of bench trials that take place in state courts are relatively brief and uncomplicated hearings on debt collection, landlord/tenant, and small claims cases.

It is notable, however, how few cases involved multiple parties or other indicia of case complexity that might warrant increased judicial attention (Table 2). Three-quarters of the cases (74.7%) involved only two parties – a single plaintiff and a single defendant; 96% of the cases involved 2 parties per side or fewer. Defendants were more likely to file an answer or other responsive pleading in a general jurisdiction court (32%) than in a limited jurisdiction court (7%), but overall nearly nine out of every ten cases were uncontested.⁹ For cases in which an answer or other responsive pleading was filed, 81 percent had no pretrial conferences whatsoever while fewer than 2 percent had more than one pretrial conference. Litigants filed one or more adversarial or dispositive motions in less than one-quarter (22.9%) of contested cases, and more than half of contested cases (60%) disposed without any in-court hearings. The majority of cases with at least one in-court hearing were filed in limited jurisdiction courts, and those hearings were most often the events that fully disposed those cases.

⁸ The monetary limit on small claims cases was greater in five of the 10 *Landscape* courts (\$12,000 in Pennsylvania, \$10,000 in California, Illinois and Texas, and \$6,000 in Indiana) than in the courts participating in the present study (\$5,000 in Florida and Missouri, \$3,500 in Arizona).

⁹ Although structurally the Missouri Circuit Court is a single-tier court, it assigns cases alleging damages up to \$25,000 to its Associate Division and cases alleging damages more than \$25,000 to its Circuit Division, essentially creating internal general and limited jurisdiction courts for case management purposes. The NCSC took the organization structure of the Missouri circuit courts into account in its analyses.

Table 2: Factors Indicating Case Complexity or Conflict

	≤ 2 Parties		Answer	2 + Pretrial Conferences	Adversarial / Dispositive Motions	In-Court Hearings
	Plaintiff	Defendant				
Arizona Superior Courts (13)	96.7%	82.4%	18.8%	0.6%	13.5%	5.2%
Arizona County Justice Courts (10)	99.6%	98.2%	16.2%	0.5%	22.4%	10.6%
Maricopa County Superior Court	98.7%	86.9%	25.8%	2.6%	6.0%	18.2%
Maricopa County Justice Court	99.9%	98.6%	6.4%	0.8%	2.9%	38.1%
Pima County Superior Court	96.8%	81.4%	34.2%	0.3%	35.8%	41.1%
Pima County Justice Court	100.0%	100.0%	5.9%	0.9%	35.4%	42.1%
Palm Beach Circuit Court	98.0%	62.2%	61.7%	n/a	60.8%	n/a
Palm Beach County Court	99.8%	94.4%	26.4%	3.2%	35.9%	n/a
Missouri Circuit Courts	99.5%	95.2%	10.0%	0.2%	16.8%	25.6%

Automated Civil Case Triage

To predict the amount of judicial involvement needed to resolve a civil case, this study employed a variety of sophisticated statistical techniques to identify key case characteristics that are routinely documented in court CMS. Those data elements were then used to assign the case to an appropriate case management pathway. The analysis involved three distinct steps.

The first step was the development of a composite index measuring the amount of judicial involvement in each case as a rough proxy for the degree of case complexity and conflict. The data elements that were initially considered for inclusion in the index were the number of pretrial conferences, the number of adversarial and dispositive motions, the number of in-court hearings set, the number of in-court hearings held, and whether the case was disposed by summary judgment or by bench or jury trial. The variation within data elements differed substantially for each court. For example, the maximum number of dispositive motions filed in Palm Beach Circuit Court (62) was more than double the maximum number filed in Maricopa County (AZ) Superior Court (28). Since both are high-volume, general jurisdiction courts, this variation presumably reflects differences in local litigation practices rather than in the comparative complexity of civil cases filed in the respective courts.¹⁰ Consequently, it was desirable to standardize each data element so that the differences in variation across courts and across variables were less extreme.

Each of these data elements reflects a different aspect of judicial involvement in any given civil case, and the impact of that involvement on case resolution likely differs based on unique characteristics for each case. To capture a measure of judicial involvement across these dimensions, the NCSC employed [factor analysis](#) for data from each CMS to identify the most efficient number of unique components (factors) that explains at least 70 percent of the variation in those data elements. Table 3 displays the number and composition of unique components for each court in terms of the variables most strongly associated with each component. After orthogonal rotation of the retained factors, scoring coefficient associated with each component multiplied by the constituent values for the component produces a set of scores for each case. Summing the component scores produces the index of judicial involvement in case resolution (complexity index), a rough proxy for the degree of observed case complexity and conflict. The average value of the index is zero, due to standardization, but the range varies for each court. Two components were sufficient to explain the variation for the Palm Beach Circuit and County Courts, the Maricopa Superior and Justice Courts, and Pima Justice Court, however the dataset for the Arizona and Pima County Superior Courts required three unique components, and the Missouri and Arizona Justice Courts required four unique components.¹¹

¹⁰ The maximum number of dispositive motions in Graham County (AZ) Superior Court was two, but that difference may reflect variation between urban and rural courts rather than local litigation practices.

¹¹ As the number of unique courts increases within each CMS dataset, the number of components required to explain 70 percent of the variation also increases.

Table 3: Statistically Significant Data Elements in Complexity Index

	Component 1	Component 2	Component 3	Component 4
Arizona Superior Courts (13)	# of Pretrial Conferences # of Dispositive Motions # Hearings Set # of Hearings Held Court Trial Held	# of Dispositive Motions # of Adversarial Motions Jury Trial Held	Court Trial Held	n/a
Arizona Justice Courts (10)	# of Hearings Set # of Hearings Held	# of Adversarial Motions # of Dispositive Motions	Trial Held	# of Pretrial Conferences
Maricopa Superior Court	# of Pretrial Conferences # of Dispositive Motions # of Hearings Set # of Hearings Held	# of Adversarial Motions Jury Trial Held	Court Trial Held	n/a
Maricopa Justice Court	# of Hearings Set # of Hearings Held	# of Pretrial Conferences # of Motions	n/a	n/a
Pima Superior Court	# of Hearings Set # of Hearings Held # of Adversarial Motions # of Dispositive Motions # of Pretrial Conferences	Jury Trial Held Court Trial Held	Jury Trial Held Court Trial Held	n/a
Pima Justice Court	# of Pretrial Conferences # of Hearings Set # of Hearings Held	# of Adversarial Motions # of Dispositive Motions	Jury Trial Held Summary Judgment	n/a
Missouri Circuit Court	# of Hearings Set # of Hearings Held # of Adversarial Motions	# of Adversarial Motions # of Dispositive Motions Court Trial Held	# of Pretrial Conferences Jury Trial Held	Court Trial Held
Palm Beach Circuit Court	# of Adversarial Motions # of Dispositive Motions	Court Trial Held	Jury Trial Held	n/a
Palm Beach County Court	# of Adversarial Motions	# of Pretrial Conferences # of Dispositive Motions		

The second step involved defining the threshold values for the index for each pathway assignment and then modeling the pathway assignment based on the index values. This step was guided by the framework proposed by the CJI Recommendations – namely, that 85 percent or more of civil cases be assigned to the Streamlined Pathway, 3 percent or fewer to the Complex Pathway, and the remaining 12 percent or fewer to the General Pathway. In most states, jurisdiction over civil cases is distributed between two or more general and limited jurisdiction courts. Consequently, the NCSC also defined parameters for general and limited jurisdiction courts separately. Given that cases involving greater complexity, conflict, and need for judicial involvement are more likely to be filed in a general jurisdiction court, the breakdown for these courts was specified as 75 percent of cases in the Streamlined Pathway, 20 percent in the General Pathway, and 5 percent in the Complex Pathway. For limited jurisdiction courts, the breakdown was 94 percent of cases in the Streamlined Pathway, 5 percent in the General Pathway, and 1 percent in the Complex Pathway. All cases with the same index value as the centile for each pathway were included in the lower pathway. Table 4 displays the pathway breakdown for the complexity index using the overall framework for Missouri Circuit Court and the appropriate general or limited jurisdiction court framework for the Arizona and Florida courts.

Table 4: Pathway Distribution based on Complexity Index

	Pathway		
	Streamlined	General	Complex
Arizona Superior Courts (13)	84%	11%	5%
Arizona Justice Courts (10)	94%	5%	1%
Maricopa Superior Court	76%	20%	5%
Maricopa Justice Court	95%	4%	1%
Pima Superior Court	83%	12%	5%
Pima Justice Court	94%	5%	1%
Missouri Circuit Court	85%	12%	3%
Palm Beach Circuit Court	80%	15%	5%
Palm Beach County Court	96%	3%	1%

The final step involved identifying the data elements that best predicted the pathway assignment. Because the focus of this study was the correct classification of cases into pathways, rather than an explanation of the reasons for variation in case complexity, the NCSC employed ordered logistic regression (ordered logit model), a likelihood-based modeling method for explaining transitions between ordered outcomes, rather than a model that explained variation in the unpartitioned index.¹² In this study, the model estimates the probability that information about a specific data element predicts that a civil case should be elevated from the Streamlined Pathway to the General

¹² A primary reason for preferring a classification model across ordered categories to a model of variation in the complexity index is that the streamlined category covers most of the range of the index. Many factors may explain some of that variation, but rarely or never predict the difference between a Streamlined Pathway assignment and a higher pathway assignment.

or Complex pathway, or from the General to the Complex pathway. The data elements considered for inclusion in the model were the number of plaintiffs, the number of defendants, the representation status of the parties, whether an answer or responsive pleading was filed, whether any counterclaims, cross-claims, or third-party claims were filed. When information was available in the CMS for each court, the model also included discrete case types (e.g., debt collection, landlord/tenant, medical malpractice/other malpractice, product liability, etc.), the presence or absence of an organizational party, whether either party demanded a jury trial, whether either party requested injunctive or equitable relief, the existence of related cases, and the monetary threshold for filing in the circuit division in Missouri or in the general jurisdiction court in Arizona and Florida.

Not all data elements are available at filing, but instead are revealed as the case unfolds. For example, the complaint will typically identify the type of case (e.g., debt collection, automobile tort), the number of separately named plaintiffs and defendants, the types of plaintiffs and defendants (e.g., individual, organization, government), and the representation status of the plaintiff. At filing, however, it is unknown whether the defendant will file an answer or other responsive pleading, whether the defendant will be represented by an attorney, or whether the defendant will file a counterclaim, cross-claim or third-party claim. That information only becomes known at the time the defendant responds to the complaint.¹³ Due to the time lag for obtaining the information, the NCSC broke the automated triage decision into two phases.

In the first phase, the NCSC estimated the probability that the value of the complexity index would merit elevating a civil case from the Streamlined Pathway (the default pathway assignment) to the General or Complex Pathway based solely on information available at filing. The analysis took into account the case type, the number and types of plaintiffs and defendants, the representation status of the plaintiffs, whether the plaintiff demanded a jury trial, whether the plaintiff sought injunctive or equitable relief, and whether the case was filed in the general jurisdiction court (Arizona and Florida) or division (Missouri). The only factors that merited elevating a case to the General or Complex Pathway were (1) six or more parties on both sides of a case filed in the general jurisdiction court/division; (2) landlord/tenant cases filed in the general jurisdiction court/division¹⁴; and (3) medical malpractice cases. No other factors – case type, litigant type, plaintiff representation status, the nature of relief sought, and court jurisdiction – predicted case complexity with sufficient consistency to warrant assignment to a higher pathway.

¹³ Other information relevant to the pathway assignment decision may be revealed even later in the case. For example, a defendant who initially appeared as a self-represented litigant might later retain an attorney. Moreover, the parties may request a pathway reassignment due to unique legal or evidentiary issues that are not routinely captured in CMS. This study assumes that modifications in the pathway assignment that take place after the answer date will be directed by the trial judge or professional court staff.

¹⁴ Landlord/tenant cases filed in the general jurisdiction court/division would necessarily involve claims for damages exceeding the monetary threshold (\$10,000 in Arizona; \$15,000 in Florida; and \$25,000 in Missouri), suggesting that these are commercial landlord/tenant disputes and likely involve more complex contractual provisions than would ordinarily be found in residential lease agreements.

TRIAGE CRITERIA AT FILING:

STREAMLINED PATHWAY ASSIGNMENT IS THE DEFAULT ASSIGNMENT

GENERAL PATHWAY ASSIGNMENT

- All landlord/tenant cases filed in the general jurisdiction court;
- All cases filed in the general jurisdiction court or division that involve six or more plaintiffs AND six or more defendants;

COMPLEX PATHWAY ASSIGNMENT

- All medical malpractice cases.

Based on this initial triage, the NCSC plotted the distribution of civil cases by pathway against the distribution of cases based on the complexity index. The columns in Table 5 reflect the pathway assignment across all the participating courts based on the complexity index, which indicates that virtually all of the cases (99%) should be assigned to the Streamlined Pathway. Only landlord/tenant cases (3,646), cases with multiple parties on both sides (1,410) and medical malpractice cases (562) were elevated to a higher pathway. The shaded areas in Table 5 show that 89 percent of the cases were assigned to the correct pathway based on the initial triage, the vast majority of which were assigned to the Streamlined Pathway. Eleven percent were under-assigned – that is, the cases should have been assigned to a higher pathway, but were not (located above and to the right of the correctly assigned cases) – and less than 1 percent were over-assigned – that is, the cases were mistakenly assigned to a higher pathway (located below and to the left of the correctly assigned cases).

Table 5: Initial Pathway Assignment v. Assignment based on Complexity Index

		Complexity Index Assignment							
		Streamlined		General		Complex		Total	
Initial Triage Pathway Assignment	Streamlined	451,339	88%	45,163	9%	11,361	2%	507,863	99%
	General	2,013	<1%	1,766	<1%	277	<1%	4,056	1%
	Complex	237	<1%	143	<1%	182	<1%	562	0%
	Total	453,589	89%	47,072	9%	11,820	2%	512,481	

At this early stage in the litigation, incorrect pathway assignment is not a critical error, particularly if the court is following recommended case management practices. Cases that are under-assigned may be reassigned automatically after the time for filing an answer has elapsed, or manually upon motion by the parties or *sua sponte* by the court based on case-specific issues. For cases that are over-assigned at filing, the potential disadvantages are minimal. If the case is ultimately

uncontested, and thus requires little or no judicial involvement in its resolution, the incorrect pathway assignment does not disadvantage the plaintiff in any way nor does it create additional work for the court. If the case is contested, over-assignment in the General or Complex Pathway permits the parties to engage in somewhat more discovery over a somewhat longer period of time,¹⁵ which many litigants would prefer, but again does not create a greater burden on the court.

Some data elements related to complexity are not available at filing, but instead are revealed as the case unfolds. For example, it is unknown at filing whether the defendant will file an answer or responsive pleading, whether the defendant will be represented by an attorney, or whether the defendant will file a counterclaim, crossclaim, or third-party claim. That information only becomes known at the time the defendant responds to the complaint.¹⁶ A second triage, which takes place immediately after the answer or responsive pleading is due, is intended to reevaluate the pathway assignment based on updated information that becomes available at that time. Specifically, the new information includes whether the case will be contested; whether the defendant is represented by an attorney; whether the defendant has filed counterclaims, cross-claims, or third-party claims; and whether either party demands a jury trial.¹⁷

Some civil cases may ultimately be uncontested. For example, the parties may have settled the case before the answer was due. Some cases are removed to federal court or transferred to a different jurisdiction. Other cases may be stayed pending the conclusion of bankruptcy proceedings. And some cases are disposed by default judgment or summary judgment because the defendant chose not to respond to the complaint. For the purpose of pathway assignment, however, uncontested cases are inherently uncomplicated and should be assigned to the Streamlined Pathway regardless of the presence of multiple parties or claims for medical malpractice.

In contested cases, the NCSC found that much of the new information that becomes available when an answer or responsive pleading is filed is highly intercorrelated as well as correlated with case complexity. For example, the defendant is significantly more likely to be represented by an attorney in contested cases and, compared to self-represented defendants, attorneys are significantly more likely to file counterclaims, crossclaims or third-party claims. The presence of

¹⁵ The CJI Recommendations urge courts to place greater restrictions on scope of discovery and the timeframe for resolving cases for all three pathways than is currently the status quo in most courts.

¹⁶ Other information relevant to the pathway assignment decision may be revealed even later in the case. For example, a defendant who initially appeared as a self-represented litigant might later retain an attorney. Moreover, the parties may request a pathway reassignment due to unique legal or evidentiary issues that are not routinely captured in CMS. This study assumes that modifications to the pathway assignment that take place after the answer date will be directed by the trial judge or professional court staff.

¹⁷ With the exception of the Pima County justice courts, all of the participating courts provided a data element in the CMS dataset indicating that a jury demand had been entered, but did not indicate which party had filed it. Although the initial complaint would normally indicate whether the plaintiff demanded a jury trial, the inability to differentiate between a plaintiff and a defendant jury demand made it necessary to include this data element in the second triage phase.

a represented defendant is also highly correlated with the filing of adversarial and dispositive motions, and with trials, presumably because self-represented litigants typically lack sufficient familiarity with the legal system to take advantage of those types of procedural options. But the presence of a represented defendant was a consistently accurate predictor of case complexity in the following circumstances:

- Debt collection and other tort cases filed in the limited jurisdiction court/division; and
- Cases filed in the general jurisdiction court/division in which either party demanded a jury trial in debt collection, other contract, intentional tort, other malpractice, product liability, other tort, and real property claims.

TRIAGE CRITERIA AFTER ANSWER/RESPONSIVE PLEADING DATE

STREAMLINED PATHWAY ASSIGNMENT

- All uncontested cases;

GENERAL PATHWAY ASSIGNMENT

- Contested debt collection cases with a represented defendant filed in the limited jurisdiction court/division;
- Contested other tort cases with a represented defendant filed in the limited jurisdiction court/division;
- Cases filed in the general jurisdiction court/division in which either party demanded a jury trial in debt collection, other contract, intentional tort, other malpractice, product liability, other tort, or real property claims;

COMPLEX PATHWAY ASSIGNMENT

Very few medical malpractice, commercial landlord/tenant, or multiparty cases are uncontested. By the same token, very few contested debt collection or intentional tort cases filed in the limited jurisdiction court/division involve a represented defendant, and very few parties filing cases in the general jurisdiction court/division feel strongly enough about having their day in court to demand a jury trial. The second triage almost doubles the number of cases assigned to the General and Complex Pathways, but proportionately has only a negligible impact on the overall accuracy of the pathway assignment (see Table 6). Again, most of the erroneous assignments were cases of medium complexity that are left on the Streamlined Pathway.

Table 6: Final Pathway Assignment v. Assignment based on Complexity Index

		Complexity Index Assignment							
		Streamlined		General		Complex		Total	
Final Triage Pathway Assignment	Streamlined	449,806	88%	43,978	9%	10,242	2%	504,026	98%
	General	3,546	1%	2,951	1%	1,396	<1%	7,893	2%
	Complex	237	<1%	143	<1%	182	<1%	562	<1%
	Total	453,589	89%	47,072	9%	11,820	2%	512,481	

Upon closer examination, the model works quite well for cases filed in the limited jurisdiction court/division, most of which are uncontested debt collection, landlord/tenant, and small claims, which remain in the Streamlined Pathway (see Table 8a). However, the model assigns only a small handful of cases to the General Pathway and no cases to the Complex Pathway, although the complexity index suggests that 7 percent and 1 percent of cases, respectively, should be assigned to those pathways. The failure to identify and elevate those cases is likely due to lack of specificity in case type codes in many of the limited jurisdiction courts. For example, the Arizona justice courts comprise more than half of the limited jurisdiction court cases in this study, but only code cases as landlord/tenant, small claims or “other civil” as the case type. The accuracy of the triage model depends on the ability to identify contested debt collection cases with a represented defendant.

Table 8a: Final Pathway Assignment (Limited Jurisdiction Court/Division)

		Complexity Index Assignment							
		Streamlined		General		Complex		Total*	
Final Triage Pathway Assignment	Streamlined	370,985	92%	26,046	6%	4,541	1%	401,572	100%
	General	83	<1%	75	<1%	34	<1%	192	<1%
	Complex	-	0%	-	0%	-	0%	-	0%
	Total*	371,068	92%	26,121	7%	4,575	1%	401,764	

* Values may not equal 100% due to rounding

Table 8b: Final Pathway Assignment (General Jurisdiction Court/Division)

		Complexity Index Assignment							
		Streamlined		General		Complex		Total*	
Final Triage Pathway Assignment	Streamlined	78,821	71%	17,932	16%	5,701	5%	102,454	93%
	General	3,463	3%	2,876	3%	1,362	1%	7,701	7%
	Complex	237	<1%	143	<1%	182	<1%	562	1%
	Total*	82,521	75%	20,951	19%	7,245	7%	110,717	

* Values may not equal 100% due to rounding

For the general jurisdiction court/division, shown in Table 8b, the model is somewhat less effective, correctly assigning 74 percent of cases. Some of the challenge in automating the triage process for cases filed in the general jurisdiction court/division is that the caseload consists of a much greater variety of cases with correspondingly greater probabilities of unique circumstances affecting complexity that are not routinely captured in CMS. These cases, especially those that were assigned to a lower pathway than indicated by the complexity index, will need to be adjusted

manually either upon motion by the parties¹⁸ or *sua sponte* by the court in response to issues that arise in the litigation (e.g., inability to complete litigation tasks within established timeframes, elevated levels of conflict). As under the initial triage model, assigning cases to a higher pathway than needed based on observed complexity permits the parties to engage in broader scope of discovery with longer timeframes than would otherwise be warranted, but those rules do not prevent the litigants from managing discovery more efficiently and more expeditiously than the rules permit, so they are unlikely to object to the erroneous pathway assignment.

A Simplified Triage Model

The NCSC experimented and tested a variety of combinations of data elements in the development of a triage model that would provide the most accurate pathway assignment. Differences in the availability and precision of CMS data resulted in slightly different accuracy ratings across the participating courts. One of the models tested was a simplified version of the final model described above. In the simplified model, the Streamlined Pathway is the default pathway assignment and the only cases elevated at filing are multiparty cases (6 or more per side) to the General Pathway and medical malpractice cases to the Complex Pathway. After the timeframe for the answer or responsive pleading has elapsed, uncontested cases are reassigned to the Streamlined Pathway and contested intentional tort cases with a represented defendant are reassigned to the Complex Pathway. Table 9 compares the proportion of cases assigned to the correct pathway for each model.

Table 9: Accuracy of Pathway Assignment for Participating Courts

	Triage at Filing		Triage at Answer	
	Final Model	Simplified Model	Final Model	Simplified Model
ALL COURTS	88%	89%	88%	89%
Arizona Superior	81%	84%	81%	84%
Arizona JP	94%	94%	94%	94%
Maricopa Superior	78%	76%	78%	76%
Maricopa JP	95%	95%	95%	95%
Pima Superior	81%	83%	78%	84%
Pima JP	95%	95%	95%	95%
Palm Beach Circuit	74%	75%	73%	75%
Palm Beach County	96%	96%	96%	96%
Missouri (ALL)	85%	85%	85%	85%
Missouri (Cir)	65%	66%	65%	66%
Missouri (Ass)	89%	89%	89%	89%

Overall, the simplified model correctly assigns cases to the correct pathway slightly more often than the final model, especially for cases filed in the general jurisdiction courts/divisions. The only

¹⁸ Although the case may not ultimately require the level of judicial involvement in case resolution that would warrant assignment to a higher pathway, the parties may need to seek discovery or need more time to fully assess the merits of the respective claims and defenses beyond the levels authorized in the rules for the assigned pathway.

exception was the Maricopa County superior court, for which the final model was more accurate than the simplified model. There was no appreciable difference in the accuracy of the models for cases filed in the limited jurisdiction courts/divisions.

It should be noted that the monetary threshold between the general and limited jurisdiction court/division is highly correlated with the accuracy of both the final and the simplified triage models. The monetary threshold level between the general and limited jurisdiction court/division on the accuracy of both the final model and the simplified model is especially significant. Arizona has the lowest threshold for filing in the superior courts (\$10,000) and the highest triage accuracy rates, ranging from 76 percent to 84 percent for the superior courts depending on the model and specific county. In contrast, the triage accuracy rate for Palm Beach County circuit court, which has a \$15,000 monetary threshold, was 73 to 75 percent, and for the Missouri circuit division (\$25,000 monetary threshold) was 65 to 66 percent.¹⁹ This trend provides further confirmation that cases involving greater claims for monetary damages are characterized by a greater variety of unique case factors that make pathway assignment more difficult to predict at the initial pleading stage of litigation.

The major difference in the impact of the two models is that final model elevates some cases based on case and litigant characteristics that ultimately did not need judicial involvement to resolve the case. As a practical matter, however, the fact that the case did not ultimately require substantial judicial involvement in the case resolution does not necessarily mean that the pathway assignment was incorrect. Most cases resolve with little or no judicial involvement, but some types of cases may require additional time or more expansive discovery before the parties can fully assess the merits of their respective claims and defenses to make an informed judgment about the most appropriate manner of disposition. The final model elevates cases to the General and Complex Pathways that would likely benefit from the additional time and permissible discovery available in those pathways. Indeed, many parties would be expected to file a motion for reassignment to a higher pathway for precisely that reason.

Geographic and Structural Considerations for Automated Triage

In addition to case-level factors, the NCSC examined the Arizona and Missouri datasets to identify differences in factors related to case complexity between urban and suburban/rural courts.²⁰ In many states, for example, more complex cases, especially complex contract disputes, will tend to gravitate to urban centers due to the concentration of commercial activity in those areas. The impact of some of these factors differed between the two states, but effects that were common across both states, and thus may be generalizable to other states, were the impact of a represented defendant; the impact of a counterclaim, cross claim, or third-party claim; and the impact of medical or other malpractice cases. In both states, the presence of these factors in rural courts predicted an increased complexity index, but the effects were even greater in urban courts.

¹⁹ The triage accuracy rate for cases filed in the Associate Division in Missouri was also significantly lower than rates in the limited jurisdiction courts in Arizona and Florida.

²⁰ For this study, the NCSC classified the counties based on [the U.S. Census Bureau classification](#) that 70 percent of the county population resides in an urban density area.

Depending on state and local caseloads, states considering implementing these triage criteria should consider adjusting the triage criteria to reflect this differential (e.g., by setting slightly higher complexity thresholds for assignment to the General and Complex Pathways in rural/suburban courts than in urban courts).

The NCSC had originally intended to examine the impact of the amount-in-controversy in the automated triage model and had requested this data element from the participating courts in the original data specifications. Unfortunately, that data element was only available in the dataset for the Arizona Justice Courts. Instead, the NCSC used the monetary threshold between the general jurisdiction and limited jurisdiction courts/divisions as a very rough proxy for amount in controversy (\$10,000 in Arizona, \$15,000 in Florida, and \$25,000 in Missouri). The impact of the presence of a represented defendant was not affected by the increase in that threshold from state to state, but across all states, the presence of a represented defendant had a larger impact in the general jurisdiction court/division than in the limited jurisdiction court/division. States implementing these triage criteria should likewise consider adjusting the criteria to reflect this differential (e.g., by setting slightly higher thresholds for assignment to the General and Complex Pathways in limited jurisdiction courts/divisions than in general jurisdiction courts/divisions).

Conclusions and Implementation Recommendations

This paper describes a preliminary attempt to use CMS data to automatically triage civil cases into an appropriate case management pathway as recommended by the CJI Committee. In addition to recommending the use of case processing pathways to calibrate case management with the needs of each case, the CJI Committee recommendations propose improvements in the administrative infrastructure supporting civil case management (Recommendation 7), improved oversight of uncontested cases (Recommendation 12), and greater attention to high-volume dockets (Recommendation 11). Automated civil triage improves the likelihood that cases requiring greater judicial oversight and involvement will be assigned to a case management pathway designed to provide sufficient judicial attention as issues or problems arise. The vast majority of civil cases, however, will be assigned to the Streamlined Pathway either because they are uncontested or because they are relatively uncomplicated matters that do not require extensive judicial involvement to reach a satisfactory resolution.

An important caveat about the automated civil case triage model is its reliance on accurate and sufficiently granular CMS data with which to assign cases to the correct pathway. The results presented in this study describe the predictive impact of the data elements provided by the participating courts. The data elements requested were those that anecdotally are most often alleged to correlate with increased complexity or conflict. Most of the participating courts provided at least some of the requested data elements, but none was able to provide all of them, which likely limits the precision of the overall model.²¹

²¹ It is also worth observing that the data used to produce the complexity index itself also varied in completeness from court to court. Differences in the completeness and fidelity of these data can affect the revealed complexity of the cases to which other case variables determining tier assignment are fit.

At the very least, the court must be able to distinguish tort and real property cases from contract cases, ideally with the level of specificity described in [State Court Guide to Statistical Reporting](#). In addition to case types enumerated in the *Guide*, courts may identify certain case types as “presumptively complex” for the purpose of pathway assignment (e.g., antitrust, construction defect, environmental/toxic tort, trade regulation, mass torts, securities, class action cases, and insurance coverage cases related to those case types).²² Other data elements such as requests for injunctive or equitable relief should also be captured in CMS. As data quality improves, the NCSC expects that more accurate triage models can be developed.²³

The triage model describes the criteria for pathway assignment, but its incorporation into the CMS should include not only the pathway, but also the timeframes for key case events based on the rules associated with each pathway (e.g., deadlines for filing the answer/responsive pleading, completion of fact discovery, completion of expert discovery, completion of ADR procedures, filing dispositive motions, and a firm trial date). Doing so will facilitate the ability of court staff to monitor case progress and intervene as necessary to keep the case on track. The [Automated Civil Case Triage and Caseflow Management Requirements](#) provide detailed descriptions of case management tasks that should be automated to support effective civil case processing. These include embedding business rules to monitor the continued appropriateness of the pathway assignment by flagging key indicators of complexity (e.g., discovery disputes, dispositive motions, failure to comply with rules concerning timeliness) that would trigger staff review and judicial involvement as needed to keep the case moving toward resolution.

²² See, e.g., CAL. RULES OF COURT Rule 3.400(c).

²³ The NCSC expects to undertake further exploration of automated triage using natural language processing software and machine-learning techniques to identify and extract relevant data elements directly from documents filed in the case that are not necessarily captured in CMS.

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For more information about the CJI Implementation Plan, visit www.ncsc.org/civil.



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