

Date:	September 14, 2018
То:	Steven Lang, EOIR
Subject:	LOP Case Time Analysis for Performance Indicators
From:	Nina Siulc, Vera

Attached please find final results of an analysis that Vera has conducted to comply with BPA instructions that we report on the relationship between LOP and case time. Please note that this analysis is designed to measure only whether and to what extent LOP has an impact on the time a case stays on the immigration court docket before reaching completion. With additional data, Vera would be able to undertake analyses addressing the relationship, if any, between case time and detention time for immigration court respondents, and to undertake additional tests assessing the broader range of ways in which LOP may have an impact on court efficiencies.

Recognizing that a large portion of immigration court cases do not complete for lengthy periods of time, as evidenced by the current backlog of approximately 750,000 cases, Vera employed survival analysis, a statistical method for measuring the duration of time to an event, in this case, the completion of an immigration court case. Importantly, unlike the approach used in EOIR's recent Phase I "LOP Cohort Analysis," survival analysis allows for consideration of pending cases alongside completed cases, a necessary step to limit the extent that case times are underreported and to assess true differences in case completion rates. Vera's analyses found the following, as described in the report:

- LOP participants receive fewer orders of removal *in absentia* than non-LOP groups.
- Even with these higher rates of continued appearance, after about the first month of the life of a case, a greater percentage of LOP cases will have completed than similarly situated non-LOP cases by any given day. This continues to hold true at 60, 90, 180, 365, and up to 1,825 days (the maximum period of observation) for the cohorts Vera examined.
- Half of the cohort of LOP cases reach completion by 140 days, compared to 421 days for the non-LOP group. In other words, it takes three times as long for the non-LOP cohort to reach 50 percent completion than the LOP cohort.
- These differences are statistically significant with 99 percent confidence. That is to say, the statistical models used demonstrate 99 percent certainty that faster LOP case times are not the product of chance.
- These findings hold true across a range of analytical models and a variety of different approaches to data organization. For example, whether the model sets the case start as the receipt date or first hearing date, LOP cases complete faster than similarly situated cases.

As you will see in reading the results, there are stark differences between the Vera results and the EOIR Phase I "LOP Cohort Analysis." These are likely due to at least two factors. First, EOIR's analysis failed to consider pending cases in assessing a potential relationship between LOP and case time, thus grossly distorting any possible LOP effect by ignoring the time pending cases have been open to date. Second, EOIR's analysis compared cases solely on whether they involved LOP or not without considering the many other factors beyond LOP that may influence how a case behaves, including, as just two examples, where the case begins and what immigration charges are involved. Cases in the two groups must be compared to similarly situated cases to obtain statistically valid results.

We look forward to discussing these results further with you, and to your review of both this report and the accompanying technical appendix that describes the results of the analysis in greater detail.

September 14, 2018

# LOP Case Time Analysis, Fiscal Years 2013-2017

Vera Institute of Justice

# **Executive Summary**

In order to examine the role of Legal Orientation Program (LOP) participation on immigration court case processing time, Vera used a statistical method known as survival analysis to conduct a series of analyses, the findings of which are presented in this report. Specifically, Vera found:

- LOP participants receive fewer orders of removal *in absentia* than non-LOP groups.
- Even with these higher rates of continued appearance, after about the first month of the life of a case, a greater percentage of LOP cases will have completed than similarly situated non-LOP cases by any given day. This continues to hold true at 60, 90, 180, 365, and up to 1,825 days (the maximum period of observation) for the cohorts Vera examined.
- Half of the cohort of LOP cases reach completion by 140 days, compared to 421 days for the non-LOP group. In other words, it takes three times as long for the non-LOP cohort to reach 50 percent completion than the LOP cohort.
- These differences are statistically significant with 99 percent confidence. That is to say, the statistical models used demonstrate 99 percent certainty that faster LOP case times are not the product of chance.
- These findings hold true across a range of analytical models and a variety of different approaches to data organization, demonstrating the robustness of the findings.

## Introduction

## Background

In issuing its 2017 Blanket Purchase Agreement to the Vera Institute of Justice (Vera) for work including administration of the Legal Orientation Program (LOP), the Executive Office for Immigration Review (EOIR) asked Vera to develop performance indicators to assess whether LOP operates as intended, and, in particular, if LOP plays a role in decreasing the average length of immigration court cases. As Vera has indicated to EOIR in a draft memo summarizing proposed performance indicators, the effect of LOP on case processing time cannot be easily converted into a simple performance indicator and cannot be accurately measured on an ongoing basis in real time given the long delay between case initiation and completion. Instead, Vera has undertaken as part of its background analysis on indicators a more extensive analysis of case time for cases initiated in fiscal years 2013 through 2017, the results of which are presented in this report. The outcomes of this analysis will enable Vera to more precisely advise EOIR on the effect of LOP on one of the primary measures of program impact—case time—and to recommend where EOIR should focus its attention in order to maximize the impact of LOP and monitor its performance in the future.

It is essential that any analysis of case time in the immigration court system include both completed cases and those that are still in process (pending cases). Immigration court cases often take several years to resolve and, as a result, any analysis that only includes completed cases will skew towards those with shorter times, dramatically under-estimating the true case duration. Moreover, differences in case time between LOP participants and other immigration court respondents may be the result of a confluence of factors beyond LOP (for example, case charges, hearing locations, custody status), complicating efforts to isolate the causal effects the program. This is compounded by the fact that the program was deliberately placed in the 38 facilities in which it operates, and thus, assignment of respondents into LOP is not random. At the same time, LOP misses some people detained at the facilities in which it operates, for reasons that may not be random in nature. This analysis applies multivariate statistical techniques to account for differences between LOP participants and other respondents in the immigration courts. These statistical methods, described in detail below, allow for the most accurate comparison of LOP and non-LOP cases in order to understand the relationship between LOP, other factors, and case time.

Vera conducted several tests using two different statistical techniques that are part of a methodological approach known as "survival analysis." Survival analysis is used when the outcome of interest is the duration of time until an event, such as the completion of an immigration court case. It

calculates rates of case completion using both completed and pending cases, a necessary step to accurately assess differences in time to case completion.<sup>1</sup> By including the duration that pending cases have remained on court dockets thus far, survival analysis provides a more precise and complete way of comparing time to an event for two or more groups (i.e., the time it takes for LOP cases to complete in court relative to comparable non-LOP cases). An additional strength of this approach is its ability to account for the range of factors that may influence case completion time, many of which are unrelated to LOP. This includes factors that remain fixed throughout a case (such as the respondent's nationality), as well as circumstances that may change during the course of a case (such as LOP participation) including the precise time at which those changes occur. The statistical techniques used for this analysis allow for a comparison of cases that are truly comparable: those that share similar characteristics across a number of variables that may influence case time. Vera employed two approaches: first, a type of regression analysis known as a Cox proportional hazards model, and second, a Cumulative Incidence Function (CIF) comparison based on propensity score matching, described in more detail later in this report. Using two different approaches to answer the same question-both under the umbrella of survival analysis-allows us to see if the same outcomes hold across different versions of analysis while surfacing any bias that may be created by the different strengths and limitations of each approach. In other words, comparing the results of different approaches with varying strengths and weaknesses improves certainty about the findings.

This report describes the findings from the survival analyses Vera conducted. These findings address the causal effect of LOP on the time taken for removal cases to reach initial completion. Later in this report we discuss the methods in greater depth, and in a separate technical appendix, describe the models and analyses in more detail, including results, significance levels, additional graphs demonstrating findings, and relevant bibliographic citations to peer-reviewed articles discussing the statistical approaches Vera employed.

As we discuss in later sections of this report, the precise differences in predicted case completion time between LOP and non-LOP groups vary depending on methodological decisions regarding the cases to include in the analysis, the case time metrics used, and the analytical methods applied. Nonetheless, in the statistical analyses that Vera ran, LOP cases had a higher cumulative probability (greater chance) of completing after about the first month. In other words, a greater percentage of LOP cases completed sooner than non-LOP cases. When Vera examined orders of removal *in absentia*, we also observed that

<sup>&</sup>lt;sup>1</sup> Pending cases present a statistical problem called "censoring," where the outcome of interest (i.e., case completion) has not yet been observed; in this circumstance, the ultimate case processing time is not yet known. Descriptive statistics (e.g., average case time) tend to either exclude pending cases entirely or use their current durations as a proxy. Though this may be a useful first step, both of these options result in underreported case time; if replicated at a later date for the same cohort, averages will increase as a greater number of pending cases conclude. Due to the high volume of pending immigration court cases (commonly referred to as the "backlog"), advanced statistical methods that include pending cases are crucial for avoiding biased results.

LOP cases have a lower cumulative probability (lesser chance) of receiving orders of removal *in absentia* than non-LOP cases. In other words, LOP cases move off the dockets more quickly than non-LOP cases, with higher rates of appearance in immigration court.

# Methodology

## Data Organization and Methods

As a contractor, Vera routinely receives data from EOIR's administrative database, Case Access System for EOIR (CASE). For the analyses described in this report, Vera used CASE data provided by EOIR on April 27, 2018, which included certain case-level variables for all respondents in the CASE database. Vera merged this data with information on LOP participants collected by Vera as part of the program's ongoing management.<sup>2</sup> Vera then constructed a dataset that included only those respondents with removal cases *and* a Notice-to-Appear (NTA) receipt date within Fiscal Years 2013-2017.<sup>3</sup> Vera's analyses described in this report include case activity for this time period, current through March 31, 2018, the cut-off date of the CASE data provided to Vera. This led to an initial sample of 479,024 respondents; of these, 149,064 had received LOP at some point during their case (31 percent). Some of the respondents in this sample were then dropped due to missing values for variables used to match similarly situated cases (such as NTA charges), resulting in a final sample of 476,422 respondents. Table 1 shows a breakdown of the matched sample by LOP participation and case status as of March 31, 2018.

	Pending	Completed	In Absentia	Total
Non-LOP	112,462 (33%)	191,488 (56%)	35,354 (10%)	339,304
LOP	40,608 (30%)	89,156 (65%)	7,354 (5%)	137,118
Total	153,070	280,644	42,708	476,422

#### Table 1: LOP Participation and Case Status (Matched Sample)

Of the LOP participants included in the sample, 31,098 (23 percent) received LOP services after their initial hearing. Vera conducted analyses that treated these participants in the same way as others who received LOP and, separately, analyses that excluded them (where explicitly noted). These two sets of

<sup>&</sup>lt;sup>2</sup> These A-numbers are contained in an LOP dataset submitted to EOIR on May 2, 2018 in a file titled "FY13 to FY17 LOP Participants in EOIR Data." This contains two data files organized by tabs. The A-numbers in Tab 2 were excluded from the sample, as they received LOP before FY2013 (prior to their NTA receipt dates) or after the end of FY2017 (after the period of analysis). A-numbers reported in Tab 1 of this file were identified as LOP participants in the sample used for these analyses.

<sup>&</sup>lt;sup>3</sup> To account for variation across cohorts over time, Vera included a variable indicating the fiscal year in which the NTA was received by EOIR. In constructing this dataset, Vera excluded the following: A-numbers with proceedings coded as never detained (persons who would not have access to LOP); A-numbers with more than one unique case ID (idncase); A-numbers with missing information for the initial hearing; cases where the completion date was prior to the NTA receipt date. Additionally, Vera controlled for all initial hearing locations that had at least 100 cases during FY13-17. A-numbers with hearings at hearing locations below this threshold (less than 100 cases) were not included in the final sample

analyses allowed Vera to determine any differences in effect based on the inclusion of the group that did not receive LOP until later in the court process.

### **Case Time**

For the purposes of case time analyses, Vera considers a "case" as the collection of all proceedings that occur between the time the respondent enters the system and receives an immigration judge's initial decision, whether that case has one hearing and one proceeding, or many hearings distributed across many proceedings.<sup>4</sup> For this analysis, Vera measured case time as the number of days<sup>5</sup> from the start date of the case to the initial case completion by an immigration judge, as defined below.

**Case start:** Vera used the initial hearing date (excluding bond hearings) to denote the start date of the case, since it is the earliest instance when case completion may occur. While LOP cannot affect the length of time between NTA receipt and the first scheduled hearing, Vera replicated certain analyses using NTA receipt date as the case start date to assess whether there were any differences in case completion trends when we used this earlier date. The results of this analysis are included below to facilitate comparison with recent analyses produced by EOIR that use NTA receipt date to define the case start.

**Case completion:** Case duration was measured as time from the initial hearing to the earliest date when case-level completion by an immigration judge occurred, including decisions that may not be permanent but that stop the case clock or move the case off the docket.<sup>6</sup> That is because LOP cannot reasonably be expected to have an impact on outcomes once a case is no longer on the active immigration court docket.<sup>7</sup> *Proceeding* completion codes such as changes of venue were not treated as *case* completions, since these cases still remain active on the court dockets.<sup>8</sup> If the case had a proceeding-only completion code as well as one of the case-level decision codes listed in the footnote below, the case end date would be determined by the case-level decision code.<sup>9</sup>

<sup>&</sup>lt;sup>4</sup> Vera only included in the analysis cases that had at least one hearing date on or before March 31, 2018. <sup>5</sup> Case processing time also could be assessed using alternative units that are proxies for time such as the number of hearings before completion or the duration of hearings, though valid research design must still account for the methodological challenges described in this report (such as including pending cases to avoid biasing the results, controlling for other relevant factors, and accounting for selection bias among others).

<sup>&</sup>lt;sup>6</sup> These decisions include: prosecutorial discretion—terminated, prosecutorial discretion—administrative closure, administrative closure, jurisdiction transferred to the BIA, "other" case completions (as coded in CASE), final grant of EOIR 42B/ SUSP, relief granted, terminated, voluntary departure, removal, removal in absentia, failure to prosecute, and temporary protected status.

<sup>&</sup>lt;sup>7</sup> After an immigration judge issues an initial decision, cases may move between active and inactive dockets because of an appeal to the Board of Immigration Appeals, an administrative closure, or other procedural reasons that remove a case from active dockets, even if months or years later it could be restored to the immigration court docket. <sup>8</sup> These decisions include: change of venues, "other" proceeding completions, and transfers.

<sup>&</sup>lt;sup>9</sup> For some cases, more than one immigration judge decision on the case may be present in the EOIR data, such as reopened cases or remanded cases. In this situation, Vera measured the case end date to be the earliest date of a substantive case disposition.

**Pending Cases:** In the event that a case had one or more hearings and no *case* completion codes, the case was counted as pending. The data cut-off date (March 31, 2018) was used as the end point for the duration a pending case was observed.

# Findings

This section of the report elaborates the findings summarized in the introduction of this report, describing the key analytical approaches Vera undertook to assess the relationship between LOP and case time.

## Descriptive Differences in the Portion of Completed Cases

Vera approached the analysis in an iterative fashion beginning with a description of cases from the study group (LOP and non-LOP) whose progress we followed through the data cut-off date (March 31, 2018), together with their last observed status. Table 2 below shows the overall portion of completed cases (compared to the portion still pending) as of March 31, 2018. For both LOP and non-LOP groups, the portion of pending cases is generally larger for more recent fiscal year cohorts, as less time has elapsed for cases to complete. Even five years after the first cases in the earliest cohort, initiated in court in FY2013, 14 percent of LOP cases and 17 percent of non-LOP cases have not yet reached a case completion, emphasizing the need for a methodological approach that incorporates pending cases. Table 2 also reveals a pattern consistent across fiscal year cohorts: the portion completed is larger for LOP compared to non-LOP. However, it would be misleading to reach any conclusions about the causal effect of LOP from these differences, even though a pattern is present. Moreover, the fact that these cases have completed does not indicate the *length of time* to completion. More sophisticated statistical analysis must be employed to account for factors other than LOP that may affect case completion trends.

		2013	2014	2015	2016	2017	Total
Non- LOP	Completed	83%	73%	64%	55%	52%	226,842
	Pending	17%	27%	36%	45%	48%	112,462
	Total	80,247	84,845	51,023	57,470	65,719	339,304
LOP	Completed	86%	78%	69%	59%	61%	96,510
	Pending	14%	22%	31%	41%	39%	40,608
	Total	28,434	25,577	24,575	28,776	29,756	137,118

#### Table 2: LOP Participation and Case Status by Fiscal Year of NTA Receipt

# Cox Regression Model: Assessing LOP's Role in the Probability of Case Completion

The actual rates of case completion displayed above do not represent the causal effect of LOP because participation is not randomly assigned. LOP participants may differ systematically from non-LOP participants on additional factors that exert their own influences on case completion time. To statistically account for the influence of these additional factors, Vera estimated a Cox proportional hazards model to assess the effect of LOP participation on case duration, defined in the analysis presented here using date of NTA receipt as the start date.<sup>10</sup> The model controlled for the respondent's nationality; respondent's language; whether the respondent had an attorney by the average LOP participation date<sup>11</sup>; whether the respondent was the lead individual on the case<sup>12</sup>; whether the case was coded by EOIR as a scheduling priority<sup>13</sup>; the NTA charge(s); the fiscal year of NTA receipt; and the initial hearing location. A strength of the Cox proportional hazards model is its ability to include "time-varying" information about variables, where a circumstance like LOP participation might change at some point during the same case. In this instance, the model accounts for not only *whether* respondents received LOP at any point during their case began.

The model included a sample of 476,714 unique respondents, 246,409 of whom had initial case completions during the period of observation. The results of a Cox model are presented as an "estimated hazard ratio," which tells us, in percentage terms, the relative probability that a pending case will complete on any given day including the initial hearing date. Accounting for other relevant factors that may simultaneously affect case time, including initial hearing location and the charges filed in the case, Vera found that LOP participation results in a 48.8 percent higher probability of LOP cases reaching completion on any given day than comparable non-LOP cases.<sup>14</sup> The 95 percent confidence interval for this estimate ranges from 47.3 percent - 50.4 percent, demonstrating that the LOP effect lies within a tight interval. The full model results and additional discussion appear in the technical appendix. Vera repeated

<sup>&</sup>lt;sup>10</sup> Vera presents receipt date as case start date here to allow comparison with other recent reports on case time <sup>11</sup> Because already-represented respondents within LOP facilities may opt out of attending LOP, we used this variable as a proxy for whether someone may have had representation before they would have attended LOP. We calculated the average day of LOP participation relative to NTA receipt date (33 days), and indicated whether the respondent had an attorney on or before that day using the date of E-28 filing. Note that we did <u>not</u> control for representation status later in the case because pro bono placements are one of the four service types of LOP, which affect likelihood to obtain representation.

<sup>&</sup>lt;sup>12</sup> Coded in three categories: lead on case with no derivatives; lead on case with derivatives; derivative on case.
<sup>13</sup> Scheduling priority codes are indicated within EOIR's database and include: adults with children, released on alternatives to detention; adults with children, detained; custody review; recent border crossers, detained; unaccompanied children; or N/A (none). The application of these codes may vary, as certain codes were introduced and phased out at different times and may not have applied for the entirety of the case. Nonetheless, they indicate that for at least part of the case, the respondent was considered a priority for scheduling hearings.
<sup>14</sup> The effect of LOP was statistically significant at the 0.01 level.

the proportional hazards model in several different ways, adding or adjusting the measurement of certain variables, which continued to affirm that LOP had a significant, positive effect on case time.

While these results are illustrative of a positive effect of LOP, one methodological challenge is that orders of removal *in absentia* truncate a respondent's case time due to failure to appear.<sup>15</sup> The model assumes that the *in absentia* process operates independently of the completion process, and that orders of removal *in absentia* could, like pending cases, eventually result in true completions if given enough time.<sup>16</sup> We acknowledge that orders of removal *in absentia* should be treated as a separate and possibly dependent case outcome that should not be treated like other case completions. Vera therefore opted to apply a different analytical approach to understand the impact of LOP on case completions and to determine if it would align with findings from the Cox model.

## **Cumulative Incidence Function**

Figure 1 displays the result of an analysis of both completed and pending cases to estimate and plot the running total percentage of cases that will have attained initial outcomes (including *in absentia*) over the time since their initial hearing, broken out by LOP versus non-LOP. This type of curve is a Cumulative Incidence Function (CIF). Any space between the two CIF curves, with their accompanying 99 percent confidence intervals, represents a statistically significant difference in rates of completion over time. Thus, in Figure 1 we see that more LOP cases (the dotted line on top) reach outcomes sooner than non-LOP cases (the solid line on bottom). However, a rigorous analysis would need to improve upon the CIF curves in Figure 1 in two key ways. The first is that the non-random LOP assignment, with accompanying differences in factors relevant to case completion times, needs to be accounted for. The second is that we would need to further break the CIFs out by the separate outcomes of initial case completion versus *in absentia* removal orders, as discussed above.

<sup>&</sup>lt;sup>15</sup> With a Cox model, *in absentia* orders must be treated as either a completion (the same as all other dispositions) or as censored (the same as all other pending cases). Vera treated *in absentia* orders as censored in this model, and the model operates by default under the assumption that the process for censoring, which now includes the process through which orders of removal *in absentia* occur, is independent of the process for case completion. <sup>16</sup> The drawbacks represented by these two assumptions are tempered by the fact that we use EOIR's custody status code to limit our sample to initially detained respondents (who cannot fail to appear while detained), the additional fact that fewer than 10 percent of cases end with orders of removal *in absentia* within five years, and as we show in later models, that *in absentia*, while slightly less likely among LOP participants, is relatively unaffected by LOP.



Figure 1: Percent Completed after Initial Hearing (All Cases, Unmatched)

## Cumulative Incidence Function Using Propensity Score Matching

An additional statistical approach Vera used is called propensity score matching (PSM). Vera used this technique to match LOP and non-LOP cases on a large number of factors in order to perform a comparison of case completion times between similarly situated LOP and non-LOP cases. The matching process accounts for systematic differences between LOP and non-LOP participants with respect to a number of factors that may influence case completion times.

The technique of propensity score matching first uses the respondent's characteristics at the beginning of the case to predict their likelihood, or propensity, to receive LOP. Specifically, Vera calculated scores using the following variables that are fixed at the beginning of the case: respondent nationality; respondent language; whether the respondent had an attorney by the average LOP participation date (33 days post-NTA receipt date); 41 of the most frequent charges; fiscal year of NTA receipt date; the hearing location at which the initial hearing was scheduled. Vera considered using

additional variables to calculate propensity scores (such a gender, years in the United States, or respondent age), but could not include them due to a large amount of missing data.

Once the propensity scores were calculated, we used them to create a matched set of non-LOP cases that have approximately the same distribution of propensity scores as LOP cases. By matching on propensity scores, we largely eliminate systematic differences between LOP and non-LOP cases with respect to all the factors that were used to estimate propensity scores.

After matching, Vera improved comparisons even further by looking at cases that end as a result of failures to appear (orders of removal *in absentia*) separately from other case completions. Figure 2 below shows the CIF curves for cases in the LOP and non-LOP groups with the propensity score matching and when *in absentia* is treated as a unique type of outcome.



#### Figure 2: Percent Completed after Initial Hearing (Matched Cases)

Figure 2 above shows that when we separate cases completed with orders of removal *in absentia* and look at those cases completed with an appearance in court for the two groups, the cumulative percentage of LOP cases that have completed is higher by day 55, with 99 percent confidence. This trend continues over the next five years (the maximum period of observation).

Another way to look at this difference is to consider the number of days it takes for 50 percent of each group to reach completion. When we separate out orders of removal *in absentia* (an outcome that is more likely for the non-LOP than LOP group), we see that 50 percent of the cohort of LOP cases reach completion at 148 days, compared to 448 days for 50 percent of the non-LOP group. In other words, it takes three times as long for the non-LOP cohort to reach 50 percent completion than the LOP cohort.

Looking carefully at the lines for LOP (dotted line) versus non-LOP cases (solid line) in Figure 2 above, we see that their survival curves cross very early in the court process. Specifically, LOP cases have a lower cumulative percentage completed than non-LOP cases from 0 to 42 days after initial hearing, with 99 percent confidence.

Vera hypothesized that what is represented in these crossing lines might be the result of a sizable portion of LOP cases (23 percent) receiving LOP after the initial hearing. LOP cannot affect case duration during the earlier parts of these cases, since these cases had not yet received the intervention at the start date used in this analysis (initial hearing).<sup>17</sup> To test this hypothesis, Vera re-ran the model displayed in Figure 2 above excluding any LOP cases in which the LOP occurred *after* the initial hearing. The results of this more refined analysis are displayed in Figure 3 below.

<sup>&</sup>lt;sup>17</sup> The inclusion of these cases in the LOP cohort allows a subset of cases that, by definition, had not completed their cases by the time of first hearing and therefore had a case duration greater than o days. The lack of completion in the time between the first hearing and LOP participation could not be associated with any potential efficacy of the LOP intervention, as the intervention had not yet occurred.

Figure 3: Percent Completed after Initial Hearing (Matched Cases; Excludes LOP Participants after Initial Hearing)



The analysis presented in Figure 3 replicates the analysis shown in Figure 2 with a single modification: Figure 3 includes in the LOP group only the 77 percent of LOP respondents who received services before the initial hearing. Vera believes the cleanest, most valid way to assess the true differences between the two groups is by removing from analysis the LOP cases that receive LOP after the first hearing as we have done here. Including these cases artificially increases the number of LOP cases that have had more than one hearing and thereby artificially lengthens case completion times for LOP cases.

The results displayed in Figure 3 above illustrates that when this group is removed, the time at which the LOP and non-LOP cases diverge is earlier in the process (15 days). By 28 days and onward, the cumulative percentage of LOP cases completed is greater than non-LOP, with 99 percent confidence. This is earlier than in the sample represented by Figure 2 (55 days and onward), and the LOP and non-LOP lines no longer cross.

Here we find that that 50 percent of the cohort of LOP cases reach completion at 140 days, compared to 421 days for 50 percent of the non-LOP group. In other words, just as the analysis in Figure 2 showed, it takes three times as long for the non-LOP cohort to reach 50 percent completion than the LOP cohort.

While Vera believes the model displayed in Figure 3 is the most valid, we display the Figure 2 model to demonstrate the difference in overall results when the LOP group is constructed in two different ways and to illustrate the iterative process that led us to the more accurate results shown in Figure 3.

#### **Percent Completed After NTA Receipt Date**

The last figure we have included in this report addresses a question about measurement of case time using NTA receipt date as the case initiation. EOIR has expressed an interest in whether LOP cases would perform differently than non-LOP cases if the case onset were measured from the NTA receipt date instead of the date of the first hearing, which is how Vera defines case start. As explained in the methodology section above, LOP cannot affect the amount of time elapsed from when EOIR receives a case from Immigration and Customs Enforcement (ICE) to when it schedules that case for the first immigration court hearing. In the CIF displayed in Figures 2 and 3 above, Vera measured time using the initial hearing as a start date. Figure 4 below shows the result of a replication of Figure 2, with a single difference: case time is measured using NTA receipt date as the start of the case, rather than initial hearing. Like Figure 2, it includes the LOP participants who received LOP after the initial hearing, and it uses CIF based on propensity score matching, the same approach displayed in Figures 2 and 3.

In Figure 4 below, the two CIFs are virtually identical for about the first month, as seen by the lines for LOP and non-LOP groups overlapping. The precise duration between the case receipt and initial hearing depends on factors such as input and docketing practices at local hearing locations. This is a time during which a disposition could not occur; thus, the length of this time period cannot be influenced by LOP. Figure 4 suggests that there may often be a non-trivial time interval between NTA receipt and the initial hearing. In Figure 4 as in the previous two figures, the LOP group will reach 50 percent completion far sooner than the non-LOP group, and after the first few months (equivalent to the results shown in Figure 2), the cumulative percentage of LOP cases completed is greater than non-LOP, with 99 percent confidence, and remains so through 1,825 days (the end of the analysis).



#### Figure 4: Percent Completed after NTA Receipt Date (Matched Cases)

To summarize the results presented in Figures 2 through 4: when using the Cumulative Incidence Function (CIF) based on propensity score matching, Vera's results were consistent with those of the proportional hazards model:

- LOP participants receive fewer orders of removal in absentia than non-LOP groups.
- Even with these higher rates of continued appearance, after about the first month of the life of a case a greater percentage of LOP cases will have completed than similarly situated non-LOP cases by any given day. This continues to hold true at 60, 90, 180, 365, and up to 1,825 days (the maximum period of observation) for the cohorts Vera examined.
- Half of the cohort of LOP cases reach completion by 140 days, compared to 421 days for the non-LOP group. In other words, it takes three times as long for the non-LOP cohort to reach 50 percent completion than the LOP cohort.

- These differences are statistically significant with 99 percent confidence. That is to say, the statistical models used demonstrate 99 percent certainty that faster LOP case times are not the product of chance.
- As discussed throughout this report, these findings hold true across a range of analytical models and a variety of different approaches to data organization, highlighting the robustness of the findings.

# Conclusion

There are many ways to define and measure the concept of efficiency in the immigration court context. At EOIR's request, Vera focused this analysis on the relationship between LOP and just one aspect of immigration court efficiency: case time. Specifically, Vera sought to evaluate empirically whether and to what extent participation in LOP causes any difference in case processing time. Our analysis answers this question with resoundingly clear results derived from two different types of analysis that are designed to account for the methodological challenges associated with measuring time-dependent outcomes among cohorts that include pending cases. The analysis demonstrates that over the life of a cohort, significantly higher percentages of LOP cases reach completion by any given day than comparable non-LOP cases once the cohorts move past about one month of time. The LOP cases reach the 50 percent completion point significantly faster than the non-LOP cases: in 140 versus 421 days. Two different survival analysis approaches yielded similar results, confirming that the reliability of the finding that LOP has a beneficial impact on case time.

Vera undertook this case time analysis in response to EOIR's interest in developing performance indicators. While the present study highlights the effect of LOP on case processing times, it does not reveal the specific mechanisms through which LOP yields case time efficiency for its participants. Additional research could expand on and contextualize these findings by exploring *how* LOP improves efficiency. For example, there may be certain pathways toward completion that LOP sets in motion, such as a greater likelihood to seek voluntary departure or decide to proceed *pro se* instead of pursuing continuances to seek counsel. Answering these questions would require different analytical approaches and more detailed data, including qualitative information from judges, legal service providers, and LOP clients.

Similarly, this study does not tell us whether there is a relationship between case time and detention time for immigration court respondents or the extent to which receipt of LOP is associated with changes in detention time. With access to the appropriate additional datasets, Vera could explore such potential relationships and their implications for questions related to court resources and cost.

Finally, it is important to note that case time efficiencies are just one benefit of LOP, and there are many other stated goals of the program that have not been measured here. These include, but are not limited to, other measures of efficiency as well as LOP's effect on due process and respondent understanding of the immigration court process.