TRANSLATING TALKS:

Federal Intervention and the Effect of Expanding Interpreter Provision in North Carolina Courts

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ABSTRACT

Following a 2012 Department of Justice investigation, North Carolina courts were compelled to significantly liberalize their language access policy. I take advantage of this policy shock to not only gauge whether this policy change actually affected the rate at which interpreters were provided, but also realize a novel analysis of the impact of interpreter provision on defendant-level outcomes that is better equipped to identify causal impact than the prior research. Employing a regression kink design and using a dataset collected specifically for this research, I demonstrate that in Mecklenburg county, the expanded language access policy led to interpreters being provided at a greater rate, an increase further spurred when the DoJ demonstrated continued monitoring capacity after the policy was finalized. I also present evidence of a potential connection between this policy and guilty pleas & verdicts among Hispanic defendants. Wake county, however, did not experience the same increase in interpreter provision, which exploratory analysis suggests is due in part to differential access to qualified interpreters between the two counties. I close with policy recommendations based on these findings.

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SECTION 1

INTRODUCTION

The United States has no official national language. But all the business of the justice system, both civil and criminal, state and federal, is conducted in English. English is the language of record; stenographers do not record or note non-English utterances in court on official transcripts (Santaniello, 2018). For the 9% of the U.S. population that is limited English-proficient (LEP), this can present a substantial barrier to even accessing the justice system, to say nothing of potential inequalities of outcome. The last fifty years have seen the emergence of a concerted effort of public policy to facilitate access to the justice system for LEP individuals and safeguard the civil and Constitutional rights predicated upon their meaningful comprehension of legal proceedings involving them. Typically these have been spearheaded at the federal level, with the 1978 Court Interpreters Act and the 1964 Civil Rights Act serving as the primary codes of reference. All fifty states agree that criminal defendants who cannot meaningfully comprehend English must be appointed qualified interpreters, regardless of their ability to pay – they must, to continue receiving federal funding. But from the beginning, language access policy has been plagued by issues of uneven implementation across the many jurisdictions in the United States. Scholars document budgetary constraints, lack of access to qualified interpreters, and out-and-out noncompliance leaving some jurisdictions lagging behind modern standards of language access (see Abel, 2013; Abel and Longobardi, 2012; Kirby et al., 2011). State resistance to federal standards of language access policy in particular has proven a major obstacle to equity, which provides the context for this investigation. I leverage a U.S. Department of Justice investigation into North Carolina courts, and the sudden subsequent liberalization of interpreter policy. In 2012, the DoJ issued an official notice of violation of Title VI of the Civil Rights Act[1] for dangerously

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1. Title VI of the Civil Rights Act guarantees equal access to all facilities and programs that are, in whole or in part, funded by the federal government, regardless of race, ethnicity, or national origin, in the United States.

inadequate language access policy, and threatened financial sanction vis-a-vis revocation of federal funding. In response, North Carolina unveiled a policy, finalized in 2017, that committed to providing interpreters, free of cost, to any party desiring one, and required a "presumption in favor of providing a court interpreter" even absent a specific request (North Carolina Administrative Office of the Courts, 2017). But complaints of unequal access and unfair – even punitive – behavior continued throughout the rollout of these new guidelines and well after the date by which they were apparently fully in place. Only in October of 2022 did the Justice Department officially resolve the investigation[2]. This thesis project is primarily concerned with addressing the question of whether expanding access to (qualified, professional) interpreters affects defendants' outcomes. It is secondarily concerned with the enforcement question: given the documented struggles of implementation, how effective is the federal government at enforcing language access policy in the states? The situation which arose in North Carolina around the federal-state struggle over language access policy provides a policy shift which can be exploited in answering my primary question on interpreter impact, and, to the extent it answers the second, provides information valuable in crafting public policy on interpreter use.

Prior literature on court interpretation would suggest that the presence of an interpreter has an effect on a defendant's outcomes, from pleas to bail to sentencing, when she goes to court. But defendants who do and do not use interpreters are different on a battery of unobservables, raising an issue from which the literature on this question has suffered. Assessing the impact of receiving an interpreter on a defendant's outcome is made difficult in conventional research designs because whether a defendant does or does not use an interpreter is a function of, and correlated with, a web of other plausible influences from which it cannot be reliably extracted: (perceived) ethnicity, education, citizenship status, et cetera. What's more, given that qualified interpreters tend to be underprovided (Berk-Seligson,

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2. The 2022 resolution was pending an October 2023 review, the results of which have not (yet) been made available to the public.

2017), some number of the group not using interpreters likely needs an interpreter but did not receive one, further confounding the comparison groups. This thesis project proposes a research design which leverages multiple key dates in the timeline of a policy change to not only review whether interpreter provision measurably increased as a result of this policy's implementation, but also present a more credible causal estimation of the effect of interpreters on defendant-level outcomes. I first demonstrate that in one North Carolina county, the date of the liberalized policy's implementation was associated with a 20% increase in the slope of the probability of receiving an interpreter, showing that the new policy increased the rate at which interpreters were provided to defendants. I further find that being post-policy-finalization was associated with an additional 28% increase – but only when including observations from after the Justice Department demonstrated they were continuing to monitor North Carolina courts for compliance. Following this increase in interpreter provision, there was a slight decrease in the slope of the probability of guilty pleas and guilty verdicts for Hispanic defendants in this county. Although this finding is not statistically significant by traditional metrics, the strongly null results from my two placebo tests - the non-Hispanic population in the county that saw an increase in interpreter provision, and the entire population in the county that did not - leads me to believe this result could nevertheless have important implications for the relationship between interpreter access and defendant-level outcomes.

The issue of language access in the criminal justice system is of no small importance. Confrontation is among the most fundamental of an accused's rights under the United States Constitution. More than a right, ensuring that a defendant understands the testimony against them, the allegations being made, and their own role in the proceedings are, in the words of one pivotal opinion, "a simple matter of humaneness" (United States ex. rel. Negron v. New York, 1970). The case of North Carolina leaves us with multiple worthwhile questions: Does increased access to interpreters improve outcomes for LEP parties? If state

courts under-provide interpreters, is the threat of federal sanction effective in increasing provision? Was the new policy written by North Carolina courts' administration even successful in improving interpreter access, and thereby access to justice, for LEP North Carolinians? The importance of these questions is obvious in light of the nearly 30 million LEP US residents whose rights to a fair trial must be preserved. But at present, the scholarship on court interpretation cannot answer these questions; it can, at best, make recommendations for what the policy should include. Not only has there been no academic study of this particular policy and its implications to date, there exist few academic investigations of interpreter use generally; and these typically contend with the aforementioned identification problem, making credible causal inference on the effect of interpreter provision incredibly difficult. Moreover, attempts to liberalize interpreter policy often coincide with other attempts to "level the playing field," so to speak. The case of North Carolina presents a unique opportunity: a series of interventions only into language access policy, not in concurrence with any other reforms to the court system, which then are ostensibly applied across the entire population and offer the opportunity to gauge whether these certain times at which reforms were instituted were associated with changes in the defendant-level outcomes we care about. Therefore, the analysis I undertake here, in which I apply a regression kink analysis to a dataset comprising approximately one hundred twenty thousand unique cases, is not only relevant to yet-unasked questions of access and equity but novel in its character.

I begin in section 2 by reviewing the current literature on court interpreters to contextualize the courtroom dynamics within which interpreters operate and theorize the relationship between interpreter provision and outcomes. In section 3, I provide historical background on interpreter policy in the United States, from the establishing of the right to an interpreter and the landmark federal legislation that set the playing field in the seventies, to the resistance this legislation met in subsequent decades, to the Department of Justice investigations into multiple states, which, through a combination of unusual severity and unexpected

resistance, bloomed into a ten-year intervention period in North Carolina. I then proceed to a description of my data and their collection process in section 4; in section 5, I explain my methodology, laying out my planned analyses; and in section 6, I review their results, demonstrating that after the policy intervention, a defendant's probability of receiving an interpreter began increasing at a faster rate. Associated with this increase, I review the evidence that interpreter provision may have had an impact on guilty pleas and verdicts among Hispanic defendants. Finally, in section 7, I explore the heterogeneity between the two counties I analyzed and make recommendations for future policy and research, concluding with a reminder of the importance of public policy that seeks to create equity in the criminal justice system.

SECTION 2

LITERATURE REVIEW

Legal practitioners who write on court interpretation agree it's critical to advocate for an accused's right to an interpreter. But their arguments find their basis in a logic of legal and moral responsibility, not a clear understanding of the effect an interpreter has on a defendant's outcomes. Indeed, the empirical picture of an interpreter's impact on defendant outcomes contained in the current research is extremely fuzzy. What scholarly work does inquire into the role of the interpreter in a courtroom largely focuses on her limitations; this means, to the extent scholars have asked what an interpreter's impact is, they have almost always been comparing the effect of having a "bad" interpreter as opposed to a "good" one. These works, largely founded in linguistics, ethnography, and communications theory, emphasize the salience of courtroom dynamics, the role of the judge, and the difficulties of relaying exact meaning in a high-pressure, knowledge-imbalanced setting. I review them, and what research has attempted to directly gauge interpreter impact, to offer background on the setting my research investigates and demonstrate the gap it fills. I then review the broader understanding at present of criminal justice outcomes for the populations most likely to need an interpreter, namely immigrants and Hispanic U.S. residents.

2.1 The Limitations of Interpreters: External vs. Intrinsic

Legal scholars and practicing attorneys unequivocally mirror the logic of case law and legislative precedent: interpreters are necessary for LEP defendants, and not to provide them is in and of itself a miscarriage of justice. Miller (2014) writes, "In a significant number of cases, appellate courts are extremely resistant to question a trial judge's decision not to provide a courtroom interpreter. As a practical matter, this means that attorneys who represent clients with limited English skills must be pro-active in advocating for their client's right

to an interpreter" (26). Finding that judges are disinclined to doubt the judgment of their colleagues in any decisions regarding interpreter use, Miller emphasizes the importance of making a convincing case that one's client needs an interpreter in their first appearances – the sooner, the better – as well as how to catch and challenge translation errors as they happen. Santaniello (2018) follows up on the latter point, arguing that as courts classify errors in interpretation as an evidentiary matter (a misclassification, according to Santaniello) and do not keep records of remarks made in any language other than English (i.e. the exact content of the witness's testimony), reviewing courts misunderstand the nature of interpreter error, according "unwarranted deference to trial court determinations. Unlike other evidentiary issues, LEP defendants cannot rely upon the [...] adversarial system to uncover and rectify deficiencies in interpretation" (98). Both Miller and Santaniello emphasize the role of judges as authorities in determining the competence and necessity of interpreters, a fact on which the sociologically-oriented investigations concur. Judges are the absolute authority in their own courtrooms on nearly every matter; they are the (selective) enforcers, and therefore effectively the makers, of policy. In this telling, if interpreters are "ineffective" in assisting defendants, it is because they are being externally impeded. If we follow this line of reasoning a step further, it tells us that if a gap exists between the outcomes of LEP and non-LEP defendants, ensuring judges/court actors provide interpreters adequately would close it.

This last point is in contrast to the argument implicit in the sociological literature, which emphasizes the practical and relational constraints faced by the interpreter. Though an individual interpreter is certainly capable of making an impact on a case's outcome, this impact may be negative just as often as (or more than) it is positive; and the interpreter as a device is inherently limited in her efficacy. As Berk-Seligson (2017) writes, "the output of [interpretation] is by no means perfect, nor can it ever be, because of the problems inherent in the interpreting process. At best, it can be excellent; at worst, a gross distortion of what has been said" (2). Berk-Seligson's original findings pointed to the general inadequacy of

language access policy, particularly in civil courts, as well as several potential pitfalls of court interpretation not adequately addressed then by guidelines or educational programs. Key to this sociological characterization of the interpreter as organizational actor is the idea that the interpreter is viewed as a neutral conduit – almost machine-like – by judges and attorneys, rather than as a fallible individual with a difficult task. "What the interpreter herself and other people think she ought to do when she does a good job" is "deeply influenced by the rules and principles codified in the official code of conduct," find Dam and Schjoldager, in a review of Wadensjö (2017, 173-174). "Thus, frequent metaphors used about the interpreter are those of a 'copying machine' or a 'telephone', implying that she should not make contributions to the content of the interpreted conversation." This "conduit mentality," as it is sometimes called, is utterly central to the (aspired) role of the interpreter. This can obscure not only errors but also partisan behavior employed by the interpreter to soften or facilitate interactions – which is more likely when authority figures apply pressure to the interpreter to seamlessly mediate an interaction which naturally contains a number of obstacles (e.g., unfamiliarity of the witness with courtroom procedures, dialect differences between interpreter and interpretee, confusion over vocabulary and "legalese," etc.).

In particular, Berk-Seligson (2017) and a number of contemporaries focus on the role of pragmatics in court interpretation. In linguistics, pragmatics refers to how context imparts meaning to an utterance. Implication, sarcasm, relevance, speech acts (i.e. speech that performs a function other than communication, like a request or order), and nonverbal communication are all pragmatic elements. "Professional interpreters overwhelmingly view vocabulary as their number one linguistic problem," writes Berk-Seligson (2). "Problems of syntax and pragmatic scope are given slight attention, if any at all. Yet observation of interpreters at work reveals that inattention to pragmatic aspects of language results in a skewing of a speaker's intended meaning... Thus [...] an interpreter has the power to make a witness's testimony cast more (or less) culpability than it did in the source language." Leading

questions are a particular sticking point here: Berk-Seligson (1999) found that interpreters translated leading questions correctly 35% of the time if federally certified and translating simultaneously, and 30% of the time if not federally certified. Berk-Seligson (2017) and Hale and Gibbons (1999) find that interpreters systemically weaken the force of leading questions, which are one of the most powerful tools an attorney has to control witness testimony, undermining aggressive cross-examinations. Hale (2002) follows up with an intensive study of discursive choices made by Spanish-English interpreters in 18 proceedings, finding that interpreters "water down" the assertiveness of witnesses who fight aggressive questioning. Jurors are highly sensitive to witnesses' mannerisms, credibility, and exact testimony, in a way that attorneys and academics alike agree is difficult to predict. Though these investigations do support the hypothesis that interpreting can impact, the counterfactual tends to be "if the interpreter had translated more accurately" or "if no interpreter was needed at all," rather than whether people who needed interpreters were or were not provided with them. Even then, the actual effect of interpreters seems unclear or even null on average based on this representation – they may make witnesses appear more intransigent, accommodating, or obsequious depending on the choices (or errors) they make in each varied instance of translation, each of which may have varying impact on juror and judge perceptions.

The conflicting mechanisms by which interpreters may influence trials bring me to the sole study which explicitly attempts to estimate the effect of interpreter use, as a proxy for being LEP, on defendant-level outcomes. Rengifo et al.'s 2020 paper on the subject claims that "research on criminal courts ... has not examined the impact of language difference and interpretation on defendant outcomes or courtroom interactions" (237). My review of the current literature results in the same opinion: there exists very little investigation, especially quantitative investigation, into the impact of interpreter use, LEP status, or language access policy on individual-level and big-picture outcomes. The findings of Berk-Seligson, Hale, and Hale and Gibbons certainly suggest that how interpreters go about translating for their

charges might affect those charges' outcomes. But that hypothesis, as well as the broader question of the impact of having/not having an interpreter, appears to be untested, save Rengifo et al. (2020).

In their investigation, Rengifo et al. employ a mixed-methods strategy, assessing interpreters' context, position, and behavior in New York and New Jersey arraignment courts in light of the qualitative research, then employing both logistic and Poisson regressions to gauge the impact of interpreter use on bail, release, and counts of judge engagement behaviors within their sample. They find evidence that cases with interpreters are associated with more rushed review processes; that judges were less engaged with LEP defendants than with English-speaking ones; and that LEP defendants are less likely to be released, instead having higher cash bail set and maximum sentences handed down more often (which is robust to various specifications and the inclusion of race/gender covariates). The authors argue the mechanism here is that cases where interpreters are used take longer and require more effort from participants, causing stakeholders to consider them a burden on case-processing routines and attempt to rush them through the justice system, which compounds with a pre-existing tendency to punish LEP defendants more harshly, translating to worse outcomes for those defendants who need to use interpreters to navigate the justice system comparatively to those who do not.

Rengifo et al.'s study explores whether interpreter use is associated with differential outcomes and dynamics, not relative to a group who needed interpreters and did not receive them, but relative to defendants who do not use interpreters. There exists an implied assumption in their study that every defendant who needed an interpreter got one – perhaps an unjustified one given that language access policy is riddled with inadequacies – and thus interpreter use is more considered as a proxy for LEP status than investigated in its own right. Though the authors do attempt to control for some of the spurious factors associated with both outcomes and interpreter use – citizenship status, Hispanic ethnicity, and prior

offenses – they miss multiple others; and ex-post controlling for a complex web of covariates is altogether not a compelling construction of a situation that mimics a counterfactual when evaluating the ability of their research design to pinpoint the causal effect of being limited English-proficient on outcomes. Though their study is a valuable foray into the landscape around a mostly-unstudied question, it also demonstrates clearly the problem of causal identification which I call out, and attempt to improve upon, in this paper.

To quickly recap, models based in the law and economics literature, like that of Rengifo et al., would suggest that an interpreter provides some utility to the defendant but presents some cost to the courts, both of which may have alter a defendant's likelihood of pleading or being found guilty. But the sociological literature relies on a more variable picture of the consequences of interpreter use, which relies heavily on individual interpreter competency and judge and juror attitudes, and will be inherently limited in its potential for advocacy by the interpreter's task to negotiate differences of understanding on behalf of the court. These competing hypotheses lay the groundwork for my question, which explicitly seeks to compare a setting where interpreter policy was limited to the same setting after it had been (ostensibly) expanded, to see whether interpreters have an effect in aggregate, contrary to the sociological view. I hypothesize that having an interpreter (as opposed to needing one and not having one) assists LEP defendants as they navigate the varied requirements of undergoing a criminal prosecution, making it easier for them to appear in court, negotiate bail and release, and defend themselves clearly at hearing or trial. On the flip side, if a negative effect on guilty pleas/verdicts were associated with expanded interpreter access, it would suggest support for Rengifo et al.'s finding that judges become more frustrated in cases with interpreters, leading to harsher sentencing. I find this mechanism and the associated negative effect of interpreters on pleas/verdicts less convincing: when defendants need interpreters and do not receive them, it is intuitive that these misunderstandings still occur, perhaps even more often. For this reason, I favor the former hypothesized mechanism

over the latter.

2.2   Outcomes in Vulnerable Populations & Why It Matters

To supplement the analyses which directly address the role of interpreters and contextualize the setting and stakes of the criminal justice system for the populations language access policy typically targets, I also look to the literature on criminal justice outcomes among those populations who comprise the majority of interpreter users in the United States: immigrants and those of Hispanic/Latino origin. Significant recent evidence suggests that Hispanics face higher odds of incarceration than white defendants, and perhaps all other defendants; this disparity is ascribed to negative stereotypes around Hispanics and criminality, structural social and economic opportunity barriers, lack of resources, and fears around immigration (Demuth & Steffensmeier, 2004; Franklin & Henry, 2020; Steffensmeier & Demuth, 2000; Ulmer et al., 2016; Demuth, 2003). Girvan and Marek (2023) find that being perceived as Hispanic is associated with a nearly doubled likelihood of being sentenced to prison, compared both to defendants perceived accurately as white and defendants perceived as white who later self-identified as Hispanic. Their finding holds even when they control for severity of the crime and criminal history. Being solely Spanish-speaking, i.e. also limited English-proficient, is a clear signal of Hispanic origin; it seems likely that Girvan and Marek's finding will be particularly applicable to that group of Hispanic/Latino defendants who need interpreters. It may even be possible that lack of interpreter access played some role in the higher rates of prison sentences among those considered perceptibly Hispanic, though Girvan and Marek only discuss negative ethnic stereotypes and group-threat as the reasons for the disparity. Light et al. (2014), meanwhile, find that citizenship status is highly salient in incarceration rates and sentence lengths, testing the hypothesis that Hispanic defendants are more likely to be incarcerated than other ethnic groups because they are more likely to be non-citizens. They find that, "[i]n short, using methods and model specifications virtually

identical to much published work in the area, the effects of citizenship status are stronger than nearly all of the extra-legal variables that factor prominently in prior research. Perhaps most notably given prior research, the magnitude of the citizenship penalty is over four times stronger than Hispanic ethnicity; moreover, including citizenship status in the model weakens the Hispanic effect by over 60 percent" (835). Though Rengifo et al. suggested citizenship status was largely immaterial when differentiating between the outcomes of LEP defendants, a sizable proportion of LEP defendants are not citizens, or are non-natural-born citizens. Focusing on pre-trial detention, Dobbie, Goldin, and Yang (2018) use quasi-random assignment of defendants to bail judges with variable leniency to explore whether being held or released pre-trial impacts verdicts - and, though their paper pays minimal attention to the racial/ethnic dimension of criminal justice outcomes, their finding is particularly relevant to LEP defendants in light of Rengifo et al.'s finding that LEP defendants are more likely to be held pre-trial and/or given maximum bail. Similarly to this paper, Dobbie, Goldin, and Yang note that previous inquiries into pretrial detention as a causal factor in sentencing have suffered from a relative lack of data and unobservable differences between held and non-held defendants which complicate causal identification. They find that being released pre-trial decreases the likelihood of a conviction, which they ascribe to lower likelihood of entering a guilty plea and a better bargaining position.

Likelihood of conviction, bail amount, and length of sentence are not only important in and of themselves, they may have major impacts beyond an individual's encounter with the criminal justice system. The literature tends towards a consensus here: having a criminal conviction limit future employment prospects, which a majority argue holds despite potentially spurious traits (substance abuse, behavioral issues) that may affect both quality of work and likelihood of criminal offense. Dobbie, Goldin, and Yang extend their analysis of pretrial detention into its effect on future earnings and government benefits received, finding that through higher employment rates and the lessened likelihood of a conviction, being

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released on bail pre-trial increases both probability of employment the following year and a defendant's income/government benefits received during that time.

The mitigating effect of criminal convictions on future employment prospects functions both through limiting which jobs an individual gets and through making employers generally reluctant to hire them, and it is not suffered equally by all offenders. Pager (2003) finds a criminal record reduces likelihood of a post-interview callback by 50% among white job-seekers, black job-seekers, who even without criminal records were less likely to receive a callback than whites with criminal records, had their likelihood of a callback reduced by over 60%. Agan and Starr (2016), meanwhile, demonstrate that the result found by Pager holds when employers are permitted to ask about criminal history. When employers legally cannot ask about criminal history, however, they are more significantly more likely to attempt to proxy for criminal history by discriminating based on observable characteristics, i.e. race. An inability to ask directly about criminal history significantly increased the already present racial gap between whites and non-whites.

If having an interpreter makes a defendant less likely to plead guilty and/or receive a conviction, therefore, the repercussions of interpreter provision on their future opportunities may be enormous. This is especially true given that the supermajority of interpreter users are non-white, with most being Hispanic, a racial-ethnic identity in the United States which often faces similar stereotypes around criminality as black Americans. The glaring and persistent disparities in outcomes amongst immigrant and Hispanic populations make obvious the necessity of investigating the impact of interpreter provision on these outcomes, especially given the salience of prior convictions for future opportunities. If providing interpreters helps vulnerable populations close the gap in verdict, sentencing, and bail, effective and robust language access policy becomes very important indeed. With this background in mind, I proceed to the historical background on interpreter policy and the North Carolina events which my design exploits.

SECTION 3

HISTORICAL BACKGROUND

In this section, I give an overview of the policy landscape for language access, from its early days of ambitious legislation to the more humble reality of continuing struggles to adequately comply with the goals that legislation sets out. I begin with a broad historical overview, from the landmark cases which cemented the right to an interpreter in the United States to the context and content of the first major piece of legislation, the Court Interpreters Act. I then discuss the struggles of implementing the Court Interpreters Act, and achieving language access equity generally, at both the federal and state levels, segueing into the Obama-era Department of Justice's civil rights departments' investigation into state noncompliance with the language access norms set by contemporary state jurisdictions and mandated by federal civil rights law. I then take a deeper look at the most extensive state-level investigation, the investigation of North Carolina, and offer a more detailed timeline of the events relevant to this paper.

3.1   Establishing the Right to an Interpreter

The use of interpreters in court is anything but new. There exist records of trials held as early as 1682 that utilized interpreters (Mikkelson 1999). Neither was discussion of the issue from the perspective of law and policy confined to modern era. In 1907, the Supreme Court first found that a trial court had erred in not appointing an interpreter for a criminal defendant in Perovich v. United States; a good number more cases centering on interpreter use had made their way to appellate courts by the seventies. But the courts were slow to adopt a widespread philosophy, and the issue remained in regulatory limbo, battered back and forth by warring case law, until the 1970s.

The Court Interpreters Act, passed by Congress in 1978, is the landmark piece of legis-

lation on the use of interpreters in federal court. To that end, it gives the Administrative Office of the U.S. Courts the power to programming for the purpose of testing and certifying interpreters; it further mandates that a masterlist of certified interpreters be maintained and made available to all federal courts, and that the most qualified readily available interpreter be utilized when proceedings concern an individual whose command of English is limited such that her comprehension would be hindered. The United States Department of Justice writes that the Act intends to "ensure that justice is carried out fairly for defendants and other stakeholders" through "the use of competent federal court interpreters in proceedings involving speakers of languages other than English" (US Courts n.d.).

A combination of forces united to spur the creation of the Court Interpreters Act: the increased prominence and professionalization of interpreting, demographic changes in the United States leading to increased need, and a heightened awareness of the consequences of faulty interpreting. The Nuremberg Trials, in late 1945 and early 1946, marked the first major test of modern technologies used to provide simultaneous interpreting in a court setting – and this on the world stage. Millions became suddenly aware of a profession heretofore little regarded. The visibility the Nuremberg Trials brought to interpreting generally, and legal interpreting specifically, led to a "watershed moment" for the profession, and in the following years interpreting and translation would become increasingly professionalized (Mikkelson 1999). Then, beginning in the forties and accelerating through the seventies, the United States experienced a wave of immigration from Latin America, spurred initially by guest worker programs during World War II and facilitated by a reworking of immigration law in 1965 (Gregory 2015). An influx of Spanish-speaking immigrants and grassroots activism led policymakers to, for the first time, consider the needs and rights of language minorities at a widespread level, particularly with respect to education (see, for example, the Bilingual Education Act of 1968).

Then, in 1970, came the tipping point. In 1967, *People v. Annett* had established in

California the defendant's right to an interpreter, if said defendant did not have sufficient understanding of the English language to actively comprehend proceedings. Then, three years later, *United States ex rel. Negron v. New York*, heard by the Second Circuit Court of Appeals (and referenced at the opening of this paper), took this opinion national. Negron, a 23-year-old Puerto Rican accused and convicted of second-degree murder, appealed his case on the basis that he had not had access to an interpreter. *U.S. ex rel Negron* overturned Negron's conviction, finding that, "regardless of his probable guilt," failing to provide adequate interpretation for an indigent defendant inhibited his access to counsel and his comprehension of the proceedings against him, violating the Sixth Amendment. "Not only for the sake of effective cross-examination, [...] but as a matter of simple humaneness, Negron deserved more than to sit in total incomprehension as the trial proceeded," reads the opinion. "The least we can require is that a court, put on notice of a defendant's severe language difficulty, make unmistakably clear to him that he has a right to have a competent translator assist him, at state expense if need be." *U.S. ex rel Negron* is commonly cited as the case which spurred the Court Interpreters Act (Mikkelson 1999). In reality, the Act was a long time coming, and Negron was simply the final advance of the pressure that had built up over the previous decades.

Following an "extensive review" of court interpreting needs and practices by Congress, the Act was passed during the Carter Administration in 1978 (Administrative Office of the U.S. Courts 2020, p. 7). It requires that:

> "the presiding judicial officer [...] shall utilize the services of the most available certified interpreter, or when no certified interpreter is reasonably available [...] the services of an otherwise qualified interpreter [...] if the presiding judicial officer determines on such officer's own motion or on the motion of a party that such party [...] or a witness who may present testimony in such judicial proceedings—
> (A) speaks only or primarily a language other than the English language; or (B)

suffers from a hearing impairment [...] so as to inhibit such party's comprehension of the proceedings or communication."

It goes on to specify that in criminal and civil actions brought by the United States, the federal government shall provide an interpreter, while in all other cases (i.e. civil cases brought by other plaintiffs) the government "shall [...] where possible, make [interpreting] services available" on a reimbursable basis. The Act empowered the Administrative Office of the U.S. Courts to create and maintain a certification program for interpreters, as well as a registry of all interpreters that attain said certification, though, crucially, it allocated no funding. Calls for similar legislation at the state level immediately followed (see, for example, Frankenthaler and McCarter 1978); indeed, many state programs are based on the federal one (Abel 2013).

3.2 Federal- and State-Level Implementation Issues

The Court Interpreters Act has faced numerous problems of implementation across the various federal courts of the United States. A 2013 report for the National Center for Access to Justice outlines these problems and their repercussions for LEP justice-seekers, revealing that, as of 2013, federal courts consistently failed to live up to the norms of language access being concurrently set by state courts and federal agencies. Specifically, federal courts tended to deny interpreters to parties and witnesses in civil cases, fail to perform due diligence in ensuring interpreter competence (especially in non-Spanish languages, for which there exists no federal certification course and a comparative dearth of qualified personnel), and lack translations of important forms and information into non-English languages (Abel 2013). Abel's report characterizes state courts as recognizing that fluency, or near-fluency, is generally requisite for full participation in a legal proceeding. But in some jurisdictions, an LEP individual who speaks some English, but is by no means fluent in the language, may still be denied an interpreter. Within federal district court, interpreter services are typically

not provided in civil or bankruptcy court – contrary to the most apparent interpretation of the Court Interpreters Act. Abel notes that the "phone-a-friend" method that in the nineties was widespread in state courts, wherein an LEP party must bring a multilingual friend or family member to interpret for them, is now, in some cases, the official policy of federal courts, "embedded in court rules, proclaimed on court websites, and acknowledged in Judicial Conference documents" (7). Even in criminal trials, an interpreter may not possess federal certification, despite the expectations set forth by the Act, as federal certification programs only exist in Spanish, Navajo, and Creole, and are only available in Spanish. Many state courts, by contrast, now offer certification in numerous languages; the Consortium for Language Access in the Courts, run by the National Center for State Courts, develops certification tests for at least 16 languages, and California state courts offer certification in 14 languages, including Mandarin, Punjabi, Armenian, and Khmer (Judicial Council of California, 2023). Abel argues the lack of effectuation in federal courts of the standards nominally outlined in the '78 Act reveals the Act's limitations as the single piece of governing legislation on the topic, and that further legislation is necessary to secure the rights of LEP parties (as well as those of any individual involved in a case with an LEP party or witness).

But though Abel positions state courts as having relatively better language access than federal courts, they are not entirely absolved; indeed, Abel names a number of states which have struggled to comply with the norms of language access set by their more advanced counterparts. In fact, the general improvement of language access standards in state courts was spurred in many places by federal intervention. As many state courts receive federal funding, the United States government (and the Department of Justice more specifically) requires they comply with Title VI, under which no person may be denied on basis of national origin the benefit of any activity which receives federal financial assistance. In the 2010s, a concerted effort by the DoJ to increase its enforcement of this standard was observed, with DoJ conducting investigations for the first time into complaints that state

courts were failing to provide adequate language access for their patrons. Publicly, this increased scrutiny began in August 2010, when then-Assistant Attorney General Thomas Perez issued a series of letters to top court officials in all 50 states, warning them of reports of inadequate language access policies which failed to meet federal civil rights standards, and of the DoJ's commitment to ensuring Title VI was enforced. Documents clarifying the DoJ's position and the implications of Title VI for state courts were subsequently provided, as well as guidance for what federal funding was available for state courts to make improvements to language access programs.

Sixteen months later, by December of 2011, seven states had been subject to formal DoJ investigations (not all of them public). Abel and Longobardi (2012) are able to identify five of these states: Alabama, California, Colorado, Rhode Island, and North Carolina. The Alabama and California complaints were resolved more or less quietly, with small expansions made to interpreter policy and no public DoJ follow-up. Colorado and Rhode Island saw somewhat greater intervention: in Colorado, a 2011 DoJ investigation resulted in a memorandum of agreement between DoJ and Colorado state courts to make major improvements to interpreter coverage and provision of translated forms, while in Rhode Island the state Supreme Court, after negotiations spanning over a year, issued a 2012 executive order with a plan for language access improvement which the DoJ considered a "critical step . . . taken in response to the Justice Department's investigation of the Rhode Island Judiciary's language access practices" (Russo, 2012).

3.3 Department of Justice Investigation & Intervention in North Carolina

North Carolina stands apart from these accounts in scope, severity, and longevity. The instigating issue was a 2006 complaint made by a private practice attorney, alleging that judges refused to facilitate the use of qualified interpreters and told LEP parties to bring a

friend or family member instead; another interpreter, when called, made derogatory remarks about Hispanic parties for which they were interpreting on the basis of their ethnicity. In 2011, a joint complaint was filed by the Latin American Coalition, the Muslim American Society of Charlotte, and the Vietnamese Association of Charlotte, describing failures to provide interpreters outside of a small number of cases, as well as indigent defendants having the cost of their interpreter assessed against them when found guilty (Kirby et al., 2011). Together, the multiple complaints comprise allegations that the courts compelled individuals who did not speak English and were involved in cases related to domestic violence, child custody, evictions, and wage disputes to proceed without interpreters, even going so far as to refuse to put individual district courts in contact with interpreters they requested the services of – directly in violation of the Court Interpreters Act. The DoJ investigation sparked by the battery of 2011 complaints almost immediately resulted in an official sanction by letter in March of 2012 by the Department of Justice, which found NC courts in violation of Title VI protections intended to ensure equal access to government services (i.e., courts) regardless of race, ethnicity, or national origin. The sanction constitutes an official threat to revoke federal funding if an improvement is not made, as, in the words of the report, "[t]he AOC [Administrative Office of Courts] is subject to Title VI [...] because it has accepted millions of dollars from the United States Department of Justice (DOJ) for its programs and activities [... and] signed a contract for each grant of federal funds [...] expressly agreeing that it would comply with Title VI" (2). The twenty-two page investigative report details findings ranging back over a decade, and eventually concludes:

> "The AOC's language access policy establishes that the AOC will only provide an
> LEP individual with a free interpreter in a limited subset of court proceedings.
> The AOC admits that it does not authorize courts to provide interpreters free
> of charge in many types of proceedings in the North Carolina state courts. We
> also found that the AOC routinely fails to meet its own standards even in the

limited circumstances where free interpreters are authorized. ... [B]ecause of these policies and practices, the AOC – through the AOC staff, local court staff, contract interpreters, and judges – is conducting court proceedings and other court operations in a manner that results in an impermissible discriminatory impact on national origin minorities, and that fails to provide LEP individuals meaningful access to the courts. This failure to ensure meaningful access has resulted in severe consequences, including needlessly prolonging the amount of time one is incarcerated, and loss of custody rights, wages, and access to one's home."

The probe did not resolve after this letter was issued; in fact, investigation intensified, and, in total, was ongoing for ten years. During this time, the DoJ made several onsite visits, conducted at least eighty interviews, and engaged in several rounds of correspondence and negotiation with the NCAOC (North Carolina Administrative Office of Courts), which houses the Office of Language Access Services (OLAS) and is responsible for the coordination of interpretation and translation services. In response, the North Carolina Administrative Office of Courts convened multiple committees, and, in April 2015, originated the Standards for Language Access Services, a comprehensive set of guidelines written by the North Carolina Administrative Office of Courts and employed by the North Carolina Judicial Branch (henceforth the SLAS). The SLAS lay out the administrative structure of the offices responsible for language access, when and how a court interpreter can be provided, what services an interpreter can render in NC courts, and how one can be requested, as well as guidelines facilitating the logistics of interpreter use and a code of ethics and professional responsibility for interpreters. In the most general terms, the goal of this policy was to specify that interpreters should be made available at no cost to anyone involved in an NC courts proceeding who needed one to meaningfully participate in said proceeding. This policy underwent multiple rounds of revision and a gradual rollout, going fully into effect beginning July 1,

2017.

However, during and after the period when these standards were rolled out, the Department of Justice continued to receive complaints alleging that, among various other issues, NC courts were failing to furnish Spanish versions of guilty plea forms in courtrooms; assign interpreters promptly to prevent delays; offer interpreters for the criminal mediation program; and provide adequately skilled interpreters or suitable equipment for telephone interpreting. Through 2017, 2018, and 2019, the Department of Justice continued to raise concerns with the NCAOC, which disputed a number of the allegations raised in the original complaint and argued financial and practical limitations to the implementation of a "perfect" interpreter policy. Instances the DoJ report names as notable "warnings" include a January 2018 meeting, a May 2019 meeting, and an October 9, 2019 letter from DoJ to NCAOC. Finally, in October 2022, the parties reached a legal agreement outlined in a DOJ memorandum, in which the Office of Language Access committed to a number of continuing steps improving the accessibility of NC courts and the Department of Justice ended its investigation – pending review of progress towards the aforementioned goals after a twelve-month period (United States Department of Justice 2022).
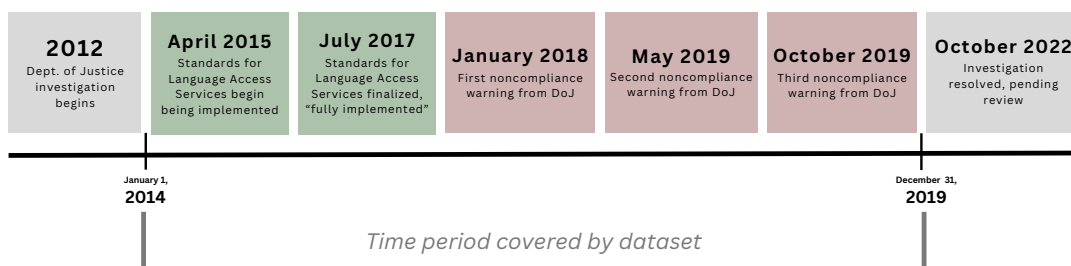

Figure 3.1: Timeline of Department of Justice Investigation

In the case of North Carolina, we see a failure more severe than most to meet the standards outlined by the '78 Act, subsequent case law, and federal civil rights standards. Though at

the time of this paper, the DoJ has officially ended its investigation, commenting that the final agreement "will ensure meaningful and effective language access services in North Carolina's courts going forward," the stakes of the policy effecting meaningful change despite years of demonstrated reluctance are obviously high for the millions of LEP individuals living in North Carolina with the undisputed right to access its justice system. My study, which covers cases spanning from 2014 to 2019, intends to measure whether, during the time period before, during, and immediately after the implementation of the new Standards for Language Access Services, trends in interpreter provision actually changed; and, subsequently, if outcomes for those defendants who utilized interpreters were affected.

SECTION 4

DATA COLLECTION

My data are 120,000 unique cases filed in two North Carolina counties from 2014 through 2019, approximately 5-10% of total cases heard in these jurisdictions during this time period. The unit of analysis is one case; for each distinct case, the data comprise information on the defendant, the charge, the disposition, and, critically, interpreter use, allowing me to answer the question of whether trends in interpreter use changed before and after policy change/DoJ intervention, as well as whether defendant outcomes changed in concert with any changes in interpreter provision uncovered by the first stage of the analysis.

The data collection process was perhaps the most time-intensive element of this research. Given the sometimes obtuse nature of data collected by government entities, it is difficult to ascertain what data on interpreter use exists, let alone is available for research use. Though some courts indicate they do track interpreter use, initial attempts to obtain interpreter use data either from non-governmental organizations or directly from courts' administrative offices, even in an aggregated form, proved fruitless. I was most interested in obtaining data from North Carolina given the policy shock I hoped to exploit for analysis and my interest in studying language access in the criminal justice system as a matter of public policy; in North Carolina specifically, public records requests were submitted after brief correspondence with the Office of Language Access hinted at the existence of internal data. However, replies denied this, and subsequent follow-ups yielded no response. Consequently, the dataset used in this thesis is a novel one, obtained through several months of scraping the North Carolina criminal courts' recently-instituted online record system, which is considered public information and is accessible to anyone.

The sample frame is two counties, Mecklenburg and Wake, across one time period from January 1, 2014 through December 31, 2019, inclusive. Although selection of cases within the sample frame was random, these counties and this time frame were chosen intentionally.

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Due to the structure of the online filing system, it is much easier to scrape from one county at a time. At present, the eCourts system is live in seventeen counties, and, as of January 2024, the North Carolina Administrative Office of the Courts has outlined a plan to universalize it across the state. However, at the time this research began in summer 2023, only five counties had filings uploaded to the online system: Harnett, Johnston, Lee, Mecklenburg, and Wake. Of those initial five, Mecklenburg and Wake were chosen for their demographics, their salience, and their size. Wake, home of Raleigh, and Mecklenburg, containing Charlotte, are respectively the first- and second-most populous counties in North Carolina, providing a larger total pool from which the sample could be drawn (particularly important considering the relatively low incidence of interpreter use, especially in locations like North Carolina where courts underprovided interpreters). 10.4% of Wake and 14.4% of Mecklenburg self-identify as Hispanic as of 2022, according to the U.S. Census, and the counties have, by number, the largest Hispanic populations in North Carolina. With respect to the time frame, there is only one clear policy change as a result of the investigation: the extended rollout of the new Standards for Language Access Services, which began in 2015 and concluded in 2017. Beginning the time frame of analysis in 2014 and ending it in 2019 buffers on either side of this while both including the Justice Department's follow-ups and excluding 2020, which we could expect to be anomalous in a variety of respects due to the repercussions of the COVID-19 pandemic.

The data collection process is automated and (replicably) randomized. Essentially, the scraper takes a random sample of cases filed in this system by generating random numbers which follow the naming pattern of the cases in the North Carolina e-filing system; the generated case names and whether they matched with a real object are recorded. In the first iteration of the scraper, it had an approximately 12% hit rate for finding numbers associated with real cases; as naming patterns were discovered, the sequence the scraper searched for was made more specific, and the hit rate was considerably improved. In its final iteration, the

data comprises 60,000 unique cases in Mecklenburg county and 60,000 in Wake, all with filing dates ranging from 2014 to 2019. The Mecklenburg county district attorney's office reports about 10,000 felonies and 200,000 felonies prosecuted yearly; however, this is somewhat inconsistent with the scraper's hit rate when sampling randomly, and it's unclear when these figures were last updated. No caseload estimates are available from the Wake county district attorney; but arrest and traffic citation totals from the Raleigh Police Department from 2017 through 2019 suggest a caseload to the order of 100,000 or less per year, which is more consistent with the magnitude suggested by the scraper. I therefore roughly estimate that this random sample of approximately 60,000 unique cases per county filed during a six-year period therefore constitutes between 5 and 10% of the cases prosecuted in each county during that period.
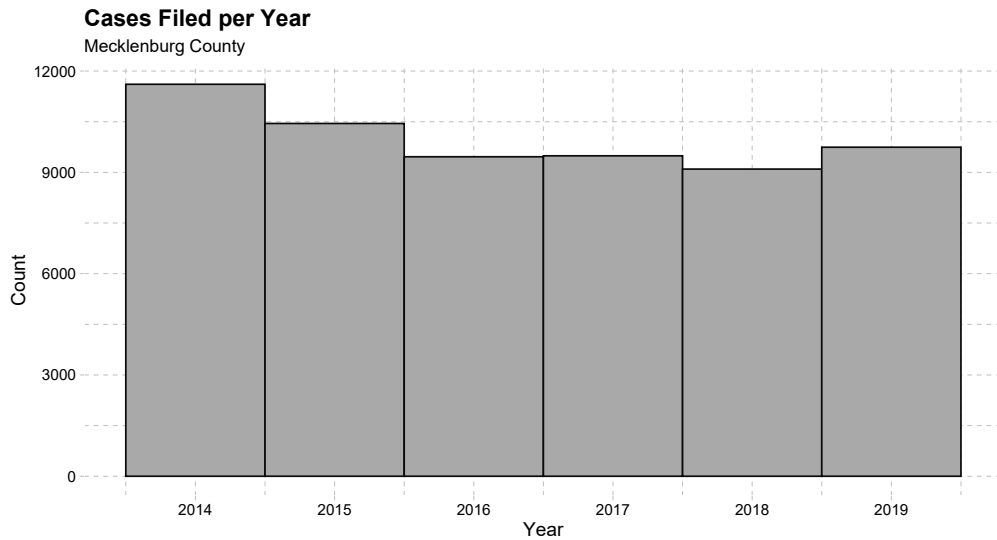

Figure 4.1: Caseload per Year in Sample, Mecklenburg County

The dataset includes considerable detail, some of which was not immediately relevant to this analysis but may be useful in future extensions or other inquiry. It includes case information, including the defendant's (perceived) race and her last name [which I use to assign
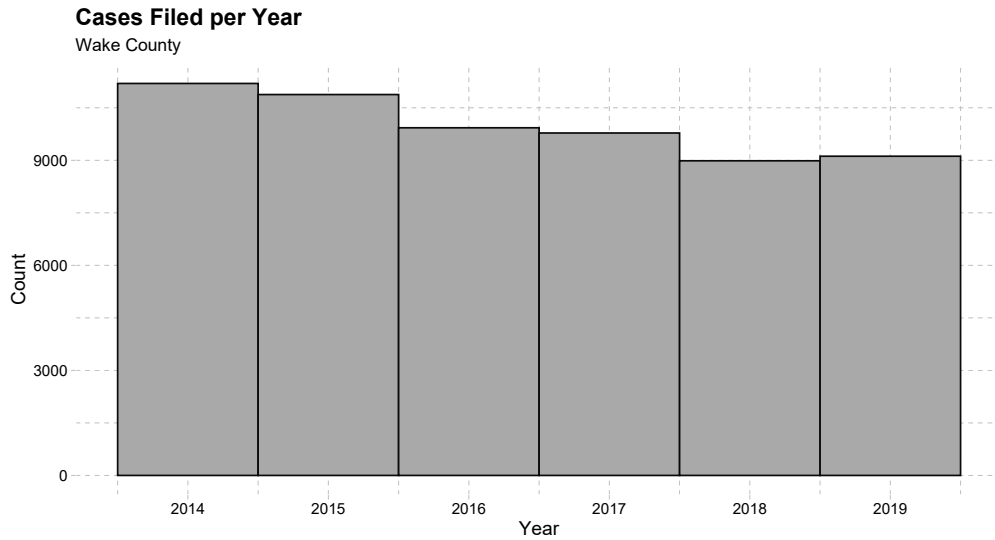
Cases Filed per Year
Wake County

Figure 4.2: Caseload per Year in Sample, Wake County

Hispanic origin, since it is not recorded in defendant race[1]], whether she has retained counsel, her gender, case type, and case status (resolved/ongoing); a log of all case events, which include such things as citations being issued, counsel being appointed, motions/petitions being filed, fines being paid, and, crucially, when an interpreter is brought onto the case; offenses (i.e. what the defendant has been charged with; may include multiple charges); disposition (meaning outcome, e.g. convicted, acquitted, dismissed, etc); and bail setting (if there is no bail in the case, there is just a N/A entry).

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1. Estimations are made using Bayesian Improved Surname Geocoding (Imai and Khanna, 2016), and supplemented with random accuracy checks. I estimate a 93.3% accuracy rate for whether Imai and Khanna's function alone correctly estimates Hispanic origin; spot checks correcting the errors I was able to manually identify will have raised this, though I should acknowledge that misclassifications in a dataset of this size are of course possible.

SECTION 5

METHODOLOGY & RESEARCH DESIGN

5.1   Regression Kink Design

To investigate whether a case was more likely to receive an interpreter after the beginning of the policy change, the end of the policy change, and/or the three warnings, I employed a regression kink design (RKD). First formalized by Card et al. (2009), RKDs are a relatively novel variant on regression discontinuity designs sometimes seen in social scientific and microeconomic research. As with a regression discontinuity design, an RKD exploits a change in the likelihood of being treated at a given point, but in cases where we expect to see a change in the slope, rather than a total discontinuity – i.e., a discontinuity in the *first derivative* of the assignment function. This is particularly appropriate in policy settings where we expect passing a given cutoff to have an impact on an outcome of interest that is a share or rate, for which the pattern of increase or decrease is of interest. For example, Simonsen et al. (2016) demonstrate a kink in the share of the price of a medication paid out of a pocket as a function of income, noting that it decreases linearly until reaching the income level at which point the government stops subsidizing the cost, at which point the share paid out of pocket flattens out.

An RKD requires a regressor variable that determines a "behaviorally endogenous variable" - that is, an outcome variable which has a value behaviorally connected to/determined by the regressor, such that the outcome variable cannot be replaced by a plausible instrument (Card et al., 2009). In this case, the regressor variable is time as a proxy for which policy of interpreter assignment is in place. Whether a certain defendant is judged to be in need of an interpreter, and subsequently provided one, is a function of which policy of interpreter assignment is followed by courthouse actors. We can also expect that the dates just before the kink and just after are relatively similar in terms of the caseload and type of cases which

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will be heard; or, at least, that variation will be random and not attributable to any genuine differences between the days on either side of these cutoffs. Individuals whose cases are heard on one side of the divide versus the other are assigned so as good as randomly.

5.2   Planned Analyses

Here, I map out the analysis I go on to realize: a three-part analysis at the case level. First, in each county, did being before or after certain cutoff dates have an effect on the (slope of the) probability of a given case receiving an interpreter? Did this effect differ between the quasi-treatment population (i.e., the Hispanic population) and the quasi-control (non-Hispanics)? Second, if a cutoff date had an effect on interpreter provision in the sample, do we see a change at the same point in the probabilities of entering a guilty plea or receiving a guilty verdict? Finally, if a change in probability of guilty plea/verdict is apparent, does it differ between Hispanic and non-Hispanic defendants?

I intend to test five kink points which I consider potential proxies for the implementation of an expanded policy of interpreter provision. First to test is April 2015, which is when the SLAS were first put into practice; then, July 1, 2017, at which point the SLAS were finalized and (nominally) made official practice in all North Carolina counties; then January 2018, the date of DoJ's first follow-up after SLAS warning of continued reports of noncompliance; then May 2019, the second follow-up; and finally, October 9, 2019, the final warning before the DoJ appears to back off (perhaps pacified by evidence of improvement).

The outcome variable for the first-stage analysis is $\Pr(Interpreter|Date)$: the probability of an interpreter being used in a given case, given that a case is before or after the kink point. Given that different years are slightly over- or under-represented in the data, and that the outcomes analysis will deal with defendant-level outcomes, using the probability of a case receiving an interpreter given the date at which it occurred has the same benefits as an aggregated share of events using interpreters and also keeps the unit of analysis at the case

level across all stages of my investigation. I also utilize $\Pr(Interpreter | Date, Hispanic)$ and $\Pr(Interpreter | Date, Non-Hispanic)$ as secondary outcome variables, given my hypothesis that the policy will have differential effects within the two populations. In Mecklenburg county, the overall probability an interpreter is used in a given case in this sample is 0.005, meaning 0.5% of cases use interpreters. The overall sample probability of an interpreter being used for a given case event is 0.007: we can expect an interpreter to be present in 0.7% of case events. In Wake county, fewer cases used interpreters: a mere 145, approximately half as many as in the Mecklenburg sample. This is despite slightly higher rates of Hispanic defendants, both overall (12.7%, over 11.5%) and among interpreter users specifically (93.7% versus 90.6%). The probability of a given case using an interpreter is 0.00242, or 0.2%; the probability of a given case event using an interpreter is approximately 0.3%. In both counties, the likelihood of a case event using an interpreter is higher than the likelihood of a case using an interpreter, suggesting that cases which use interpreters are "over-contributors," i.e., they have more associated events than non-interpreter cases on average. This comports with Rengifo et al.'s finding that cases with interpreters have longer hearing lengths on average and require more intensive/extended involvement from court actors, given the language barrier and the additional variable of an interpreter to contend with.

Calculated across the entirety of the Mecklenburg county dataset, $\Pr(Int | His)$ is 0.03884, meaning that, given that a defendant is Hispanic, there is a 4% chance of an interpreter being used in her case. $\Pr(Int | Non-His)$ is 0.000528, translating to a 0.05% chance of an interpreter being used in a case given that the defendant is not Hispanic. Interpreter use being eighty times more likely in cases with Hispanic defendants, as well as the simple matter of 91% of interpreter-use cases having Hispanic defendants, supports the secondary hypothesis that if interpreter use patterns change, they will be seen primarily within the Hispanic population. In Wake county, $\Pr(Int | His)$ calculated across the entire time frame is 0.0178, equaling a 1.8% chance of an interpreter being used given that a defendant is

Hispanic, while $\Pr(Int|Non-His)$ is 0.00017 – if a defendant is not Hispanic, there is a 0.017% chance an interpreter will be used. Again, we see that it is over 100 times more likely for interpreter intervention to occur in a case with a Hispanic defendant than a non-Hispanic defendant, supporting the dual suppositions that we can consider the Hispanic population a quasi-treatment population and that changes to interpreter policy will primarily affect this group.

Bail-level outcomes proved to be difficult to parse given the nature of their encoding in the online system. However, verdicts/dispositions were significantly more straightforward to code and utilize for analysis. Therefore, my second- and third-stage analyses realize regressions using the kink points previously laid out to gauge whether there exist changes in probability of pleading or being found guilty concurrently with any observed changes in interpreter provision. The outcome variables for the second-stage analysis are $\Pr(GuiltyVerdict|Date)$ and $\Pr(GuiltyVerdict|Date)$[1]. For the third-stage analysis, the outcome variables are $\Pr(GuiltyVerdict|Date, Hispanic)$ and $\Pr(GuiltyVerdict|Date, Hispanic)$; I will realize the analysis in full within the sample population of both Hispanic and non-Hispanic defendants to gauge whether a policy I expect to be primarily of relevance to the Hispanic population has differential effects on outcomes between the two groups.

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1. Pleading down and being found responsible to a lesser charge are considered "not guilty" observations for the purpose of this analysis.

SECTION 6

RESULTS

6.1 Interpreter Provision

Exploratory visualizations utilizing locally-estimated scatterplot smoothing (LOESS) curves suggest that the probability of receiving an interpreter in each county, given that a defendant is Hispanic or non-Hispanic, indeed changes over the time period captured in the sample. What's more, the trend $\Pr(Int|His)$ displays suggests a plausible relationship between some number of the five intervention dates, which are marked on these graphs with vertical lines[1], and interpreter provision.

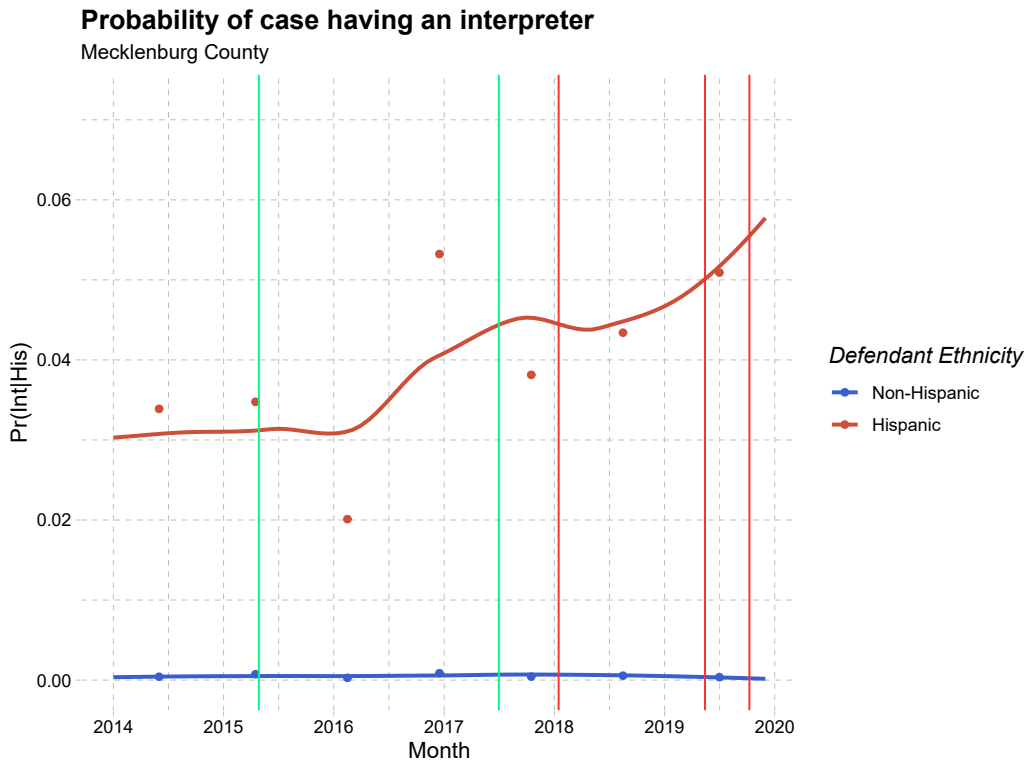**Probability of case having an interpreter**
Mecklenburg County

Figure 6.1: Probability of interpreter use, Mecklenburg

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1. The SLAS inception and SLAS completion dates are marked in green; the three subsequent warnings are marked in red.
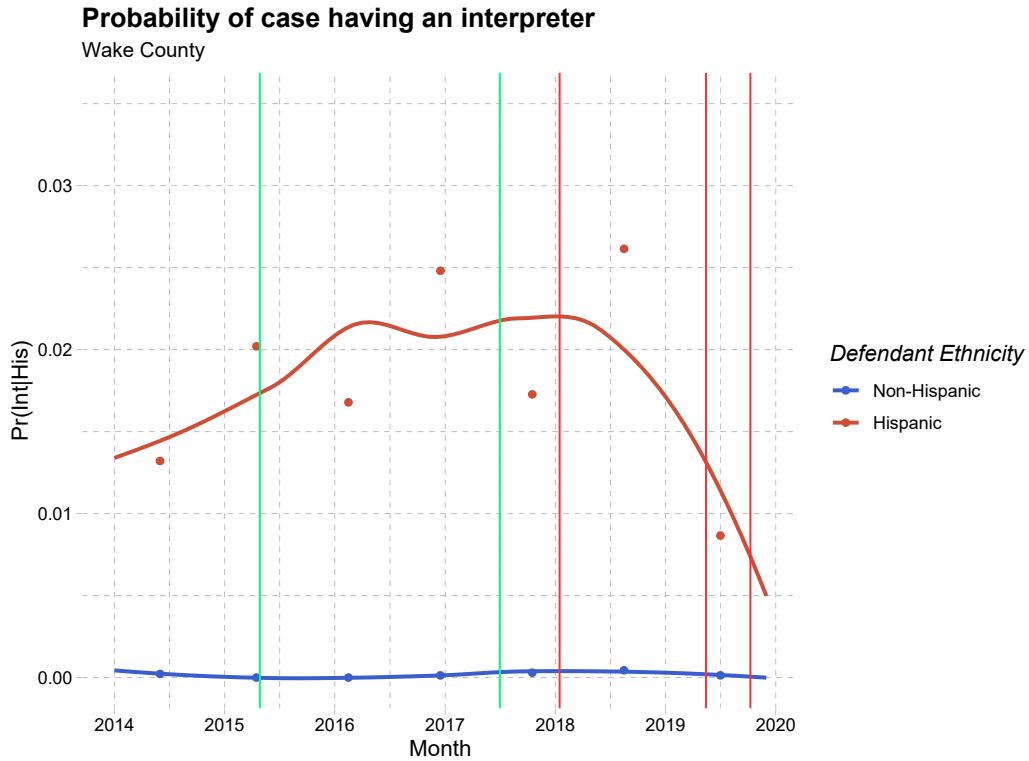
Figure 6.2: Probability of interpreter use, Wake

In Mecklenburg county, $\Pr(Int|His)$ begins to increase during the SLAS implementation period; the increase then slows and begins to reverse, only to begin increasing again after the first warning date. In Wake county, we see evidence of an increase which predates the SLAS implementation period but begins to increase more sharply post-SLAS start, then flatten out, and actually begin declining sharply after the first warning date. In both sample locations, the relative probability of a case receiving interpreter intervention given that the defendant is not Hispanic hovers around zero. The visually observable trends provide support for the appropriateness of the regression kink design, and for the selection of these five dates as potential inflection points. With their selection justified, I progress to my results.

6.1.1 Mecklenburg

The regression results from Mecklenburg county suggest that the interventions of interest – the creation of the Standards for Language Access Services and the Department of Justice follow-ups – indeed were associated with an increase in how likely a defendant was to receive an interpreter. These results were of significantly greater magnitude when measured only within the Hispanic population.

My initial regression specifications[2] find a case's filing date being post-SLAS beginning and post-SLAS end both have statistically significant positive effects on the rate at which the probability of receiving an interpreter increased. Probability of receiving an interpreter was already increasing on average across this time period; the RKD uncovers whether certain events made the probability of receiving an interpreter increase faster (or stop increasing, or begin decreasing), thereby estimating the impact of the SLAS policy and the DoJ warnings on a defendant's likelihood of receiving an interpreter. Specifically, among Hispanic defendants, the probability of a defendant receiving an interpreter in cases filed after the SLAS was initialized in 2015 increased 20% faster than it had been increasing before ($p < 0.05$)[3]. In the specification that compared pre- and post-SLAS finalization, the probability of receiving an interpreter increased 28% faster than it had been after the SLAS were finalized ($p <$ 0.05). The character of these results held when $\Pr(Int)$ was measured within both Hispanic and non-Hispanic defendants, though their magnitude decreased; in analyses of only non-Hispanic defendants, the coefficients remain of the same sign, but were either of considerably smaller magnitude (all < 0.02), not statistically significant, or both. These findings are entirely consistent with what we'd expect based on the hypothesis that changes in interpreter provision were driven almost entirely by increased provision to Hispanic defendants, and

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2. Observations of probability are aggregated to the day level in the final specification. All bandwidth calculations/selection are done automatically via the rdrobust package (Calonico et al., 2023), optimizing for MSE.

3. Only robust estimates and standard errors are reported.

further evince the position that Hispanic defendants were the primary beneficiaries of this policy.

TABLE 1: RKD, EFFECT ON SLOPE OF PR(INT), MECKLENBURG

	SLAS start		SLAS finalization		Warning 1	
	(1)	(2)	(1)	(2)	(1)	(2)
	All	*Hispanic*	*All*	*Hispanic*	*All*	*Hispanic*
After kink	0.0403*	0.1999*	0.0493**	0.2810*	0.0347*	0.0389
	(0.0176)	(0.0981)	(0.0189)	(0.1370)	(0.0169)	(0.0747)
Obs.	2191	2191	2191	2191	2191	2191
Bandwidth est.	189.153	226.212	212.281	221.602	225.450	341.625

Figure 6.3: Regressions 1, 2, & 3, All and Hispanic, Mecklenburg county

The specifications which compared the entire period preceding the DoJ warnings to the entire periods afterwards found a positive, but not statistically significant, effect from the first warning $\Pr(Int|His)$'s rate of change. However, given the shape of the data displayed in 6.1, I questioned whether the effect captured by Regression 2 was actually an artifact of the impact of DoJ warnings *in addition* to the finalization of the SLAS, not the finalization alone. To estimate whether these warnings had an impact on $\Pr(Int)$'s rate of change post-policy, not just an impact above and beyond any of the other dates, I ran a secondary series of regressions which compared $\Pr(Int)$ in the time period before the policy change and after the policy but before the warnings, and in the time period after the policy but before the warnings and after the warnings. In other words, I wanted to see if, even after the policy had been implemented, the warnings had an additional effect on the trend of $\Pr(Int)$.

Being post-SLAS *start*, i.e. post-April 2015, remained a statistically significant kink point in the function of $\Pr(Int)$ over time even without including the post-warning observations, suggesting that the SLAS alone did have some impact on interpreter provision regardless of DoJ monitoring. However, when I measured whether being post-SLAS completion increased $\Pr(Int)$ relative to being pre-SLAS completion in only the following six months, i.e. *without*

TABLE 2: RKD, NO POST-WARNING DATES, MECKLENBURG

	SLAS start		SLAS finalization	
	(1)	(2)	(1)	(2)
	Non-Hispanic	**Hispanic**	**Non-Hispanic**	**Hispanic**
After kink	0.0173	0.2059*	-0.0183	-0.2378
	(0.010)	(0.1027)	(0.0368)	(0.4113)
Obs.	1462	1462	1462	1462
Bandwidth est.	220.134	166.535	100.956	109.483

Figure 6.4: Regressions 3 & 4, Hispanic and Non-Hispanic, Mecklenburg county

including dates after the first warning, I found the effect seen in Regression 2 was much reduced and no longer statistically significant by any metric ($p < 0.8$). This communicates that an increase that occurred post-warning(s) was the primary driver of the clear increase in $\Pr(Int)$ we see post-SLAS completion in Regression 2. Regression 5, seen below, suggests that, in the time period during which the SLAS were ostensibly in full effect, $\Pr(Int)$ increases at an over 75% faster rate after warning 1, suggesting that receiving warnings from DoJ may have been driving the increase we see in $\Pr(Int)$ post-SLAS not SLAS in and of itself; however, this finding was not traditionally statistically significant ($p < 0.29$). I therefore conclude that the statistically significant increase in $\Pr(Int)$'s rate post-SLAS finalization seen in the first regression functioned through a combination of the policy's finalization and the continued compliance monitoring/warnings from the DoJ.

6.1.2 Wake

In Wake county, however, the regression results suggest that both SLAS and the DoJ's monitoring were significantly less successful at increasing interpreter provision. None of the kink points tested had a statistically significant relationship with the function of the probability of receiving an interpreter.

	Warning 1	
	(1)	(2)
	Non-Hispanic	**Hispanic**
After kink	0.0020	0.7537
	(0.0120)	(0.7059)
Obs.	914	914
Bandwidth est.	73.995	70.128

Figure 6.5: Regression 5, Hispanic and Non-Hispanic, Mecklenburg county

TABLE 4: RKD, EFFECT ON SLOPE OF PR(INT), WAKE

	SLAS start		SLAS finalization		Warning 1	
	(1)	(2)	(1)	(2)	(1)	(2)
	All	**Hispanic**	**All**	**Hispanic**	**All**	**Hispanic**
After kink	-0.0048	-0.067	-0.0011	-0.0001	-0.0074	-0.0635
	(0.0095)	(0.0823)	(0.0042)	(0.0342)	(0.0076)	(0.0556)
Obs.	2191	2191	2191	2191	2191	2191
Bandwidth est.	240.239	222.8367	372.4935	358.5929	254.4616	329.0298

Figure 6.6: Regressions 6, 7, & 8, All and Hispanic, Wake county

6.2 Guilty Pleas & Verdicts: Aggregate

Though the probability of entering guilty pleas and receiving guilty verdicts did change over time in both counties, aggregated regression results for Mecklenburg county displayed no effect of any of the kink points on the function of a defendant's probability entering guilty pleas nor receiving a guilty verdict. Not only were none of the kink points statistically significant, the magnitudes associated were extremely low. Similar results were seen in Wake county, which conformed with my priors based on the lack of meaningful change in interpreter provision at any of the kink points in Wake. For this section of the analysis, I fail

to reject the null hypothesis that increased likelihood of receiving an interpreter as a result of the policy change had an effect on the likelihood of entering a guilty pleas or receiving a guilty verdict for all individuals undergoing criminal prosecutions in North Carolina courts during the period contained in the sample.

TABLE 5: RKD, DEFENDANT OUTCOMES, MECKLENBURG

	Guilty pleas	Guilty verdicts
	All defendants	All defendants
SLAS start	0.0099** (0.00317)	0.0049** (0.0018)
SLAS complete	0.0011 (0.0006)	0.0003* (0.0001)
Warning 1	-0.0000 (0.0006)	0.0001 (0.0002)
Obs.	20136	71714
Bandwidth est.	447.374; 414.894; 128.244	92.377; 545.672; 534.103

Figure 6.7: Regressions 9 & 10, Verdicts and Pleas, All, Mecklenburg county

TABLE 6: RKD, DEFENDANT OUTCOMES, WAKE

	Guilty pleas	Guilty verdicts
	All defendants	All defendants
SLAS start	-0.0010 (0.0017)	0.0016 (0.0012)
SLAS complete	-0.0005 (0.0004)	-0.0006 (0.0003)
Warning 1	0.0000 (0.0005)	0.0007* (0.0003)
Obs.	28740	71306
Bandwidth est.	186.093; 525.056; 488.163	150.5857; 395.130; 357.339

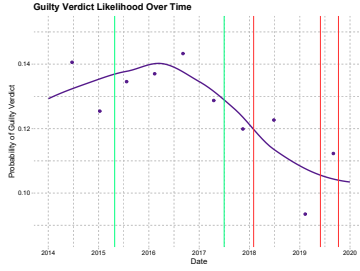**Figure 6.8:** Regressions 10 & 11, Verdicts and Pleas, All, Wake county

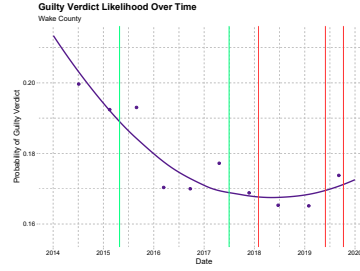**Figure 6.9:** Guilty verdict trend, Mecklenburg

Figure 6.10: Guilty verdict trend, Wake

6.3 Guilty Pleas & Verdicts: Hispanic vs. Non-Hispanic

Although the RKD showed no effect on defendant-level outcomes when conducted within the entire population of defendants in the sample, I progressed to the third stage of my analysis, testing whether patterns of guilty pleas and verdicts changed at each of the three dates[4] I had reason to believe impacted interpreter provision for Hispanic and non-Hispanic defendants separately.

TABLE 7: RKD, DEFENDANT OUTCOMES, MECKLENBURG

	Guilty pleas		Guilty verdicts	
	(1)	(2)	(1)	(2)
	Non-Hispanic	*Hispanic*	*Non-Hispanic*	*Hispanic*
SLAS start	0.0156**	-0.0076	0.0055**	-0.0025
	(0.0048)	(0.006)	(0.0019)	(0.0039)
Obs.	16409	3727	64015	7699
Bandwidth est.	100.953	148.560	87.221	155.538

Figure 6.11: Regression 12 & 13, Verdicts and Pleas, Hispanic & Non-Hispanic, Mecklenburg county

Indeed, in Mecklenburg county, the regressions demonstrated that if a case was disposed (i.e., there was an opportunity for an interpreter to be appointed before the case concluded) after the SLAS first came into effect (which was the most robust and consistent of the viable kink points), the function which dictated probability of a Hispanic defendant both

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4. SLAS start, SLAS finalization, and the first warning.

pleading and being found guilty decreased at a faster rate. However, the effect size was small, and the (robust) standard errors large by comparison; none of these coefficients were statistically significant at traditional levels. For non-Hispanic defendants in Mecklenburg, which functioned as a placebo test, the SLAS start date in fact had a statistically significant positive relationship to the function of probability of guilty plea and verdict; the consistent sign chance of the relationship when comparing Hispanic defendants (for whom we would hypothesize a negative effect) and non-Hispanic defendants (for whom we would not) may be evidence that the (very small) negative relationship between the kink point and the probability of pleading/being found guilty is not due to chance.

TABLE 8: RKD, DEFENDANT OUTCOMES, WAKE

	Guilty pleas		Guilty verdicts	
	(1)	(2)	(1)	(2)
	Non-Hispanic	*Hispanic*	*Non-Hispanic*	*Hispanic*
SLAS start	-0.0001	-0.0003	0.0011	0.0046
	(0.0025)	(0.004)	(0.0013)	(0.0027)
Obs.	23917	4826	62675	8631
Bandwidth est.	151.778	149.667	141.726	186.168

Figure 6.12: Regressions 14 & 15, Verdicts and Pleas, Hispanic & Non-Hispanic, Wake county

Expectedly, among both Hispanic and non-Hispanic defendants in Wake county, none of the kink points had an effect on guilty pleas or verdicts, lacking even the consistency of effect direction seen in Mecklenburg. I did not execute the aggregated or ethnicity-split RKDs in Wake with the expectation of non-null results; instead, they function as a second-order placebo test to compare with the results of Hispanic defendants in Wake, for whom the first-stage analysis demonstrated there was a policy impact.

Ultimately, while I cannot reject the null hypothesis that the increase in interpreter provision in Mecklenburg had no effect on pleas and verdicts, I am of the opinion that

these results also do not negate the hypothesis that increased interpreter provision decreases the likelihood of a guilty verdict through decreasing likelihood of pleading guilty. The fact that a negative effect on probability of guilty pleas and verdicts was seen only among the policy target population, but not in the population that received minimal benefit, and was suggested in Mecklenburg county, where an increase in interpreter provision was seen, but not in Wake, where it was not, is exactly what we would expect to see if these results were not due to chance, despite small effect sizes and p-values that are not statistically significant by traditional margins. A more definitive conclusion on the effect of expanded interpreter access on outcomes could potentially be pinned down with more certainty with a sample that included a greater number of interpreter users, as less than 1% of the sample used an interpreter and effect sizes were small even in the first-stage analysis. It follows, if one's probability of receiving an interpreter only increased 2%, even if this is 1.5 times the prior probability, a subsequent effect on outcomes relies on a very slim likelihood of interpreter use.

SECTION 7

CONCLUSIONS & POLICY RECOMMENDATIONS

My results suggest that when federal entities observe noncompliance and intervene in state language access policy, both the construction and implementation of an expanded language access policy and demonstrated capacity for continued monitoring/enforcement by the federal entity matter for how effectively the state increases language access; but, if courts do not have access to enough qualified personnel, it creates a roadblock neither the policy nor continued federal monitoring can overcome. The importance of effective language access policy is underscored by the suggestion in the data that interpreter access may reduce the likelihood of pleading or being found guilty for those groups of defendants primarily in need of language access/affected by the policy change. With these core findings in mind, I address the seemingly heterogeneous effect of the policy and intervention on the two counties included in this analysis; give a brief opinion on the cost-benefit and make recommendations for future federal interventions into language access policy; and discuss the most promising avenues for future research to build on the work done here.

7.1 County-Level Heterogeneity

Evidently, the DoJ's investigation and NCAOC's subsequent implementation of the Standards for Language Access did not have the same effect on interpreter access in all jurisdictions in North Carolina. In this section, I explore what might be behind this unexpected heterogeneity; I review three potential causes, willingness, access, and need, and propose that access and need are the primary vehicles for the divergence between the policy's impact in Mecklenburg and Wake counties.

Though Wake displayed a higher percentage of Hispanic defendants than Mecklenburg county, a lower percentage of Wake defendants used interpreters. Is this because Wake county

was less able or willing to provide interpreters, because fewer individuals in Wake county needed interpreters, or some combination of the two? Data from the United States Census indicates that approximately 55,000 Wake county residents are limited English-proficient, while 79,000 limited-English proficient persons reside in Mecklenburg - 4.6% and 6.8% of the counties' populations respectively [1]. The difference in proportion of LEP individuals in the two counties supports the theory that, at least in part, the expansion of language access policy had no effect in Wake because fewer people need interpreters in Wake, and any expansion caused by the policy would have been minimal. But I remain skeptical that need entirely explains the heterogeneity for two reasons. Firstly, although the drop-off in likelihood of receiving an interpreter in Wake cannot be conclusively linked to any of the kink points, the steep decline in the probability of receiving an interpreter definitively occurs, and is inconsistent with the largely stable (and even increasing) levels of interpreter provision prior. Secondly, the difference in the proportion of LEP individuals between the counties does not match the difference in proportion of interpreter provision. Approximately 1.5 times as many LEP people live in Mecklenburg as do in Wake; but defendants in Mecklenburg were 2.5 times more likely to receive an interpreter. I turn then to two other potential mechanisms to supplement this explanation.

Anecdotal reports suggest that Mecklenburg county was reprimanded by the state administrative office for "over-supplying" interpreters prior to the DoJ investigation Abel and Longobardi [2012]. It is possible that Mecklenburg county courts possess some unique willingness to comply with liberalized language access policy, and that instituting expanded policies and/or receiving federal warning threats only results in increased compliance if the county possesses underlying willingness, i.e. actually wants to realize the policy; among courts that are unwilling to liberalize their interpreter policy, it follows, no amount of in-

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1. These figures are much lower than the percentage of interpreter users in the sample, which suggests either that limited English-proficient people are underrepresented in populations of criminal defendants, indicating some diminished likelihood to offend compared to fluent English-speakers, or that some number of defendants in the samples were limited English-proficient but did not receive an interpreter (or both).

creased monitoring nor threat of sanction will be sufficient to increase rates of interpreter provision. However, this mechanism intuitively chafes with the evidence that receiving a DoJ warning contributed to the post-SLAS-finalization increase in interpreter provision in Mecklenburg. If Mecklenburg was entirely willing to enforce the policy of its own volition, why did the warning compounded with the full SLAS rollout create a jump in interpreter provision beyond just the finalization of the SLAS? Would the presence of a policy which allowed Mecklenburg to provide interpreters to anyone who might need them not be sufficient justification for an eager jurisdiction to fully effectuate that policy? Furthermore, some increase in interpreter use prior to and across the rollout of the Standards of Language Access Services is visible in Wake County, inconsistent with the idea that the county is completely unwilling to effect a policy change. I therefore favor the access and need mechanisms.

To evaluate the possibility of differential access, I reviewed the 2018 registry of certified interpreters in North Carolina. In District 10, Wake County, thirty-one certified spoken foreign language court interpreters are registered. Two are staff interpreters who exclusively interpret for Wake County courts. Seven name Wake as their county of residence. The other twenty-two live in other counties. On average, 3.77 of the interpreters who listed Wake as their county of residence were also listed on the registries for neighboring counties, just over half of the Wake-residing professionals. In District 26, Mecklenburg County, twenty-six certified spoken foreign language court interpreters are registered. Again, two are staff interpreters who exclusively interpret for District 26 courts. Fifteen are local to Mecklenburg; the remaining nine live elsewhere. 6.9 of the fifteen Mecklenburg residents, a bit under half, were crosslisted on registries for neighboring counties on average.

Despite a higher share of Hispanic defendants in Wake than in Mecklenburg, less than half as many interpreters reside in Wake county, and the share of these that tend to be cross-listed in neighboring counties is about 10% more. Though more interpreters serve Wake county overall, all of the twenty-two non-residents are cross-listed on multiple other counties,

including their counties of residence. The drop-off in probability of receiving an interpreter in Wake county is roughly simultaneous with the increase in probability of receiving one in Mecklenburg; though this particular fact is only circumstantial evidence of the access theory, it suggests a world where cross-listed interpreters certified in Wake are pulled away as neighboring counties begin expanding their interpreter provision, and Wake is left with fewer interpreters available to meet the demands of the expanded SLAS in its own courts.

7.2   Policy Recommendations

The results obtained from Wake and especially Mecklenburg counties seem to indicate that the Justice Department's decision to monitor North Carolina courts for a year following the resolution of the investigation in October 2022 to ensure compliance with the newest set of standards is a necessary one. Given that the post-SLAS-finalization uptick in rate of interpreter assignment in Mecklenburg county only holds when including cases following the January 2018 warning follow-up, it seems apparent that the courts only became motivated to genuinely effect a difference in their policy of interpreter provision when they learned the DoJ was still closely monitoring the status of their programming and would be aware – and enforce consequences – when they failed to zealously follow the standards they had set out. Therefore, in other cases where language access is less than adequate/out of compliance with civil rights standards, it is highly necessary to continue monitoring, site visits, and interviews with relevant parties even after the party agrees to make changes to policy, and to tie compliance warnings to consequences that are meaningful to the (e.g., losing needed federal funding, as DoJ did in its warnings to NCAOC).

Specifically, it may be prudent for the DoJ to follow up on the investigations in Rhode Island and Colorado, which both quickly agreed to change their interpreter policy – it is not unfounded to infer that North Carolina came under as serious of scrutiny as it did comparatively not just because of the gravity and number of Title VI complaints but also

because it initially pushed back on the DoJ's request for policy change, citing lack of funds. These results suggest it is not enough to broadcast that a change in policy is required to keep federal funding; continuous monitoring and communication must occur to show the relevant actor that the new policy must actually be carried out by its respective agents for the actor to escape consequences. In other words, these findings demonstrate enforcement of policy – which has historically been the biggest struggle of the federal government's ability to provide language access – may be just as important for policy outcomes as the policy itself.

7.2.1   Cost-Benefit Analysis

A comprehensive, conclusive cost-benefit analysis is made unrealistic in this setting by the inconclusive results I return for whether expanding language access policy changed defendant-level outcomes and by how much, as well as the profound lack of clarity around what the DoJ investigations entailed (and therefore what costs they might have incurred). However, I do find the suggestion that expanded language access policy can contribute to reducing the likelihood of a guilty verdict for vulnerable populations a compelling benefit of this policy, considering the literature mentioned prior agrees that a criminal conviction can have deleterious effects on future economic opportunities. The costliness of monitoring courts for compliance depends on whether the monitoring was sustained over extended periods or occurred at random checkpoints; how many courthouses/jurisdictions data was gathered in; whether data was gathered in-person and remotely; how it was analyzed; whether special counsel were appointed to review complaints and opine on compliance, and if so how often and how many; and variable costs of travel and lodging associated therewith, assuming the likelihood of some in-person component. However, what is known is the DoJ's estimate of how much the Standards for Language Access Services themselves cost North Carolina Courts to implement. The Department of Justice's official letter of sanction to the North Carolina Administrative Office of the Courts writes that the courts could provide adequate

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interpreters at the cost of 0.3% of its total budget. In 2012, when the letter was issued, this was $463.8 million, making the cost of providing adequate interpreters $1.4 million per year. If we assume that in Mecklenburg county, in the time period after the SLAS were fully implemented and the DoJ's first warning had come into effect, the county indeed came fully into compliance and provided interpreters in all cases where they were appropriate, then the cost to the county for 2018 and 2019 of the SLAS was approximately $2.8 million. In the sample, 144 defendants were provided interpreters during this time period; based on the estimate that our sample represents 5% of cases filed in Mecklenburg, this puts the total defendants provided interpreters during this period approximately 2,880. This figure puts the cost of the policy at about $972 per defendant provided a qualified interpreter. According to the Administrative Office of the U.S. Courts, the going rate for professional interpreters ranges from $300-$566 per day depending on certification level; and considering that proceeding lengths are highly variable, an average of 2-3 days of interpreting services per defendant who uses an interpreter checks out.

The benefits of the policy are also obfuscated, in no small part due to the unclear results of my analysis. But the literature is clear that, for the marginal defendant, the financial benefit of avoiding a criminal conviction - which my analysis suggests is a viable consequence of increased interpreter access - can be enormous, especially when considered over an extended period. Dobbie, Goldin, and Yang (2018) put the value of avoiding pre-trial detention for one defendant between $55,143 and $99,124, largely based in the increased wages a defendant can expect to benefit from by avoiding a criminal conviction. The Prison Policy Initiative, meanwhile, estimates that the average earnings lost across a lifetime by being incarcerated are over $500,000. What's more, the benefits of language access policy are not contained to defendants who need interpreters. As the DoJ points out in its sanction letter, "it costs money and time to handle appeals and reversals based on the failure to ensure proper interpretation and effective communication. Similarly, delays in providing interpreters often

result in multiple continuances, which needlessly waste the time and resources of court staff"
(2012, 3). In comparison to tens or even hundreds of thousands of dollars in benefit per case
accrued to defendants, judges, interpreters, and court staff, a cost of less than $1000 per case
to adequately provide interpreters pales.

I caution that the numerical estimates provided here are speculative, as the results of the
outcomes analysis are far from definitive, the confidence intervals large, and cost-benefit only
a tangential concern of this research. I provide this brief evaluation of the costs and benefits
of expanding language access in this setting only as a reminder that language access policy
is in no way free from economic repercussions; indeed, for its stakeholders, the financial
implications of language access to the justice system may be quite meaningful, and the
benefits far more lucrative than the costs are burdensome.

7.3   Recommendations for Future Research

With regard to further research, as I've emphasized, large-scale, policy-focused, and statistically-
based attempts to gauge the importance of interpreter policy and the effect of limited English
proficiency on outcomes and ability to navigate the U.S. justice system have thus far been
seriously limited. The most direct extension of the research contained in this thesis would be
to execute this same analysis on every North Carolina county, once the state has uploaded
all county filings to the online portal, and over a more extended length of time. Given
the appearance of pre-trends of increasing interpreter provision in both counties going into
2014, I would recommend beginning the analysis in 2010 before the DoJ investigation and
testing the public announcement of investigation in 2012 as a sixth kink point. Though
time-consuming, especially in the data collection phase, the heterogeneous county-to-county
results indicate that executing the analysis in full within each jurisdiction overseen by the
NCAOC may be necessary for a complete picture of the policy's efficacy, though based on
this research I predict that those counties with a readier supply of interpreters saw a more

effective rollout. Another important avenue, mirroring the policy-focused suggestion, would be an evaluation of interpreter use policy, provision, and outcomes within Rhode Island and Colorado, and, to a lesser extent, the other states called out by DoJ for noncompliance that were not investigated to the extent North Carolina was. Is it possible for new language access policy to effectuate a meaningful expansion in language access in the absence of enforcement? The results from Mecklenburg county suggest that expanded language access policy on its own can lead to increased interpreter access, but also that enforcement (or demonstration of enforcement/monitoring capacity) may be necessary for a policy to be fully realized. In the absence of regular DoJ follow-ups, were these states less able to increase interpreter access? Not only would extending this analysis to other states test the durability of its findings, interrogation of the conditions that make positive policy change easier or more likely more generally is absolutely worthwhile for legal scholars and policymakers. In fact, given that criminal records in the United States are a matter of public record and many states, including Illinois and California (states in the top three of limited English-proficient populations), have similar online filing systems, a particularly ambitious goal might be to realize similar analyses in multiple distinct regions in the United States which differ on important aspects of interpreter policy, LEP demographics, or interpreter training/certified interpreter access. Though such an undertaking would be no easy task, the initial foray into the question of interpreter impact on outcomes undertaken in this thesis project demonstrates, if nothing else, how worthwhile a line of inquiry it would be.

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