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ABSTRACT

Effect of State E-Verify Laws on H2A Program Utilization

By

RAYMOND M. HENRY

March 14, 2015

Committee Chair: Dr. Barry T. Hirsch

Major Department: Economics

The United States enjoys a per-capita gross domestic product more than five times the size of Mexico (World Bank, 2015). Yet the immigration policies of the United States fail to recognize the incentives workers in Mexico have to immigrate, legally or otherwise, into the United States. The law alone fails to control the movement of people across a 1,900-mile land border. Immigration has contributed to the economic and cultural dynamism of the United States. In the short-run, it may create economic winners and losers, leading to domestic tension.

After Congress debated and then rejected President George W. Bush's immigration overhaul in 2007, state governments started adopting laws and rules targeting illegal immigrants. Many of those laws forced employers to use the electronic E-Verify system to check whether prospective hires were eligible to work in the United States. Typically, the primary goal was to bar illegal immigrants from the workforce. Additional goals included boosting the employment prospects and earnings of legal residents, and encouraging illegal immigrants to voluntarily leave markets governed by E-Verify requirements. Politicians focused particular attention on the U.S. agricultural industry, which is not surprising since U.S. Department of Agriculture surveys show roughly half the agricultural workforce is working in the country illegally. Farmers say they hire

illegal workers because they cannot find enough U.S. workers to harvest labor-intensive produce and livestock.

Supporters of the E-Verify law in Georgia said one of their policy goals was to encourage farmers to secure legal, foreign laborers through the federally run H2A visa program. The H2A system allows growers facing domestic labor shortages to import foreign laborers for up to 10 months, though the program is bureaucratically cumbersome and requires that cost-sensitive growers pay above-market wages.

To determine whether E-Verify laws encourage H2A use, the author reviewed every state E-Verify law affecting the agricultural industry. After aggregating H2A usage data at the state level, the author conducted a fixed-effects regression that controls for years, monthly seasonal fluctuations, state effects, H2A wage costs, and the relative strength of a state's E-Verify law. While there is anecdotal evidence that E-Verify laws may disrupt labor markets, there is little statistical evidence that state E-Verify laws cause farmers to increasingly rely on the H2A system. Surprisingly, there is statistical evidence that the strictest E-Verify laws may reduce H2A usage.

EFFECT OF STATE E-VERIFY LAWS ON H2A PROGRAM UTILIZATION

BY

RAYMOND M. HENRY

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree
of
Master of Arts of Economics
in the
Andrew Young School of Policy Studies
of
Georgia State University

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Raymond M. Henry
2015

ACCEPTANCE

This dissertation was prepared under the direction of the candidate's Thesis Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Master of Arts in Economics in the Andrew Young School of Policy Studies of Georgia State University.

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I dedicate this thesis to my wife, Brianne M. Henry, and my sons, Jude and Elias.

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Introduction

The United States enjoys a per-capita gross domestic product more than five times the size of Mexico (World Bank, 2015). The two countries share a roughly 1,900-mile land border. Yet the immigration policies of the United States fail to recognize the incentives that draw workers from Mexico and South America to the United States, legally or otherwise. Immigration has undoubtedly contributed to the economic and cultural dynamism of the United States. It also creates short-run labor displacement that rewards some and penalizes others.

Congress refused President George W. Bush's plan to overhaul federal immigration laws in 2007, contributing to a political stalemate. As the legislation was debated and ultimately rejected, state governments from tiny Rhode Island to Georgia began passing laws or adopting rules requiring employers to use an electronic system called E-Verify to check whether prospective hires were legal residents and therefore eligible for work.

Politicians focused particular attention on the U.S. agricultural industry, where federally administered surveys show roughly half of crop workers immigrated illegally into the United States (Hertz, 2014). As the E-Verify laws spread, the agricultural lobby warned that E-Verify rules could drive away its workforce and inflict economic harm. After witnessing a particularly controversial state-led immigration crackdown in Arizona, Georgia's largest agricultural lobbying group, the Georgia Farm Bureau, passed a resolution at its 2010 annual convention (Henry, 2010) preemptively warning Georgia's state lawmakers not to react similarly.

"We think immigration is a federal issue, and it needs a federal solution," said Jon Huffmaster, the Farm Bureau's legislative director. "And we think a patchwork of state laws could cause more problems than it solves."

Farmers routinely complain they cannot find enough U.S.-based workers willing to work on their knees in hot, dusty fields to harvest produce that cannot be collected mechanically. Migrant workers, some here legally, many not, travel along agricultural corridors during harvest season and will readily work in these conditions.

E-Verify supporters say farmers can avoid illegal labor if they participate in a federally run agricultural guest-worker program known as the H2A system. The U.S. Immigration and Nationality Act of 1952 created special categories of guest workers, including agricultural laborers, who can be employed in the United States for finite periods. H2A rules set by the U.S. Department of Labor (2012) allow farmers to import full-time foreign workers for temporary or seasonal jobs lasting up to 10 months.

Georgia state Rep. Matt Ramsey, a Republican, introduced legislation requiring many farmers and other employers to use the E-Verify system. He acknowledged the growers had an alternative to illegal labor through the H2A program.

“I continue to be mystified by the suggestion that House Bill 87 will impact the agriculture industry's access to a legal workforce. The H2A visa is a system set up by the federal government so farmers can lawfully access an unlimited number of foreign workers to come help on our farms,” Ramsey wrote (2011) in response to critics. “... The Georgia Peach Council has been using it for several years. So can all other growers.”

Though the H2A program is an alternative to hiring illegal labor, it is costly to farmers and inflexible compared to hiring migrant labor on the open market. To incentivize U.S. growers to try hiring U.S. workers, federal law requires that foreign H2A workers receive subsidized transportation to the United States, premium wages, and housing. Also, farmers must declare in advance where their H2A workers will work and cannot easily shift those foreign workers to

alternative work sites if poor weather or growing conditions hamper a harvest. This requirement increases the risk that farmers will have to pay H2A workers even if they are idled by conditions outside a grower's control.

Farmers have good reason to fear any market change that raises production costs. Since growers produce easily substitutable commodities for national or international markets, a slight rise in price to offset increased labor costs can lead to steep drop-offs in sales and revenue. For example, a 1 percent increase in cucumber prices could prompt a reduction in demand ranging from 30 percent to 67 percent, according to a U.S. Department of Agriculture survey of own-price commodity elasticities (2012). If the cost of labor increases, farmers of commodity products must accept either a lower price-cost margin or sell a lot less.

Immediately after Georgia's E-Verify law passed in 2011, there were anecdotal signs of potential labor trouble in the agriculture industry. Fliers on Hispanic storefronts in Lyons, Georgia, advertised free transportation to field hands willing to pick jalapenos and banana peppers in Florida and blueberries in the Carolinas, states that had less-strict or no E-Verify laws (Brumback et al., 2011). Suggesting an outflow of workers, farm laborers in Lyons could no longer buy same-day bus tickets out of town and instead had to book days in advance.

Workers worried about the new law questioned whether they would return to Georgia for the 2012 harvest.

"I think this law is difficult because they don't want to let us work here. We're not delinquents," said Alfredo Perez, who arrived illegally from Mexico in 2008 (Brumback et al., 2011). Perez said in an interview he typically traveled between Florida, Michigan and Georgia picking crops. "We usually come here during onion season, because of the law, we're going to have to think about whether or not we'll come back."

Seeking to pressure state leaders into overturning or limiting the law, Georgia farmers reported in late June 2011 that they had 11,000 unfilled agricultural jobs, according to an informal survey conducted by the Georgia Department of Labor (Henry, 2011a). The results of the survey should be viewed with caution. State officials made no effort to survey a representative sample of growers, and those with the worst labor problems may have been the most likely to respond. It was unknown how many positions had gone vacant in prior years before Georgia debated E-Verify laws. Poor working conditions could have contributed to those vacancies independent of political action. More than half of the vacant jobs paid less than \$9 per hour and lasted less than six months. Few growers offered any additional benefits.

Reacting to farmer complaints, Georgia Gov. Nathan Deal ordered correction officials to identify probationers willing to work for pay harvesting crops. The experiment was short-lived and provided little relief for farmers struggling to find labor. The author watched as probationers walked off a hot cucumber field in Leslie, Georgia, frustrated by the hard conditions. "Tired. The heat," said 33-year-old Tavares Jones, who quit early (Henry, 2011b). "It's hard work out here."

Literature Review

Economists have attempted to quantify the effects of E-Verify laws since states began adopting them starting in 2006. A brief summary of that academic work follows.

Amuedo-Dorantes and Bansak found that E-Verify laws principally reduce the labor demand for unauthorized male workers. The probability an undocumented female worker remained in a state's labor force after it adopted an E-Verify law dropped by roughly 7 percentage points, compared to 3 percentage points for men (Amuedo-Dorantes et al., 2012). The authors concluded that enactment of E-Verify laws actually raise the share of unauthorized workers in the agricultural industry because the sector is exempt from E-Verify in several states.

Bohn, Lofstrom and Raphael estimated the adoption of Arizona's E-Verify law in 2007 resulted in a statistically significant reduction of the state's Hispanic noncitizen population compared to a synthetic control group representative of Arizona (2011). Using a similar difference-in-difference method, the authors also found rental vacancies had increased compared to the synthetic control group. The authors considered this significant since past research and surveys show illegal immigrants are more likely to live in rental housing than the rest of the population.

A follow-up study using similar methods concluded that Arizona's E-Verify law pushed likely unauthorized workers from the formal labor sector into the informal labor market, including as independent contractors, to dodge E-Verify requirements. Two years after the E-Verify law was implemented in Arizona, the employment rate of non-citizen Hispanics was 11 to 12 percentage points lower than comparison states (Bohn et al., 2012). Meanwhile, difference-in-difference calculations suggested the self-employment rate for non-citizen Hispanic males rose 8.3 percentage points higher than the synthetic control group.

E-Verify laws targeting private-sector employers reduce pay by roughly 8 percent for Mexican workers who fit the profile of likely illegal immigrants (Orrenius et al., 2013). The laws did not appear to significantly affect whether men who fit the profile of illegal workers were employed. However, employment for women who fit the profile of illegal workers increased by 3.5 percent. The authors concluded that as E-Verify rules reduced pay for men, women in affected households may enter the workforce to recoup lost income.

This Study's Contribution

Researchers have not studied the potential linkage between state E-Verify laws and farmer utilization of the H2A foreign agricultural guest worker program. This study will fill this gap in knowledge by applying a fixed-effects OLS regression to data collected by the U.S. Department of Labor showing H2A program usage from 2007 through 2014, a period in which multiple states adopted various types of E-Verify laws and rules affecting the agriculture industry. The results suggest E-Verify laws do very little, if anything, to encourage H2A usage. Counterintuitively, the strictest E-Verify laws may actually decrease H2A usage.

State E-Verify Laws

State governments have adopted a range of laws requiring or promoting use of the E-Verify system. The review below is based on legislative information compiled by the National Conference of State Legislatures (Meyers et al., 2012) and supplemented by the author's analysis of each state law or regulation. A detailed analysis of state laws can be found in Appendix A.

For the purpose of this paper, enacted E-Verify laws were assigned to one of five qualitative categories.

Mandatory E-Verify usage: Most, if not all, agricultural firms in a state must use the E-Verify system. Violators may be fined, lose state-issued business licenses or be subject to specialized judicial oversight and enforcement. Enrolling and using the E-Verify system can give firms an affirmative defense against accusations they violated labor laws.

Weak E-Verify usage: Some businesses, including some of those in the agricultural sector, must use the E-Verify system. However, exemptions and loopholes limit the numbers of affected growers. Good-faith usage of the E-Verify system is a defense for growers accused of illegally hiring labor.

Encouraged E-Verify usage: Laws or rules promote the use of E-Verify by some agricultural growers, but they are not required to use it. Using the E-Verify system may give a firm or grower an affirmative defense against accusations it violated labor laws.

Government E-Verify usage: Only a state government or its political subdivisions must use the E-Verify system. In some cases, private firms cannot win or keep government contracts unless they use E-Verify. Private firms without government contracts are exempt. It is unlikely these requirements would affect many growers.

No E-Verify usage: No firm or government must use E-Verify.

Table 1: Summary of E-Verify Laws by State

Mandatory	Weak	Encouraged	Government
Alabama Arizona Mississippi Utah	Georgia North Carolina	Louisiana Missouri Oklahoma South Carolina Tennessee	Colorado Florida Idaho Indiana Michigan Nebraska Pennsylvania Virginia Rhode Island

Data and Methods

Differences in how government agencies compile H2A program data make it difficult to assemble firm-level panel data describing utilization. Officials at U.S. Citizenship and Immigration Services responded to an information request by releasing data for each H2A application that showed a petitioner's federal tax ID number, the business name, the number of H2A beneficiaries and the federal fiscal year of the H2A request. The availability of federal tax IDs would allow for the high-confidence identification of firms, a task that would otherwise be challenging since growers commonly operate under several different business names. However, U.S. Citizenship and Immigration Services only tracks where a grower is legally headquartered, not where the requested H2A workers will be laboring. Unless the state of employment can be identified, one cannot test for the effect of state-specific E-Verify laws.

The U.S. Department of Labor keeps a separate but related store of electronic data. Since Oct. 1, 2006, departmental officials have reliably published details on each grower's H2A application, including in what state the workers will be employed. Those records also include details on the duration of employment, promised wages, and occasionally basic crop information. Unfortunately, officials at the U.S. Department of Labor will not release the federal tax IDs or other firm-specific identifiers, making it impossible to aggregate the Labor Department data at the firm level.

For this study, the author used U.S. Department of Labor data to aggregate the number of certified workers by state and starting month, producing a dataset of 4,704 observations. Records reflecting a maximum of 0.07 percent of H2A workers from 2007 to 2014 were dropped because they contained likely data-entry errors that could not be resolved by cross-checking other publicly available data, interviewing government officials, or interviewing the applicant. The

actual percent of dropped workers may be smaller than 0.07 percent because the author assumed that each record lacking worksite information corresponded to a year from 2007 through 2014. In reality, some of those problematic records may date prior to 2007, a period beyond the scope of this paper.

To incorporate wage (labor cost) effects, the author supplemented each observation with the applicable Adverse Effect Wage Rate (AEWR) in effect when the certified H2A laborers listed in a given observation were scheduled to start working. By law, H2A workers receive premium wages, an incentive for cost-sensitive farmers to hire locally before seeking H2A labor. Farmers must pay H2A workers the highest of the state or federal minimum wage; the applicable collective bargaining wage, if any; the prevailing wage rate documented by the government; or the Adverse Effect Wage Rate, which is set for a calendar year. The AEWR is the best choice for the model since it is higher than government-set minimum wages. Collective bargaining in the H2A program is rare outside of North Carolina, and even those fieldworker unions typically accept the AEWR as the governing wage rate. The prevailing wages documented by the government vary by sub-regions within a state and do not cover all agricultural sectors. As a result, prevailing wages cannot be incorporated into data aggregated at a statewide level.

Unfortunately, the wage data self-reported by farmers is likely subject to measurement error. Even though growers are required to pay H2A workers the highest of several categories of wages, U.S. Department of Labor records show growers in Georgia still self-report paying H2A workers the federal minimum wage of \$7.25 even though the AEWR is considerably higher. This means employers are either ignorant of H2A program requirements, deliberately cheating workers, or complying with the law but mistakenly completing government paperwork.

The author lagged the AEWWR by three and six months since farmers likely consider labor wage rates prior to deciding whether to apply for H2A workers. A minimum three-month lag is appropriate because farmers must start their H2A application process with a state labor agency 75 days prior to when they want H2A workers to arrive. Though it is a subjective judgment, the author also conducted the regressions using a six-month lag in the AEWWR since farmers probably consider wage costs and decide whether to participate prior to the paperwork deadlines. Either way, a short lag is appropriate since the U.S. Department of Labor typically publishes its state-specific AEWWR wages in the Federal Register no later than the start of the spring planting season. Once published, the AEWWR wages generally remain constant for the rest of the calendar year. Only farmers who need H2A labor very early in the calendar year would face much uncertainty about future AEWWR wages. Since the AEWWR is a weighted average of livestock and produce-sector wages in a given state, state farming associations can predict the likely AEWWR wage with reasonable accuracy.

Last, each observation contains a law*post binary variable indicating whether a state had a mandatory, weak or encouraged E-Verify law in effect when the H2A workers were scheduled to start working.

Farmers applied to import 72,656 workers into the United States during calendar year 2007, a sum that increased to 103,698 workers in 2014 (See Table 2). The requests for workers appeared to dip during the Great Recession and its aftermath, and then gradually recovered (See Figure 1). The broad trend for the United States masks a great deal of state variation in H2A applications (See Figure 2). Curiously, the greatest increase in H2A usages in recent years occurred in states with weak E-Verify laws, for example, North Carolina, rather than those states with mandatory E-Verify laws.

It is difficult to make causal connections by visually observing the trends. North Carolina experienced sharp growth in its E-Verify utilization. While the growth appears to begin after an E-Verify rule takes effect, it remains unclear whether there is a causal connection (See Figure 2). Other factors could be at play. For example, farmers in North Carolina use a cooperative called the North Carolina Growers Association to file H2A applications. The cooperative is now one of the largest H2A applicants in the United States. Consequently, the increase in usage could represent efficiency gains or local preference, not the effect of immigration crackdowns.

H2A usage in Georgia increased as lawmakers debated adopting an E-Verify law. While the increase in H2A in usage may be the result of tighter E-Verify requirements, it could also reflect a recovery after a particularly deep recession (See Figure 2). Counterintuitively, H2A trend lines are nearly flat in Alabama despite the state's strict E-Verify law.

Table 2: H2A Trends by State and Year

State	Y2007	Y2008	Y2009	Y2010	Y2011	Y2012	Y2013	Y2014	State Totals
Mandatory									
AL	523	720	584	520	613	701	650	648	4,959
AZ	1,862	5,017	4,159	3,308	2,091	2,242	3,365	1,610	23,654
MS	2,037	2,141	1,937	1,840	1,745	2,267	2,460	2,902	17,329
UT	1,635	1,607	1,718	1,580	1,689	1,606	838	651	11,324
Weak									
GA	6,876	7,173	6,510	5,128	6,475	7,887	9,330	9,897	59,276
NC	8,801	9,228	8,722	9,396	9,129	10,481	12,386	15,135	83,278
Encouraged									
LA	5,189	6,007	6,911	6,494	7,113	6,786	6,684	6,516	51,700
MO	310	408	354	305	267	226	327	594	2,791
OK	485	605	608	535	455	430	470	462	4,050
SC	2,265	1,979	2,743	1,240	2,565	3,140	2,945	2,440	19,317
TN	2,436	2,276	2,425	2,170	1,926	2,240	2,558	2,834	18,865
Government									
CO	2,274	2,535	2,331	1,575	1,045	1,052	1,113	1,488	13,413
FL	2,212	5,870	5,000	4,571	6,577	8,646	11,196	6,357	50,429
ID	1,658	2,418	2,246	2,536	1,799	1,987	2,044	1,998	16,686
IN	197	132	101	71	119	463	1,017	929	3,029
MI	591	469	463	277	276	344	585	1,317	4,322
NE	217	200	223	220	240	259	379	497	2,235
PA	307	609	709	614	517	557	575	675	4,563
VA	2,809	2,763	2,612	2,455	2,647	2,175	2,657	3,214	21,332
RI	11	12	2	25	7	4	5	4	70
NONE									
AR	2,894	3,319	3,041	2,836	2,471	2,712	2,783	2,500	22,556
AK	24	30	31	20	22	22	20	15	184
CA	2,255	4,370	3,173	2,298	1,774	3,249	4,291	4,994	26,404
CT	772	655	386	362	290	721	833	408	4,427
DE	85	76	57	46	38	32	32	32	398
HI	75	224	200	175	114	122	21	39	970
IA	733	1,796	1,386	846	1,168	1,212	1,557	1,085	9,783
IL	367	764	525	543	570	784	805	867	5,225
KS	865	1,087	906	799	839	730	678	631	6,535
KY	4,907	5,808	5,716	5,443	4,686	4,755	5,804	6,757	43,876
MA	689	692	558	442	487	449	457	432	4,206
MD	784	1,098	873	616	624	639	640	608	5,882
ME	559	638	1,003	627	614	586	519	640	5,186
MN	512	955	691	721	521	750	729	965	5,844
MT	534	590	518	171	418	479	484	564	3,758
ND	649	878	973	825	837	898	913	1,102	7,075

NH	258	273	280	135	205	153	181	163	1,648
NJ	407	661	580	457	454	548	598	648	4,353
NM	384	423	545	548	568	124	152	158	2,902
NV	1,832	1,997	1,927	1,680	1,762	1,682	1,769	1,874	14,523
NY	3,987	4,190	4,315	3,852	3,949	3,650	4,697	4,638	33,278
OH	1,076	1,153	1,216	924	733	770	762	845	7,479
OR	86	81	128	48	68	89	70	192	762
SD	428	514	578	452	555	560	561	616	4,264
TX	1,980	3,117	2,850	2,185	1,998	2,045	2,066	2,394	18,635
VT	450	501	456	432	454	419	466	489	3,667
WA	1,790	2,575	1,986	3,015	3,194	4,443	6,349	9,055	32,407
WI	174	332	376	142	120	171	178	490	1,983
WV	39	37	48	42	38	134	34	37	409
WY	366	379	395	402	290	304	307	224	2,667
Blank							10	68	78
Annual Total	72,656	91,382	86,075	75,944	77,156	86,725	100,350	103,698	693,986

Figure 1: U.S. H2A Workers Certified

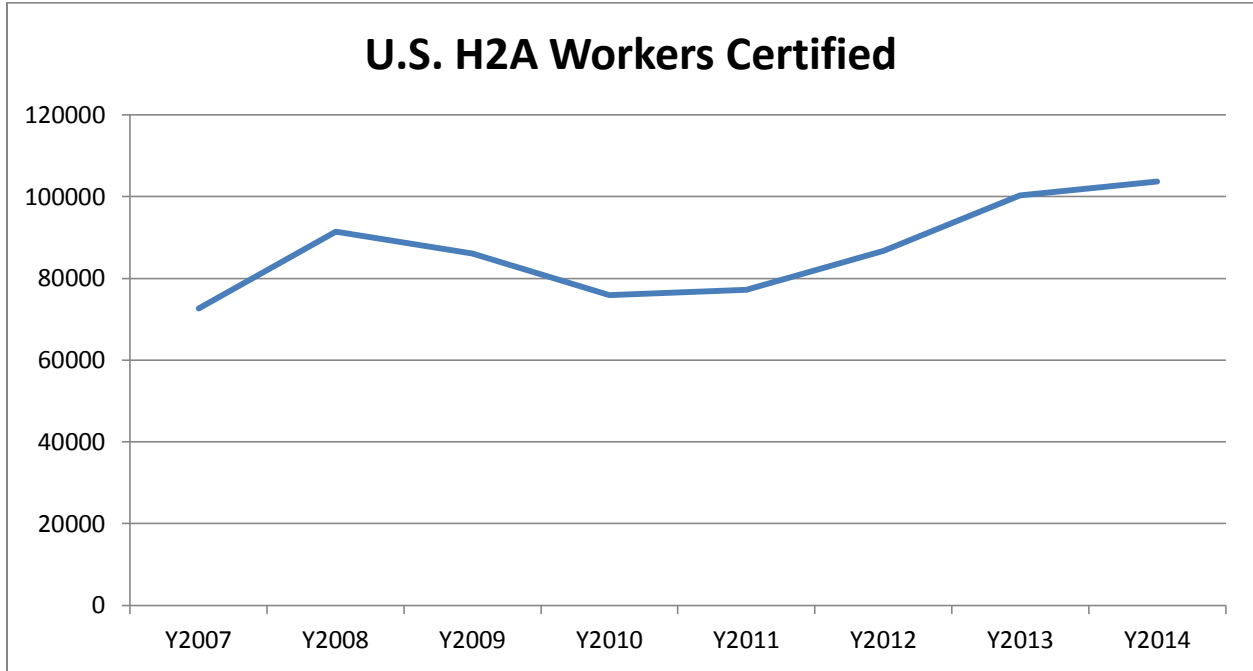
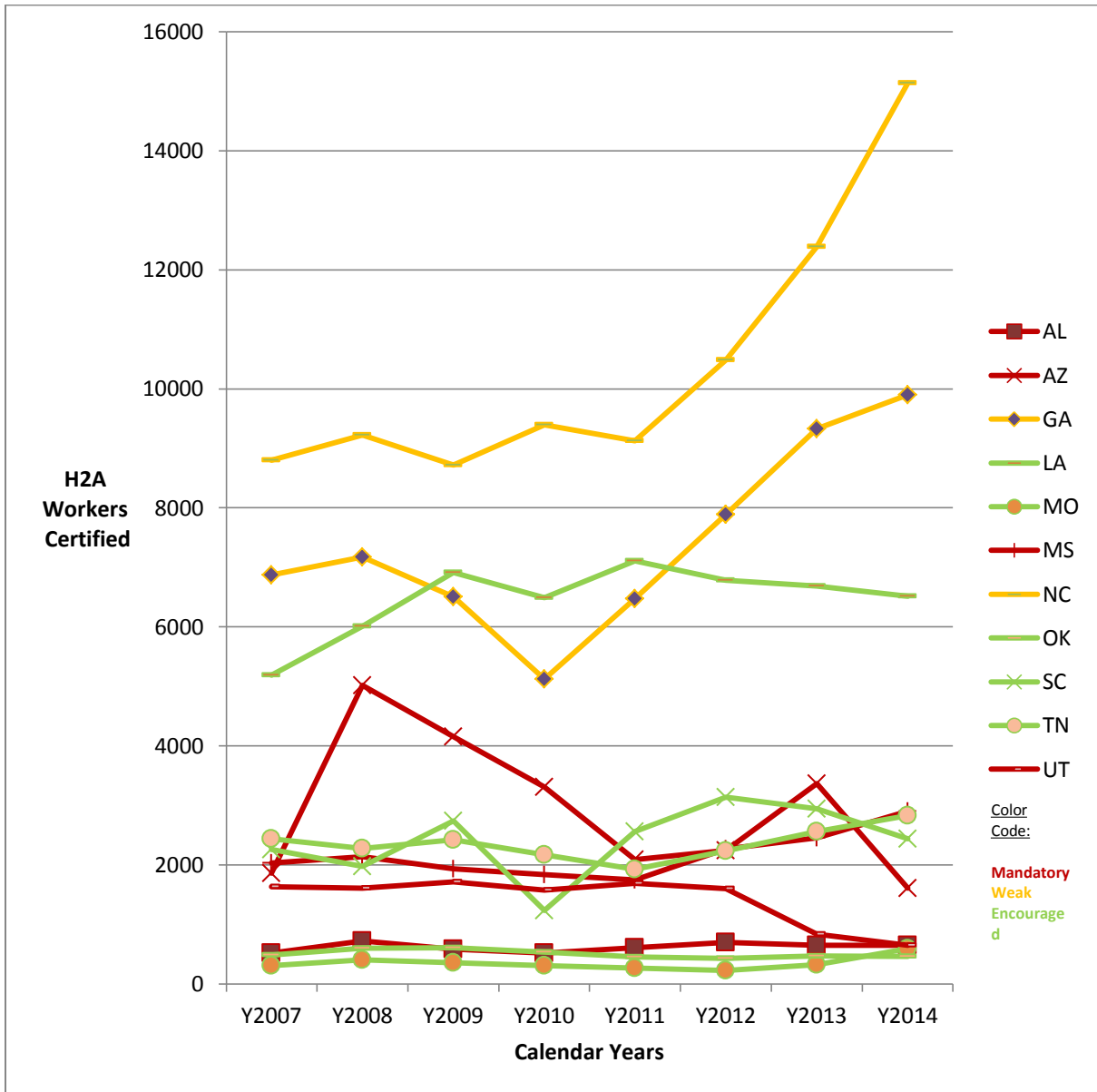


Figure 2: H2A Worker Utilization by States with E-Verify Laws Affecting Agriculture



To better explore how H2A labor use responded to the E-Verify laws, the following fixed-effects difference-in-differences models are employed.

Model 1

$$\begin{aligned} \log(H2A\ workers)_{state,month} &= \beta_0 + \beta_{y1}year_{2008} + \dots + \beta_{yn}year_{2014} + \beta_{m1}month_{February} + \dots \\ &+ \beta_{m11}month_{December} + \beta_{s1}state_{Alabama} + \dots + \beta_{s48}state_{Wyoming} \\ &+ \beta_w \log(lagged\ AEW\ R) + \beta_{e3}EVerify(mandatory) + \mu \end{aligned}$$

Model 2

$$\begin{aligned} \log(H2A\ workers)_{state,month} &= \beta_0 + \beta_{y1}year_{2008} + \dots + \beta_{yn}year_{2014} + \beta_{m1}month_{February} + \dots \\ &+ \beta_{m11}month_{December} + \beta_{s1}state_{Alabama} + \dots + \beta_{s48}state_{Wyoming} \\ &+ \beta_w \log(lagged\ AEW\ R) + \beta_{e0}EVerify(no\ law) + \beta_{e2}EVerify(weak) \\ &+ \beta_{e3}EVerify(mandatory) + \mu \end{aligned}$$

Model 3

$$\begin{aligned} \log(H2A\ workers)_{state,month} &= \beta_0 + \beta_{y1}year_{2008} + \dots + \beta_{yn}year_{2014} + \beta_{m1}month_{February} + \dots \\ &+ \beta_{m11}month_{December} + \beta_{s1}state_{Alabama} + \dots + \beta_{s48}state_{Wyoming} \\ &+ \beta_w \log(lagged\ AEW\ R) + \beta_{e1,2}EVerify(encouraged\ and\ weak) \\ &+ \beta_{e3}EVerify(mandatory) + \mu \end{aligned}$$

In the models above, the omitted reference group of states is as follows: (Model 1) all states other than those with E-Verify(mandatory); (Model 2) states with E-Verify(encouraged); and (Model 3) states with no E-Verify law. Under the null hypothesis, the effect of E-Verify laws

(relative to the omitted group of states) on farmer applications for H2A workers is not statistically different from zero at a reasonable confidence level.

Model 1:

$$H_0: \beta_{e3} = 0$$

Model 2:

$$H_0: \beta_{e0}, \beta_{e2}, \beta_{e3} = 0$$

Model 3:

$$H_0: \beta_{e1\&2}, \beta_{e3} = 0$$

If the fixed-effect OLS regression rejects the null hypothesis at a reasonable confidence interval, then E-Verify laws may have an effect on farmer applications for H2A workers.

Model 1:

$$H_1: \beta_{e3} \neq 0$$

Model 2:

$$H_1: \beta_{e0}, \beta_{e2}, \beta_{e3} \neq 0$$

Model 3:

$$H_1: \beta_{e1\&2}, \beta_{e3} \neq 0$$

If the strength of state laws matters, differences should be observed in β_{e0} , β_{e1} , β_{e2} , and β_{e3} .

Using a base year of 2007, the model incorporates additional intercepts for each calendar year from 2008 through 2014 to capture macroeconomic or other time-related national patterns.

The month dummy variables control for the seasonality of the agricultural labor cycle. A separate intercept is included for each state except Alaska, which is omitted from the database because the government does not publish any AEWR for the small number of H2A workers there. Kentucky, which has no E-Verify laws, serves as the base state.

Table 3. OLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, E-Verify Laws by Type

VARIABLES	(Model 1)	(Model 1)	(Model 2)	(Model 2)
	3-month AEWR lag	6-month AEWR lag	3-month AEWR lag	6-month AEWR lag
No E-Verify law			-0.137 (0.172)	-0.205 (0.179)
E-Verify weak			-0.0168 (0.305)	-0.0942 (0.310)
E-Verify mandatory	-0.317 (0.201)	-0.360* (0.211)	-0.443* (0.258)	-0.550** (0.269)
ln(AEWR): 3-month lag	-0.633 (0.998)		-0.515 (1.007)	
ln(AEWR): 6-month lag		-0.655 (1.029)		-0.493 (1.039)
Constant	5.434** (2.120)	5.444** (2.189)	5.333** (2.128)	5.323** (2.196)
Observations	4,704	4,557	4,704	4,557
R-squared	0.492	0.490	0.492	0.490

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

Table 3A. OLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, E-Verify Laws by Type; Clustered Errors

VARIABLES	(Model 1) 3-month AEWR lag	(Model 1) 6-month AEWR lag	(Model 2) 3-month AEWR lag	(Model 2) 6-month AEWR lag
No E-Verify law			-0.137 (0.123)	-0.205 (0.142)
E-Verify weak			-0.0168 (0.125)	-0.0942 (0.146)
E-Verify mandatory	-0.317*** (0.0988)	-0.360*** (0.0776)	-0.443*** (0.143)	-0.550*** (0.152)
ln(AEWR): 3-month lag	-0.633 (1.154)		-0.515 (1.161)	
ln(AEWR): 6-month lag		-0.655 (1.175)		-0.493 (1.190)
Constant	5.434** (2.407)	5.444** (2.484)	5.333** (2.402)	5.323** (2.499)
Observations	4,704	4,557	4,704	4,557
R-squared	0.492	0.490	0.492	0.490

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

Table 4. WLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, E-Verify Laws by Type

VARIABLES	(Model 2)	(Model 2)
	3-month AEWL lag	6-month AEWL lag
No E-Verify law	0.0701 (0.0967)	0.0910 (0.0980)
E-Verify weak	-0.184 (0.194)	-0.212 (0.197)
E-Verify mandatory	-0.116 (0.226)	-0.248 (0.196)
ln(AEWL): 3-month lag	-1.697 (1.294)	
ln(AEWL): 6-month lag		-3.449** (1.436)
Observations	4,704	4,557
R-squared	0.235	0.240

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

Table 4A. WLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, E-Verify Laws by Type; Clustered Errors

VARIABLES	(Model 2)	(Model 2)
	3-month AEWL lag	6-month AEWL lag
No E-Verify law	0.0701 (0.105)	0.0910 (0.118)
E-Verify weak	-0.184* (0.0941)	-0.212** (0.0937)
E-Verify mandatory	-0.116 (0.159)	-0.248*** (0.0859)
ln(AEWL): 3-month lag	-1.697 (1.141)	
ln(AEWL): 6-month lag		-3.449* (1.846)
Constant	4.452* (2.414)	8.094** (3.865)
Observations	4,704	4,557
R-squared	0.235	0.240

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

Table 5. OLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, Encouraged and Weak E-Verify Laws, Mandatory E-Verify Law

VARIABLES	(Model 3)	(Model 3)
	3-month AEWL lag	6-month AEWL lag
Encouraged or weak E-Verify law	0.132 (0.147)	0.176 (0.151)
E-Verify mandatory	-0.306 (0.202)	-0.345 (0.211)
ln(AEWL): 3-month lag	-0.514 (1.006)	
ln(AEWL): 6-month lag		-0.489 (1.039)
Constant	5.194** (2.137)	5.110** (2.207)
Observations	4,704	4,557
R-squared	0.492	0.490

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

Table 5A. OLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, Encouraged and Weak E-Verify Laws, Mandatory E-Verify Law; Clustered Errors

VARIABLES	(Model 3)	(Model 3)
	3-month AEWL lag	6-month AEWL lag
Encouraged or weak E-Verify law	0.132 (0.0966)	0.176 (0.108)
E-Verify mandatory	-0.306*** (0.100)	-0.345*** (0.0800)
ln(AEWL): 3-month lag	-0.514 (1.160)	
ln(AEWL): 6-month lag		-0.489 (1.188)
Constant	5.194** (2.416)	5.110** (2.507)
Observations	4,704	4,557
R-squared	0.492	0.490

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

Table 6. WLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, Encouraged and Weak E-Verify Laws, Mandatory E-Verify Law

VARIABLES	(Model 3)	(Model 3)
	3-month AEWL lag	6-month AEWL lag
Encouraged or weak E-Verify law	-0.134 (0.0910)	-0.165* (0.0929)
E-Verify mandatory	-0.187 (0.218)	-0.339* (0.184)
ln(AEWL): 3-month lag	-1.672 (1.285)	
ln(AEWL): 6-month lag		-3.424** (1.426)
Constant	4.470 (2.764)	8.131*** (3.077)
Observations	4,704	4,557
R-squared	0.235	0.240

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

Table 6A. WLS: Determinants of Monthly H2A workers - Years, Months, States, Adverse Effect Wage Rate, Encouraged and Weak E-Verify Laws, Mandatory E-Verify Law; Clustered Errors

VARIABLES	(Model 3)	(Model 3)
	3-month AEWL lag	6-month AEWL lag
Encouraged or weak E-Verify law	-0.134 (0.112)	-0.165 (0.132)
3: E-Verify mandatory	-0.187 (0.164)	-0.339*** (0.101)
ln(AEWL): 3-month lag	-1.672 (1.139)	
ln(AEWL): 6-month lag		-3.424* (1.847)
Constant	4.470* (2.471)	8.131** (3.950)
Observations	4,704	4,557
R-squared	0.235	0.240

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: Controls for states, years and months are included and available on request.

F-tests conducted in each OLS regression show the dependent variables are jointly significant and yielded adjusted R-squared ratios of 48 percent. The controls for years produce few statistically significant findings, with the exception of 2008. The controls for month (with January the omitted reference month) are all statistically significant at the 99 percent confidence level, which is not surprising given the seasonality of planting and harvesting cycles for labor-intensive crops. Additionally, the coefficients for about 40 states tested statistically significant (as compared to Kentucky) at a 90 percent level of confidence or more, most states having significantly lower usage of H2A workers but two with higher levels (Georgia and Louisiana).

Models 1 & 2: The coefficients for the three- and six-month lagged AEW are negative as would be expected with a downward-sloping demand curve for labor (See Table 3). However, they are not statistically significant and exhibit high P-values. The lack of significance may reflect the inherent endogeneity of the employment-wage relationship. Labor demand is inversely related to the wage, all else the same, but shifts in labor demand are positively associated with wages.

The coefficients for the law*post E-Verify mandatory dummy were strongly negative and statistically different from zero (i.e., no-law states) at confidence intervals of greater than 10 percent in three out of four OLS regression models. A Wald test failed to reject the null hypothesis that $\beta_{e0} = \beta_{e3}$ and $\beta_{e2} = \beta_{e3}$ at the 90 percent confidence level or greater. However, the resulting p-values are as low as 10.2 and 13 percent.

Model 3: A separate fixed-effects regression tested the strength of mandatory E-Verify against encouraged or weak-law states as a group. These models twice produced coefficients for the law*post E-Verify dummies that were strongly negative but not statistically different from

zero (i.e., no-law states) at confidence intervals of 90 percent and greater. However, the p-values for the coefficients corresponding with mandatory laws tested just above 10 and 13 percent. When the regression model included a six-month lagged AEW, a Wald test found strong statistical evidence that $\beta_{e3} \neq \beta_{e1,2}$ at a confidence level of greater than 90 percent.

WLS: In the OLS results shown previously, each state is weighted the same, regardless of the size of its agricultural sector. Rather than allowing each state to count equally, one can adjust the impact of each state's impact on the regression estimates to vary by the size of its agricultural sector. To do so, the author repeated the fixed-effects regression using a weighted least squares method. To construct a weight reflecting labor-intensive agriculture, the author used the total number of crop workers reported each month by state in the U.S. Department of Labor's Quarterly Census of Employment and Wages. This dataset omits smaller growers but represents the best state-level agricultural labor force estimates available.

Regression results display sensitivity to the move from unweighted to weighted least squares estimation. The WLS results produced no statistically significant findings for E-Verify coefficients in Model 2 (See Table 4). However, a WLS estimation using Model 3 showed the coefficients for encouraged and weak E-Verify laws as a group and mandatory E-Verify laws were negative and statistically significant at confidence levels of greater than 90 percent (See Table 6). Once again, the coefficient for the dummy representing mandatory E-Verify laws was more negative than the dummy for weaker laws.

Clustering: To the extent that residuals within states are correlated, standard error estimates may be biased. The author repeated each fixed-effect regression using clustering at the state level. The clustered errors associated with the AEW wage rates tended to be larger than the un-clustered standard errors, as is common. However, the cluster-robust errors associated

with the coefficients for various E-Verify laws decreased. The regressions with cluster-robust errors produced strongly negative coefficients at the 99 percent confidence level for mandatory E-Verify laws in Model 1 and Model 2 (See Table 3A). When using clustered errors combined with WLS, the negative coefficients for weak E-Verify laws tested statistically significant at confidence levels of 90 percent or greater (See Table 4A). Once again, the coefficients for mandatory E-Verify laws were negative and statistically significant at a confidence level of greater than 99 percent. The drop in the error terms implies that employers within a state have residuals negatively correlated with the residuals of other employers in the state. That negative correlation may arise because the supply of H2A workers within a state is relatively fixed.

U.S. law imposes no cap on the number of H2A workers admitted to the United States, but practical considerations may effectively impose short-run limits on the H2A labor supply. First, farmers must decide whether to import workers at least three or more months before growers need the workers to arrive. Therefore, the supply of H2A workers is effectively fixed during critical planting and harvesting periods. Multiple farmers have said in interviews they prefer employing the same H2A workers over several years because it reduces training costs and generally improves worker productivity. This preference may impose another practical supply constraint. U.S. Department of Labor data show many farmers rely on large contractors to recruit H2A workers abroad, mainly in Mexico. These contractors often recruit from the same clusters of families or regions, which could make it difficult to dramatically increase the H2A worker supply in the short-run. To the extent contractors supply one farmer with a large supply of workers, those workers are unavailable to another farmer. Last, H2A workers must remain employed with the same grower or grower group during the length of their stay in the United States, which reduces workforce mobility.

Overall, the findings partially reject the null hypothesis since $\beta_{e3} \neq 0$ at the 90 percent confidence interval or greater in several models. The suggestion that the strongest E-Verify laws may decrease H2A usage coupled with the failure to identify any statistically significant evidence that E-Verify laws encourage H2A usage calls into question whether state leaders are achieving their policy objectives in the agricultural sector. Interestingly, states with laws encouraging or weakly requiring that farmers use the E-Verify system exhibit higher use (by roughly 11 and 23 percent) in H2A hiring than do states without a law, although the difference is outside the range of statistical significance. A more surprising result is that states with laws making E-Verify use mandatory exhibit substantially *lower* H2A hiring than those states with weaker laws, a difference of roughly 43 (about 35 percent) lower, when using a three-month lagged AEWWR wage. When using a six-month lagged AEWWR wage, the difference was roughly 46 log points (about 37 percent).

Conclusion

State lawmakers started requiring employers to use the E-Verify system in the hope it would deter illegal immigrants from the workforce and potentially booster employment opportunities for legal residents, including in the agricultural sector. Supporters of E-Verify laws expected farmers could increasingly find legal labor by using the federal H2A program. However, the available statistical evidence calls into question whether these goals can be achieved in the agriculture industry. This study found no statistical evidence that E-Verify laws increase farmer usage of the H2A program. Counterintuitively, there is evidence suggesting the strictest state-level E-Verify laws actually discourage farmers from using the H2A system.

Given the high own-price elasticity for agricultural goods, farmers have an incentive to carefully consider whether the cost of complying with E-Verify rules outweighs the risk-adjusted cost of getting caught. In states that merely encourage or have weak E-Verify requirements, a rational farmer may be reluctant to comply. State governments have few resources for enforcing E-Verify laws. Even some of the strictest laws appear little more than paper tigers. In a telling example, Mississippi grants its agriculture industry no exemptions from its E-Verify laws. But it has no track record of enforcement, either. A spokeswoman for the Mississippi Attorney General's Office, Jan Schaefer, told state lawmakers in late 2010 that prosecutors had not received a single complaint alleging violations of the state's E-Verify law (Crisp, 2010). Schaefer said the attorney general's office would investigate any such complaints, though she added that prosecutors had not received any additional funding or resources for those new responsibilities. To be effective, E-Verify laws may need to be combined with a broader immigration overhaul that includes a credible threat of labor law enforcement.

Prior research helps explain why the toughest E-Verify laws may substantially decrease usage of the H2A program. When analyzing Current Population Survey data in states with E-Verify laws, Amuedo-Dorantes and Bansak (2012) concluded the laws reduced the number of suspected illegal workers in higher-paying and better-regulated jobs such as construction. Yet the E-Verify laws appeared to increase the share of workers in the agricultural sector who fit the demographic profile of illegal laborers. It appeared that as employers in more formal sectors of the economy complied with the new E-Verify law, illegal workers were pushed into the lower-paying agricultural sector, which traditionally is less strict about labor law compliance. If strict E-Verify laws force more illegal immigrants into the agricultural sector, farmers benefit from an increased supply of local labor. The low probability of enforcement combined with the glut of available illegal labor would decrease a farmer's incentives to seek labor through the more-costly H2A program.

Further research is recommended on several fronts. If the U.S. Department of Labor released firm-specific identifiers with its H2A usage data, economists could better study the determinants of H2A utilization on a micro scale. A better understanding of the determinants of H2A program usage could help researchers more precisely measure the effects of state-level E-Verify laws.

If better firm-level data were available, it would be worth testing whether larger growers tend to increase their H2A usage at higher rates than smaller growers once E-Verify laws take effect. Even when laws are tightened, small growers may remain confident in their ability to hire a handful of additional laborers for planting or harvest. By contrast, large growers need hundreds of workers during unpredictable harvest windows. If an E-Verify law disrupts the labor market, larger growers may struggle to fill their labor needs, resulting in a potential loss of crops and

revenue. As a result, the benefits of using the H2A program for a large farmer may outweigh the program's extra costs. The marginal cost of applying for H2A labor may be cheaper for large farmers since they already employ back-office professional staff who can help oversee the bureaucratic, time-consuming H2A application process. Smaller growers would need to hire additional staff or use expensive H2A contractors. Last, federal immigration and labor officials with scarce investigative resources are more likely to target large growers since those cases involve larger numbers of workers, bigger potential fines, and may produce a greater deterrence effect. If larger growers are aware of enforcement trends, they may seek the legal cover the H2A program provides.

Appendix A: State E-Verify Laws

Mandatory States

Alabama

Alabama lawmakers in 2011 passed one of the strictest E-Verify laws in the country. Public Act No. 2011-535 requires that all “business entities” (Alabama, 2011) enroll to use E-Verify by April 1, 2012. The act broadly defines business entities as a person or group of people engaging in any activity for “gain, benefit, advantage, or livelihood” (Alabama, 2011) regardless of whether that work is performed for profit. The act specifically defines corporations, limited liability companies, partnerships, and trusts as business entities.

Arizona

Arizona became the first state to require that employers use the E-Verify system as part of House Bill 2779, which then-Gov. Janet Napolitano signed into law on July 2, 2007. The law, known as the “Legal Arizona Workers Act,” requires that all employers use the E-Verify system to make sure new hires were legally eligible to work in the United States. Employers were required to use E-Verify starting on Jan. 1, 2008 (Arizona, 2007).

Employers caught knowingly employing an illegal immigrant would be put on a three-year probation period. While on probation, those employers must file quarterly reports with the county attorney documenting all new hires. State judges in Arizona can order a business owner who violates the law to file an affidavit within three days promising the business has fired all employees hired illegally and promising not to hire illegal workers in the future. If that affidavit is not submitted within three days, the court can order the suspension of a firm’s business license until the affidavit is filed. Licenses are suspended for the business location where a violation

occurred. A firm with a single location or a statewide license would risk the suspension of its entire operations until the employer submits the affidavit (Arizona, 2007). The court can require a 10-day business license suspension if judges feel such a punishment is warranted given the facts of the case.

Intentional violations, considered more serious than a “knowing” violation, result in a five-year probationary period, a minimum 10-day business license suspension, and quarterly monitoring (Arizona, 2007). The employer must also file an affidavit promising the owner has fired any illegal immigrants and will refrain from hiring illegal workers in the future. Employers caught breaking the law a second time while on probation forfeit their business licenses, effectively ending their ability to operate in Arizona.

Lawmakers in Arizona used a carrot-and-stick approach to nudge businesses into following the law. While employers face sanctions for hiring illegal immigrants, participating in the now-mandatory E-Verify program gives an employer a rebuttable defense (Arizona, 2007) that the firm was complying with state labor laws.

The following year, lawmakers streamlined several portions of the act in House Bill 2745. Among the major changes, lawmakers better explained the definitions between knowing and intentional violations (Arizona, 2008). The rest of the legislation had little impact on the E-Verify requirements.

Mississippi

Gov. Haley Barbour, a Republican, signed Senate Bill 2988, which contained sweeping measures targeting illegal immigrants in the public and private workforce. Under the legislation, all employers in Mississippi must use the E-Verify system to confirm the work eligibility all new

hires (Mississippi, 2008). Employers were required to meet the following E-Verify registration deadlines:

- July 1, 2008: Employers with 250 or more workers;
- July 1, 2009: Employers with 100 or more workers;
- July 1, 2010: Employers with 30 or more workers;
- July 1, 2011: All other employers.

In addition, all state contractors were required to use E-Verify if they hoped to secure government contracts effective July 2, 2008.

The penalties for violations are harsh, if enforced. People who knowingly work while they are illegal immigrants commit a felony offense punishable by a maximum five years in prison and a \$10,000 fine. Firms caught hiring illegal immigrants could lose their ability to win state contracts for up to three years and face a potential loss of any government-issued licenses for a maximum of one year.

Utah

In 2008, Utah passed Senate Bill 81 requiring public employers to use E-Verify to check the employment eligibility status of new hires starting July 1, 2009 (Utah, 2008). Public employers cannot enter into contracts for the performance of services unless the contractor is enrolled in E-Verify. The law did not affect private employers.

Gov. Gary Herbert, a Republican, signed Senate Bill 251 into law on March 31, 2010, which focused on private employers (Utah, 2010). The law required private employers with 15 or more workers to vet new hires using the federal E-Verify system starting July 1, 2010. The law does not set any penalties for noncompliance.

Apparently frustrated by federal inaction, Utah authorities authorized the state to create its own guest worker program upon receiving federal approval or June 1, 2013, whichever came first (Utah, 2011). Once the state guest worker program started, employers with 15 or more employees would be required to use E-Verify to identify their new hires were in the country legally or had a Utah-issued guest worker permit. The proposed state worker program would have contained civil penalties for noncompliance. As of yet, Utah has not secured federal permission to start its state guest worker program, and the law has therefore not taken effect.

Weak States

Georgia

Politicians in Georgia first required that public employers and government contractors use E-Verify, then gradually forced private industry to use the system.

In 2006, then-Gov. Sonny Perdue signed into law a requirement that public employers use E-Verify to vet their new hires starting the following year. Government contractors were also required to use the system (Georgia, 2006). The requirement was implemented in a three-step process. Public employers and contractors with 500 or more employees were required to use E-Verify starting July 1, 2007. Those with 100 or more employees had to start using the system on July 1, 2008. Finally, all public employers and subcontractors were forced to use the system on July 1, 2009.

State legislators apparently worried that municipal governments and other employers were seeking to evade the newly established requirements. A new law effective Jan. 1, 2010, made clear that local governments were required to use the E-Verify system (Georgia, 2009).

The new law also required that contractors file documents proving they used E-Verify before bidding on public contracts.

Politicians in Georgia enacted more sweeping changes to immigration law in 2011. After a lengthy and contentious debate, lawmakers voted overwhelmingly to adopt House Bill 87, which Gov. Nathan Deal signed on May 13, 2011 (Georgia, 2011). The new law included the first requirements that all private employers, not just government contractors, use the E-Verify system. The legislation established three deadlines for E-Verify use:

- Jan. 1, 2012, for employers with 500 or more employees;
- July 1, 2012 for employers with 100 or more employees but less than 500;
- July 1, 2013 for employers with more than 10 employees but less than 100.

Employers would determine whether they were subject to Georgia's E-Verify requirements based on the number of workers a firm employed on the first day of the year. The law defined employees broadly to mean a worker for whom an employer collected withholding taxes and who worked no less than 35 hours weekly (Georgia, 2011). Since many agricultural growers employ few workers in January, many may be exempt from E-Verify requirements.

North Carolina

Gov. Beverly Perdue, a Democrat, signed a law on Aug. 23, 2007, requiring all state government branches to use the E-Verify system to make sure all new hires were legally eligible for employment in the United States. This requirements extended to all North Carolina agencies, departments, institutions, universities, community colleges and local education agencies (North Carolina, 2006).

State leaders enacted more sweeping laws on June 23, 2011. House Bill 36 requires any employer with 25 or more employees to use the E-Verify system to verify work eligibility (North

Carolina, 2011). Employers accused of a first violation would have to file an affidavit stating the employer has consulted with the worker in question and requested a “verification of work authorization through E-Verify.” Employers who do not file such an affidavit must pay a \$10,000 fine. A second violation results in a civil penalty of \$1,000 regardless of the number of workers involved. A third violation triggers a \$2,000 penalty for every worker the employer failed to check using the E-Verify system.

Enforcement was phased-in on the following schedule:

- Oct. 1, 2012: Employers with 500 or more workers must comply;
- Jan. 1, 2013: Employers with 100 or more workers must comply;
- July 1, 2013: Employers with 25 or more workers must comply.

The law creates a giant, acknowledged loophole for the agriculture industry. The rules do not apply to seasonal, temporary employees who work 90 days or fewer during a consecutive 12-month period (North Carolina, 2011). This would exempt many migrant agricultural workers employed during the harvest of labor-intensive commodity crops.

The loophole benefiting the agriculture industry was further widened in legislation adopted on Sept. 4, 2013. Instead of just exempting workers employed 90 days or fewer, it was expanded to nearly nine months (North Carolina, 2013). Republican Gov. Pat McCrory vetoed the legislation on Aug. 15, 2013, shortly after its adoption by the North Carolina General Assembly.

“This bill has been thinly disguised as a measure to help our farming community when in fact it applies to a broad spectrum of other businesses in both urban and rural areas,” McCrory wrote (2013). “This is a loophole that would allow businesses to exempt a higher percentage of employees from proving they are legal U.S. citizens or residents.”

North Carolina lawmakers overrode McCrory's veto on Sept. 4, 2013, making the bill a binding state law (North Carolina, 2014).

Encouraged States:

Louisiana

Louisiana lawmakers stiffened penalties for hiring illegal immigrants in the private sector starting Aug. 15, 2011 (Louisiana, 2014). Public Act No. 402 doubled the financial penalties for employing illegal immigrants for first and second offenses (Louisiana, 2011b). Although E-Verify is not mandatory, the legislation includes harsh penalties for violators more common in states that made the E-Verify system mandatory. A third offense would result in a business license suspension of 30 days to six months and a fine of \$2,500 for every illegal immigrant unlawfully employed. Employers using E-Verify would be exempt from punishments so long as they adhered to other, existing record-keeping requirements, including retaining a job applicant's immigration-related records.

In 2011, state lawmakers adopted Act No. 376, requiring that firms bidding for public contract to use the E-Verify system starting Jan. 1, 2012. Proof that a firm used the E-Verify system would provide a presumptive defense if the company was later accused of civil or criminal violations involving immigration-related labor laws. The legislation did not explain how state authorities would enforce E-Verify use, and it contained a large loophole for subcontractors. Under the provision, a contractor cannot be sanctioned for a subcontractor's violation unless the contract has "actual knowledge" of violations (Louisiana, 2011a). The following year, the Legislature passed Act No. 142, further clarifying that a public works project means the "erection, construction, alteration, improvement, or repair of any public facility or immovable property owned, used, or leased by a public entity." (Louisiana, 2012)

Missouri

Businesses are forbidden from knowingly hiring illegal immigrants under House Bill 1549, which was effective Jan. 1, 2009. Any firm receiving a state contract worth more than \$5,000 must register for E-Verify under the law (Missouri, 2008). Firms that receive state tax credits or loans must also use E-Verify. While not required, using E-Verify is an affirmative defense for an employer accused of violating the law. Knowingly employing an illegal immigrant is punishable by a loss of government-issued permits and licenses for 14 days. A second violation is punishable by a one-year suspension of those licenses and permits. A third violation would result in permanent suspension. The original law denied some forms of public assistance to illegal immigrants, and lawmakers followed up the following year in House Bill 390 to modify the definition of the affected assistance (Missouri, 2009).

Oklahoma

House Bill 1804, adopted on May 8, 2007, requires that all public employers use E-Verify to check the work eligibility of new hires starting July 1, 2008 (Oklahoma, 2007). Contractors and subcontractors awarded public contracts must use E-Verify to check the work eligibility of all new employees. The law makes it illegal to knowingly replace a legal worker with an illegal worker. Employers participating in the E-Verify program are exempt from any liability in connection with the new law.

South Carolina

The agriculture industry successfully evaded E-Verify rules put into place for other employers. State leaders adopted House Bill 4400 in 2008 requiring private employers with 100 or more employees to either use E-Verify to vet new hires or only hire those with South Carolina-approved identity documents starting July 1, 2009 (South Carolina, 2008). Firms with

fewer than 100 employees had to meet the same requirements starting July 1, 2010. Firms that ignored the rules were subject to an escalating series of fines and license suspensions. However, a little-noticed loophole exempted agricultural employers, domestic and personal service workers, and clergy. In 2011, that law was amended to make E-Verify the sole verification option for private employers (South Carolina, 2011). The amended law also pushed back the compliance deadline until Jan. 1, 2012.

Tennessee

The Tennessee Lawful Employment Act of 2011 requires that governmental and private employers with six or more employees verify each new hire's work eligibility by either examining defined documents (for example, a valid driver's license or government birth certificate) or using the federal E-Verify program (Tennessee, 2011). The rules took effect on:

- Jan. 1, 2012: Government entities and private employers with 500 or more workers;
- July 1, 2012: Private employers with 200 or more workers;
- Jan. 1, 2013 Private employers with six or more employees.

Firms caught violating the rules face fines ranging from \$500 to \$2,500 per affected employee for each violation and suspension of business licenses.

Government

Colorado

Laws passed from 2006 through 2008 require that government contractors use E-Verify.

Florida

Gov. Rick Scott required Florida's state agencies use E-Verify to establish the employment eligibility of current and new agency hires (Scott, 2011). Contractors with the state

government must also use E-Verify to verify the status of their employees while performing government work within Florida.

Idaho

Gov. C.L. “Butch” Otter signed an executive order in 2009 requiring the state government to verify that new hires were legally authorized to work in the United States (Otter, 2009). Otter’s order did not specify the process for making these eligibility checks. To satisfy the order, Idaho’s state government now uses the E-Verify system to screen the eligibility of new hires (Idaho, 2014).

Indiana

Lawmakers passed legislation in 2011 requiring the state government to use E-Verify to screen new hires starting June 30, 2011 (Indiana, 2011). Contractors to the state and other business entities selling the state government more than \$1,000 in goods and services were also required to sign an affidavit proving they used E-Verify. The law does not otherwise affect private employers.

Michigan

Lawmakers passed a budget for the fiscal year beginning Oct. 1, 2012, that forced the Michigan Department of Human Service and the Michigan Department of Transportation to require its contractors and subcontractors use the E-Verify system. Contractors and subcontractors must submit a certification to the state proving they are enrolled to use the E-Verify system. No such rules have been placed on the private-sector workforce.

Nebraska

All public employers and contractors shall use E-Verify to verify the employment eligibility of new hires starting Oct. 1, 2009 under Legislative Bill 403 (Nebraska, 2009). The

Nebraska Department of Labor was required to publicize the availability of the E-Verify service to all employers, but none of those firms except state contractors are required to use it. The Nebraska Tax Commission cannot approve various tax credits to a taxpayer unless the taxpayer shows that all employees have been electronically verified.

Pennsylvania

A law adopted July 5, 2012, requires that contractors seeking government work use the E-Verify system to check the work eligibility of their employees starting Jan. 1, 2013 (Pennsylvania, 2012). Violators are subject to fines and can be barred from seeking public contracts.

Virginia

All state agencies must use E-Verify to check the work eligibility of new hires starting Dec. 1, 2012, under House Bill 737. The legislation was adopted on April 11, 2010. Any employer with 50 or more workers over the previous 12 months and seeking a state contract worth more than \$50,000 must enroll in the E-Verify program by Dec. 1, 2013, under legislation approved in 2011 (Virginia, 2011). Failure to comply can disbar a contractor from state contracts for one year.

Rhode Island

Gov. Don Carcieri, a Republican, signed an executive order on March 27, 2008, requiring most executive branch agencies to use the E-Verify system to vet new hires in state government (Carcieri, 2008). His order also forced private firms contracting with the state government to use the E-Verify system. His successor, Lincoln Chafee, a Democrat, revoked the order on Jan. 5, 2011 (Chafee, 2011).

Other E-Verify Requirements

West Virginia

Any service provider whose workers who regularly have access to the state capitol complex must be vetted using E-Verify under legislation passed March 10, 2012 (West Virginia, 2012). The law has no impact on other private employers.

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