

# Results from the Identifying Challenges to Implementing the ADA Survey for Cities and Towns in New England\*

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New England ADA Center, a Project of the Institute for Human Centered Design, Boston, MA

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## Abstract

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Title II of the Americans with Disabilities Act of 1990 (ADA) protects individuals with disabilities from discrimination in services, programs, and activities provided by state and local government entities. Accordingly, Title II requires local governments to implement certain administrative policies and develop plans for achieving accessibility. After ADA was passed, early research examining local implementation found mixed results, and it is unknown to what degree municipalities eventually achieved compliance. From a survey of cities and towns across New England, we estimate levels of Title II implementation and reasons for noncompliance. Results suggest that 3 decades later, localities have not implemented all requirements and a lack of understanding appear to be the predominant hurdles. Furthermore, analysis of a randomized intervention showed that typical efforts to remedy non-compliance were not effective.

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## Introduction

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The Americans with Disabilities Act of 1990 (ADA) provides protections from discrimination for people with disabilities as they participate in the many facets of public life from employment to civic participation.<sup>1</sup> Title II of the ADA requires state and local governments to protect individuals with disabilities from discrimination in the services, programs and activities they provide.<sup>2</sup> The Department of Justice promulgates regulations to define these Title II obligations.<sup>3</sup> Among these regulations are administrative requirements to which local government entities must adhere:

- Entities must perform a self-evaluation of its current services, policies, and practices, and the effects thereof for compliance with ADA regulations, and
- Notify the public about ADA compliance.

In addition, Title II standards require public entities with 50 or more employees to:

- Designate a responsible employee to coordinate and carry out responsibilities under ADA,
- Develop a procedure for resolving complaints involving ADA obligations, and
- Develop a transition plan for achieving ADA compliance.

In the three decades following passage of the ADA, there has been important progress for the inclusion of people with disabilities in the public sphere, but the vision of *maximum community*

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<sup>1</sup> Public Law 101-336, as amended by Public Law 110-325.

<sup>2</sup> 42 U.S.C. 12132, extending 29 U.S.C. 794

<sup>3</sup> 28 CFR Part 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services

*participation* is far from being met. For example, research has found that from 1980 to 2008, people with disabilities have persistently been less likely to vote than their non-disabled peers.<sup>4,5</sup> This is despite the enactment of laws supporting civic participation, like the Help America Vote Act (HAVA), which aimed to improve accessible polling locations. Rather, the barriers to civic participation appears to be multidimensional, of which having a physically accessible polling location was only one.

The ADA represents a civil rights mandate and establishes the regulatory framework to assure that those civil rights are being afforded. Implementing the regulatory framework, however, requires the deployment of resources – financial, personnel, time, and attention – for which the federal government provides little direct support.<sup>6,7</sup> The ADA National Network of 10 Regional ADA Centers offers guidance and training to public and private entities about ADA requirements, but there remain significant gaps in implementation. Many communities may still be unaware of their obligations under Title II while others may lack the resources needed to successfully carry them out.

Early research into ADA implementation suggested that local entities appeared to be meeting their obligations. A 1994 study found that 78% of cities and towns had completed a self-

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<sup>4</sup> Matsubayashi, Tetsuya and Michiko Ueda. 2014. “Disability and voting” *Disability and Health Journal* 7(3):285-291.

<sup>5</sup> Kingston, Lindsey. 2014. “Political participation as a disability rights issue” *Disability and Health Journal* 7(3): 259-261.

<sup>6</sup> Percy, Stephen. *Disability, Civil Rights, and Public Policy: The Politics of Implementation*. University of Alabama Press, 1989.

<sup>7</sup> Pfeiffer, David. 1994. “The Americans with Disabilities Act: Costly Mandates or Civil Rights” *Disability & Society* 9(4): 533-542.

evaluation and 67% had a transition plan.<sup>8,9</sup> Yet, a smaller study in 1999 found that compliance levels were far lower; only 3 of the 20 cities had designated an ADA coordinator.<sup>10</sup>

Furthermore, the second study found “a general lack of awareness or concern about the duties and responsibilities of the ADA coordinator or the full range of coverage of the law.” More recently, research examining transition plans found compliance levels lower than anticipated at only 13% of municipalities.<sup>11</sup> All the while, ADA Centers have known, at least anecdotally, that cities and towns experience substantial challenges to implementing Title II. Thus, municipalities and the organizations that support them have continued with old or absent empirical data about the challenges to implementing ADA.

Given the paucity of timely empirical data, the New England ADA Center – the Region I member of the ADA National Network - undertook a research activity to better understand municipal implementation of the ADA in the region. The Identifying Challenges to Implementing the ADA (ICIADA) survey was developed by subject matter experts from the New England ADA Center about obligations under Title II and challenges to achieving compliance. Staff from the Center gathered information from representatives of New England cities and towns about how each was (or was not) meeting the administrative ADA requirements and whether municipal

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<sup>8</sup> Pfeiffer, David, and Joan Finn. 1995. “Survey Shows State, Territorial, Local Public Officials Implementing ADA” *Mental and Physical Disability Law Reporter* 19(4): 537-540.

<sup>9</sup> Pfeiffer, David, and Joan Finn. 1997. “” *Disability & Society* 12(5): 753-773.

<sup>10</sup> Switzer, Jacqueline V. 2001. “Local Government Implementation o the Americans with Disability Act: Factors Affecting Statutory Compliance.” *Policy Studies Journal* 29(4): 654-662.

<sup>11</sup> Eisenberg, Yochai, Amy Heider, Rob Gould, and Robin Jones. 2020. “Are communities in the United States planning for pedestrians with disabilities? Findings from a systematic evaluation of local government barrier removal plans” *Cities* 102:102720.

services, programs, and activities were accessible to people with disabilities. Specifically, the survey was designed to help answer two research questions:

1. To what extent and in what areas is compliance to ADA Title II obligations a challenge?
2. What factors impede municipalities from implementing the ADA?

From answers to these two research questions, we hope to identify innovative approaches to helping increase implementation of the ADA at the municipal level. In addition to those research questions, we use the survey results to identify whether municipal characteristics—such as the prevalence of disability or level of socioeconomic status—are associated with compliance. Lastly, we use compliance progress from the survey to measure the effectiveness of two interventions to engage municipalities with information about implementation.

## **Data and Methods**

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For our analysis, we combined data from two rounds of collection of the ICIADA survey, yielding 775 total responses. Detailed information about the sample construction and survey weighting are included in Appendix A.

Using the survey questions shown in Table 1, we created indicators for compliance with each of the administrative requirements and accessibility to services, programs, and activities (SPA). A municipality with fewer than 50 employees is considered to be in compliance with administrative requirements if it answered “Yes” to questions 9 and 11. A municipality with 50 or more employees is considered to be in compliance if it answered “Yes” to questions 5, 7, 9, 11, and 14. Municipalities who answered “Yes” to questions 19, 22, and 24, and “All” to

question 18 and 21 (if applicable) are considered to be in compliance with accessibility to services, programs, and activities. To illustrate the state of compliance, we present statistics about compliance overall, the number of requirements (or still in need of completing), and for compliance with specific requirements. We present statistics for the New England region as a whole and, where sample sizes permit, by state, population size, and number of municipal employees. Because the two rounds of collection were only separated by a year, we examine most compliance levels using a pooled sample, treating the statistics as an average over the entire study period. All percentages are presented as weighted estimates, unless otherwise specified. Unweighted estimates are included in the Appendix C.

When a municipality is reported to have not accomplished a requirement, the survey follows up with a question about reasons why the items was not in compliance. In addition to the 4 main categories – lack of time, money, personnel, or knowledge of the requirement – respondents were also offered the option of providing their own, open ended response. Those write-in responses were clerically coded back into the four categories (where applicable) and two additional categories were identified: use of informal or ad-hoc processes and due to being a “small town”, without further explanation. Respondents were allowed to provide multiple reasons and so percentages in each category sum to greater than 100%.

To examine the relationship between Title II compliance and the characteristics of people residing in the municipalities, statistical information from the Census Bureau’s 2018 American Community Survey were added to a subset of responses. Characteristics included population size, percentage of the population aged 65 years or older, median age, median household

income, median home value, percentage with a bachelor's degree or higher, percentage of 18-to-64-year-olds with a disability, and the overall disability rate. Associations between compliance and municipal characteristics are presented as average marginal effects from bivariate and multivariate logistic regressions.

Also using this subset, we also linked survey responses with the randomization assignment of cities and towns to two independent interventions aimed at informing local governments about their Title II responsibilities. Municipalities were randomized into one of four groups: (1) receiving the standard email message with information about developing the policies and processes required under the ADA; (2) receiving the standard information plus a link to statistics about disability prevalence in their area; (3) receiving the standard information plus an invitation to participate in a webinar about implementing Title II requirements; (4) receiving the information plus the local statistics and the webinar invitation. While the time between the intervention and the survey was relatively short, round two of the survey specifically asked whether municipalities had begun working on requirements, allowing responses of “in progress”. A compliance score was developed by awarding one point for being in the process of achieving compliance and two points for having achieved compliance and summing up the points across requirements. This metric allows us to capture when municipalities have made steps towards compliance, but may not have fully completed any single requirement. The interventions were analyzed using weighted linear and logistic regressions controlling for state differences. Results are presented as average marginal effects from models with and without controls for municipal characteristics.

Measures of variance (standard errors and confidence intervals) were estimated for all point estimates taking into account the sample design. For percentage estimates, non-symmetric confidence intervals were estimated using the Rao-Scott chi-squared distribution for the log-likelihood of a binomial distribution.<sup>12</sup> All comparisons have been tested at the 95% confidence level for statistical significance.

## Results

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### Sample Composition and Weighting

Before presenting the results of survey, it is helpful to understand how the municipalities in the sample differ from the region as a whole. Table 2 shows the population and sample counts in each stratum used for calculating weights. A normalized weight greater than 1.0 indicates that municipalities from that state-population group are underrepresented in the sample, while those with a normalized weight less than 1.0 are overrepresented. For example, small towns (under 10,000 people) in Vermont were vastly underrepresented both rounds with normalized weights of 3.41 and 2.93 while larger towns (over 10,000 people) in Vermont were overrepresented. Overall, both rounds had samples that tended to skew toward Connecticut, Massachusetts, and Rhode Island and were disproportionately made up cities and towns with populations of 10,000 or more. The adjustment factors are intended to help correct for some of the effects of this imbalance on Title II compliance and also address sample differences between the two rounds of collection.

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<sup>12</sup> Rao, JNK, Scott, AJ (1984) "On Chi-squared Tests For Multiway Contingency Tables with Proportions Estimated From Survey Data" *Annals of Statistics* 12:46-60.

In addition to the differences between the samples and the population, the subset of municipalities that provided the name of their city or town so that we could link additional information was not alike the full sample or population. The sub-sample was more skewed toward Rhode Island and away from Maine and New Hampshire than the overall sample. For example, in round two, the subsample weights for municipalities in Rhode Island were about one-third (0.30) the average weight while the average weight for municipalities in New Hampshire was almost six times (5.82) the average weight.

### **Overall Compliance**

Overall, 5.4% (95% Confidence Interval: 4.1%–6.8%) of municipalities in the New England region were compliant with all Title II administrative requirements and accessibility requirements for their services, programs, and activities. Compliance differed by state, with a high of 17.0% (10.8%–24.6%) of municipalities in Connecticut meeting the requirements. Over both rounds of collection, none of the municipalities in Vermont were in total compliance. Examining administrative requirements, 20.3% (17.6%–23.2%) of municipalities were compliant and state rates ranged from 6.2% to 40.0%. Despite having more additional requirements, municipalities with 50 or more employees were more likely to achieve compliance at 26.7% (23.3%–30.3%) than municipalities with fewer than 50 employees at 14.8% (11.7%–18.3%). For individual states, however, differences in the levels of compliance between large and small municipal employers were not statistically significant. In addition to those in compliance, another 34.4% (25.4%–44.3%) of municipalities with 50 or more employees were near compliant, meaning they were just 1 or 2 requirements short of being fully compliant. Likewise, for municipalities with fewer than 50 employees, 37.4% (32.5%–42.4%) met only one of the two requirements.

Figure 1 also shows 14.3% (11.8%–17.0%) of municipalities were compliant with accessibility to services, programs, and activities, with compliance rates for states ranging from 8.5% to 27.1%.

Figure 2 also shows the distribution of number of requirements completed. Most municipalities were complying with at least some of the requirements; only 6.7% (4.7%–9.2%) of municipalities with 50 or more employees were noncompliant with all 5 requirements. 47.8% (42.9%–52.8%) of municipalities with fewer than 50 employees were noncompliant with both requirements. The data also suggest there is substantial variation across states in the number of requirements completed.

### *Reasons for Noncompliance*

Of the primary reasons for noncompliance, responses appear distributed evenly, however lack of personnel (55.1%; 51.3%–59.0%) and lack of knowledge (47.2%; 43.3%–51.1%) held a slight edge over lack of money (43.5%; 39.6%–47.4%) or time (33.2%; 29.6%–37.0%), as shown in Figure 3. Responses of “small town”, or addressing ADA concerns reactively or “ad hoc” were less prevalent, but were identified as common themes in other/write-in response option.

Lacking personnel appeared to be among the most common reasons for noncompliance across the states; a lack of knowledge was the most cited in Maine, and a lack of money was the most cited in Massachusetts and Rhode Island.

### **Individual Title II Requirements**

Compliance with individual requirements are shown in Figure 4. Results show that 40.1% (36.6%–43.7%) of municipalities in New England had conducted a self-evaluation of their programs and policies and almost half (46.5%; 42.9%–50.1%) had a procedure in place for

notifying the public about ADA issues. The modal responses for why a self-evaluation had not been conducted cited the lack of personnel and lack of knowledge, as shown in Figure 5. Lack of knowledge was the most common response for not meeting the notification requirement. 86% (82.2%–89.2%) of municipalities with 50 or more employees had designated an ADA coordinator and about three-quarters (73.9%; 69.2%–78.2%) had a procedure for receiving and addressing complaints. Of those who did not have an ADA coordinator or other designated employee, lack of personnel was the most common response. Of the administrative requirements, developing a transition plan had the lowest compliance (38.8%; 34.2%–43.6%). For those without a transition plan, a lack of knowledge was the most common cited reason.

Accessibility of services, programs, and activities requirements generally had higher compliance. 92.7% (90.0%–94.3%) reported that all polling places in the jurisdiction were ADA accessible, 75.3% (71.5%–78.9%) of those who operated emergency shelters reported that all were accessible, 72.9% (69.6%–76.1%) had considered people with disabilities in all phases of emergency management, and 55.1% (51.4%–58.8%) had an employee who arranges accommodation requests for effective communication such as sign language interpreters or large print materials. For those not yet arranging effective communication, the lack of personnel was the most common response. Of the requirements least in compliance, having an accessible website was the lowest at 34% (30.5%–37.5%) with lack of knowledge as the most cited reason for noncompliance. For the question about website compliance, however, many municipalities did not appear to know whether or not their municipal website was accessible and several noted that their website was in the process of being upgraded and made accessible.

Appendix Table S5 shows pairwise correlations across requirements. Positive correlations imply that the pair of requirements are completed together whereas negative correlations imply that the pair are treated as “either/or”. Overall, administrative requirements were moderately correlated with each other with correlations between 0.21 and 0.56. Completion of a self-evaluation was correlated with the existence of a transition plan (0.56) and having an ADA coordinator was correlated with having a notification procedure (0.41). Having notification and complaint procedures were also moderately correlated with each other (0.33). Overall, compliance with accessibility to services, programs, and activities was only weakly correlated with compliance with administrative requirements (-0.14 to 0.34). Furthermore, making shelters and polling places accessible had a slight positive association (0.26). Overall, most correlations were positive or close to zero indicating that municipalities were not making trade-offs between requirements.

Table 3 shows which requirements were still unmet among municipalities who were close to achieving compliance with all Title II administrative requirements. Around 37.6% (32.9%–42.5%) of municipalities with fewer than 50 employees and 14.7% (11.9%–17.8%) of municipalities with 50 or more employees were only 1 requirement away from being in full compliance. Among those with 50 or more employees who were nearly compliant (i.e., had completed 4 of 5 requirements), over half (54%) needed to complete a transition plan, 23% needed a notification procedure and 15% needed to complete the self-evaluation. Among those who were two requirements away, transition plans (83%) and self-evaluations (66%) remained the most common requirements not yet in compliance. For smaller municipalities who were

nearly compliant (i.e., had completed 1 of 2 requirements), 57% needed to complete the self-evaluation.

### **Associations with Municipal Characteristics**

The average marginal effects from logistic regressions on municipal characteristics showed that many were not heavily associated with compliance levels. Older municipalities (those with a greater proportion of the population aged 65 and over) were slightly more likely to have completed their administrative requirements, although the effect was fairly small; a one-percentage point increase in the proportion over 65 was associated with less than a 1 percentage point increase in administrative requirement compliance. The associations between an aging population with SPA requirement compliance and overall compliance were negligible.

Socioeconomic characteristics like the proportion with a bachelor's degree or higher education, median home value, and median household income had relatively small effects on compliance. A 1% increase in median household income, for example, was associated with a 0.25 percentage point increase in administrative requirement compliance. Effects on SPA requirements and overall compliance were even smaller in magnitude. Disability rates were shown to have a negative association with compliance; in the bivariate models, a one-percentage point increase in the municipal disability rate was associated with a 1.2 percentage point decrease in administrative requirement compliance. However, in the multivariate model (taking into account the aging, education, home values, and median household income of municipalities), the associated was slightly positive, although not statistically significant.

## **Randomized Intervention**

Results from the randomized intervention show that municipalities that received the link to statistical information about disability prevalence in their area were, on average, 13 percentage points less likely to have completed their administrative requirements and 7 percentage points less likely to have completed their SPA requirements than the group that did not receive the statistical information. Combined, those that received the statistical information were 4 percentage points less likely to be in complete compliance. Using the point scale for administrative requirements, those who received the statistical information achieved 0.71 fewer points than the untreated group. The invitation to the webinar appeared to have a small effect in magnitude. Those who received the invitation were 8 percentage points less likely to be in compliance with administrative requirements. The effect of the webinar invitation on SPA requirements, compliance overall and on the administrative points scale was negligible. None of these effects were statistically different from zero at the 95% confidence level and controlling for municipal characteristics did not meaningfully affect the estimates.

## **Discussion**

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Over a quarter-century has passed since the ADA was enacted and yet, as results from the ICIADA survey suggest, assuring that protections for people with disabilities are in place for government-citizen interactions remain a challenge in many localities. Overall compliance to Title II requirements – assuring that services, programs, and activities are accessible and that appropriate policies and plans are in place – pose a significant challenge for many municipalities. With about 1-in-20 municipalities in full compliance across New England, interventions appear necessary to help local governments follow through with their obligations.

On the first of our research questions – to what extent and in what areas is compliance to ADA Title II obligations a challenge? – we find that local governments are not, by and large, meeting their obligations under Title II. Only about 1-in-7 have services, programs, and activities entirely accessible to people with disabilities in their community, and about one-fifth have taken the necessary administrative steps to build the policy framework for tackling discrimination in the provision of public services. Only 5% of municipalities had done both.

Interestingly, we find that compliance to administrative requirements is higher among cities and towns with 50 or more employees than their smaller neighbors by nearly 2-to-1, despite having additional requirements with which to comply. In fact, nearly half of small municipalities (those with fewer than 50 employees) have not taken any steps toward ADA compliance, having neither conducted a self-evaluation nor established a notification procedure.

While larger governments appear further along in meeting obligations, some requirements appear to still elude completion. Fewer than half of larger governments have a transition plan for achieving accessibility goals and the transition plan is the most common requirement needing completion among those who are near full compliance. This may be because other requirements may be more naturally seen as “first step” requirements and that the transition plan is the work product of the ADA coordinator, building off the results of the self-evaluation. Furthermore, developing complaint and notification procedures may be part of broader plan, however these requirements can be implemented while an accessibility transition plan is still being developed. In this sense, the transition plan can be seen as a final step toward ADA compliance.

Completion of the transition plan requirement is therefore helpful in maximally addressing compliance along both intensive and extensive margins. Because it is among the requirements least complied with, helping municipalities develop plans would increase the average number of completed requirements more than targeting any other requirement for intervention. Likewise, since it is the requirement more needed by near compliant municipalities, helping them achieve this task would raise the percentage of those in full compliance, more than targeting any other requirement.

Helping communities meet their requirements means addressing the reasons for why requirements aren't being met. On this second research question, we found that lack of personnel and knowledge were the primary causes for noncompliance, particularly for the self-evaluation requirement. Resource-using requirements, such as those requiring the hiring of an individual to handle ADA issues, logically cited lack of personnel as a leading cause whereas lack of knowledge seems to be the hurdle for requirements of establishing policies and procedures (such as the notification and complaint procedures). There were several reoccurring responses where participating municipalities responded, "We haven't had any issues;" or "We didn't think it was necessary." The first statement indicates that knowledge of the ADA requirements is generated through exposure to specific incidents or requests. The second statement indicates a more general lack of salience among these smaller government entities in New England.

Overall, the findings about reasons for noncompliance is good news for those designing interventions. Organizations looking to help municipalities achieve compliance are often limited in what kinds of interventions they can do by the availability (or rather scarcity) of resources

and funding. And even when funding is available, the size of the budget may limit how many municipalities can obtain those funds. Knowledge-based interventions, where many municipalities can learn from experts at one time, or share best practices with each other, can be far more efficient (benefit per dollar) when lack of knowledge is the predominant hurdle. Municipalities can also contract with organizations that specialize in developing self-evaluations and transition plans to help achieve compliance.

The reasons for noncompliance also appear consistent with the associations with municipal characteristics. More wealthy communities (higher median household income) or those with a higher tax base (higher median home value) do not appear largely predictive of Title II compliance. Were limitation in funds the driving factor, we might expect those wealthier municipalities to be in greater compliance. Knowledge and salience go hand-in-hand; with an aging population and a rising need for disability services, knowledge of and compliance with ADA requirements appear higher.

Helping to educate municipalities is no easy task, however. Most organizations that seek to educate and assist organizations with their ADA obligations use informational resources, activities, and events to provide municipal with the tools they need, but it is not easy to get those tools into the hands of people in place to effectuate change. Attempts to communicate the importance of disability concerns in the community by including a link to local disability statistics of their populations was met with indifference or even outright rejection. Indeed, the intervention show a negligible impact from the statistics intervention on compliance. A follow-up conversation with a municipal employee who was part of the study suggested that many

communications from the ADA Center were largely ignored because the person didn't "know who [the ADA Center] was" and believed the communication to be spam. Evidence from the webinar intervention was similarly treated, however, with such few municipalities actually participating in the webinar, we were not hopeful to find a meaningful effect.

## **Limitations**

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The sample used in this study was a non-probability sample and therefore subject to potential bias in its generalizability to all New England cities and towns. Specifically, because conducting the survey required the identifying a contact person at each jurisdiction who could reasonably answer the survey's questions about ADA compliance, many cities and towns without an identifiable contact may be at higher risk of noncompliance with Title II requirements than those in the survey. In addition, the fact that municipalities who completed the survey had an identifiable contact may help explain the high ADA coordinator requirement completion rate. Similarly, nonresponse to the survey may be associated with noncompliance due to an unwillingness to admit failure to meet their ADA obligations. Indeed, when we compare compliance levels from round two, which had a larger sample, to round one, compliance went down. The additional sample appears to have pulled the mean compliance level down.

In addition to concerns about sample generalizability, definitions of compliance are based on survey self-reports and may not be equivalent to results from a compliance audit or other external reviews of programs and policies. Whether or not a jurisdiction is meeting its Title II obligations is ultimately a decision that can be (and often is) litigated. While self-responses are subject to various kinds of measurement error, the study purposefully set out to identify a

representative (city official, managers, administrators, clerks, and others) of each municipality who could provide the best assessment how their jurisdiction is performing. Other people outside of government, including people with disabilities who reside in these communities, may have different opinions about the state of compliance in their city or town.

Lastly, the sample size of the survey was insufficient to draw statistical conclusions for many detailed dimensions. Ideally, we would have liked to present statistics about Title II requirements broken down by population size in each state, however, the small sample of large cities and towns in Maine, New Hampshire, and Vermont and small towns in Rhode Island, combined with even moderate levels of item nonresponse, result in margins of error too large to conclude much of anything.

## **Recommendations**

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From this study, we identified which requirements should be targeted first for interventions by organizations like the ADA Centers to best help improve compliance with Title II requirements. Given tight budgets, it is a relief to learn that the problem of compliance is not completely solved by simply increasing funding. Furthermore, the kinds of interventions needed are generally in line with the expertise that the ADA Centers possess. Because the areas of need and reasons for noncompliance appear readily fixable with existing resources, focus should instead be placed on how to engage municipal representatives with those resources to see requirements implemented.

From our analysis of interventions, it appears that the kind of help being provided matters little if municipalities are not receptive to receiving assistance. We can still learn from the survey

that focusing on helping municipalities with posting a notice of ADA compliance or implementing a complaint procedure are requirements that need some education and a little guidance to achieve compliance, however the challenge is in how to get buy-in from municipal representatives for using the provided information. ADA Centers develop a wealth of materials, like the Title II Action Guide, that could be extremely helpful but are not being used, despite repeated attempts to convey those resources to the municipalities that need them. ADA Centers should not assume that monthly newsletters or other passive communications effects are getting through to relevant municipal actors.

In this sense, antecedent to assisting municipalities, there must be the development of relationships between municipalities and those in the position to help. Unless and until municipalities see their state and regional ADA support organizations as partners in delivering the needed local services, it will remain difficult for those organizations to help bring the compliance up to acceptable levels. State affiliates may also be in a better position than the regional ADA Centers for working with small municipalities, who engage with state-based organizations, but may shy away from regional or national groups. The Massachusetts Office on Disability (MOD), the state's affiliate, has had success in engaging municipalities in the Commonwealth by integrating resource-based interventions for administrative requirements with capital improvement grants. Since 2017, MOD has approved 129 separate grant applications across 106 different communities totaling over \$5.25 Million. Paired with the subsequent opportunity to apply for MOD capital funds - contingent on a completed ADA Transition Plan - municipalities have eagerly pursued these funding opportunities. Using these

funds, municipalities can contract with the private organizations with expertise in working toward compliance.

Similarly, the Connecticut state affiliate established a municipal ADA Coordinator Certificate Program. This program ensures that designated ADA Coordinators have the knowledge and understanding of the law to be effective. Currently, 36 of Connecticut's 161 municipalities have enrolled in the certification program. This source for shared information may be one reason why compliance was higher among municipalities in Connecticut than the other New England states. Beyond the direct assistance these programs provide, municipalities have developed a relationship with the organizations and so subsequent information sharing is made easier.

## Tables

**Table 1: Title II Requirements and Associated ICIADA Survey Questions**

Requirement Label	50 + Employees Only	Survey Question Wording
<b>Administrative Requirements</b>		
ADA coordinator*	✓	Is there an employee who handles ADA compliance?
Complaint procedure*	✓	Is there a municipal complaint procedure that includes ADA issues?
Notification procedure*	x	Does the municipality notify the public about its compliance with the ADA?
Self-evaluation*	x	Has the municipality conducted a self-evaluation of programs and policies for ADA compliance?
Transition plan*	✓	Did the municipality develop an ADA Transition Plan?
Label		Survey Question Wording
<b>Accessible Services, Programs, and Activities</b>		
Accessible voting		Are the municipality's polling places ADA compliant?
Emergency plans <sup>†</sup>		Are people with disabilities considered in all phases of local emergency management?
Accessible shelters <sup>†</sup>		[If municipality operates shelter(s),] are the shelter(s) ADA compliant?
Effective communication*		Is there an employee who arranges accommodations for an effective communication request such as sign language interpreter or materials in large print?
Accessible website <sup>*†</sup>		Is the municipality's website accessible?

\* Denotes topics with a follow-up question to report reasons for noncompliance

<sup>†</sup> if applicable

**Table 2: Sample Composition and Weighting**

	Overall	CT	ME	MA	NH	RI	VT
<b>All Municipalities</b>							
<i># of Cities and Towns</i>							
Total	1,496	169	455	351	234	39	248
Large municipalities (10k+)	366	97	21	180	30	30	8
Small municipalities (<10k)	1,130	72	434	171	204	9	240
<b>Round 1 Sample</b>							
<i># of Cities and Towns</i>							
Total	315	37	99	112	35	11	21
Large municipalities	116	27	3	65	6	9	6
Small municipalities	199	10	96	47	29	2	15
<i>Average Normalized Weight*</i>							
Total		0.92	0.98	0.66	1.39	0.76	2.52
Large municipalities	0.67	0.77	1.49	0.58	1.07	0.71	0.28
Small municipalities	1.19	1.28	0.96	0.78	1.45	0.96	3.41
<b>Round 2 Sample</b>							
<i># of Cities and Towns</i>							
Total	437	61	124	159	43	21	29
Large municipalities	171	37	9	101	5	15	4
Small municipalities	266	24	115	58	38	6	25
<i>Average Normalized Weight*</i>							
Total		0.80	1.12	0.61	1.66	0.54	2.61
Large municipalities	0.59	0.74	0.71	0.47	1.83	0.57	0.61
Small municipalities	1.29	0.91	1.15	0.90	1.64	0.46	2.93
<b>Round 1 Sub-sample</b>							
<i># of cities and towns</i>	174	18	57	59	22	5	13
<i>Average Normalized Weight*</i>							
Total		0.84	0.94	0.62	1.32	0.73	2.80
Large municipalities	0.64	0.73	1.43	0.55	1.02	0.68	0.27
Small municipalities	1.19	1.05	0.92	0.74	1.36	0.92	3.26
<b>Round 2 Sub-sample</b>							
<i># of cities and towns</i>	167	29	33	73	5	15	12
<i>Average Normalized Weight*</i>							
Total		0.66	1.71	0.50	5.82 <sup>†</sup>	0.30	2.57
Large municipalities	0.45	0.56	1.03	0.39	-	0.32	1.19
Small municipalities	1.67	0.89	1.78	0.77	-	0.24	2.70

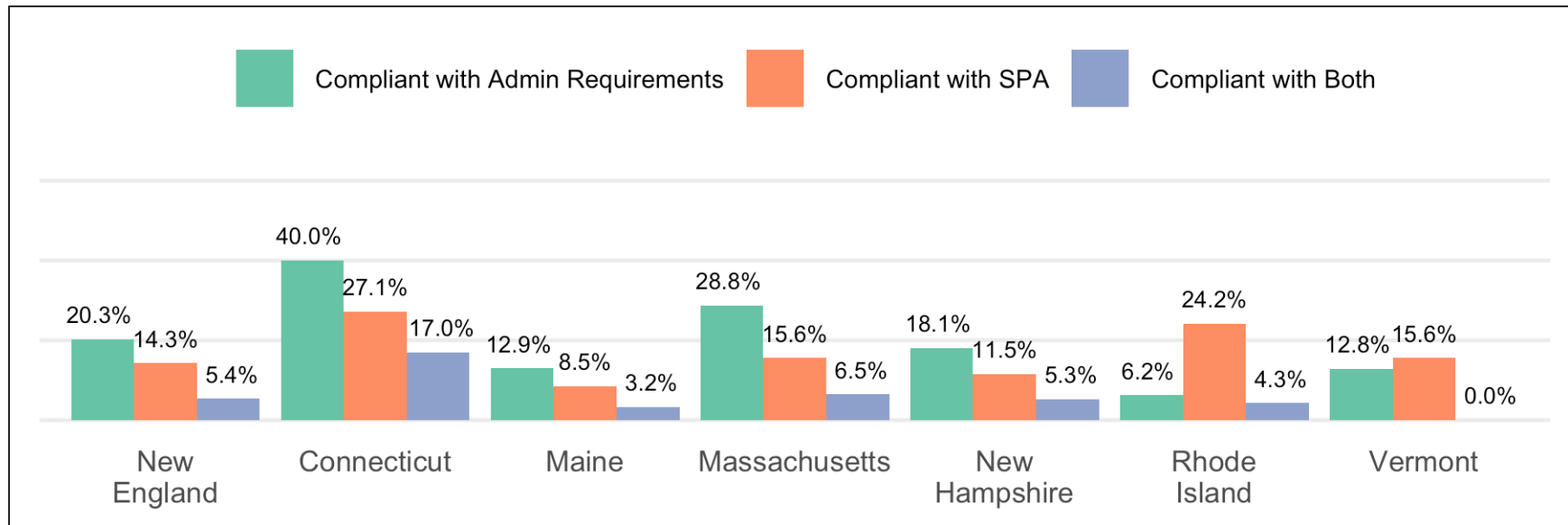
\* Normalized weights were calculated by dividing the average weight in each stratum by the average weight of the sample.

<sup>†</sup> The post-stratification adjustment factor for New Hampshire was estimated by collapsing the population size strata.

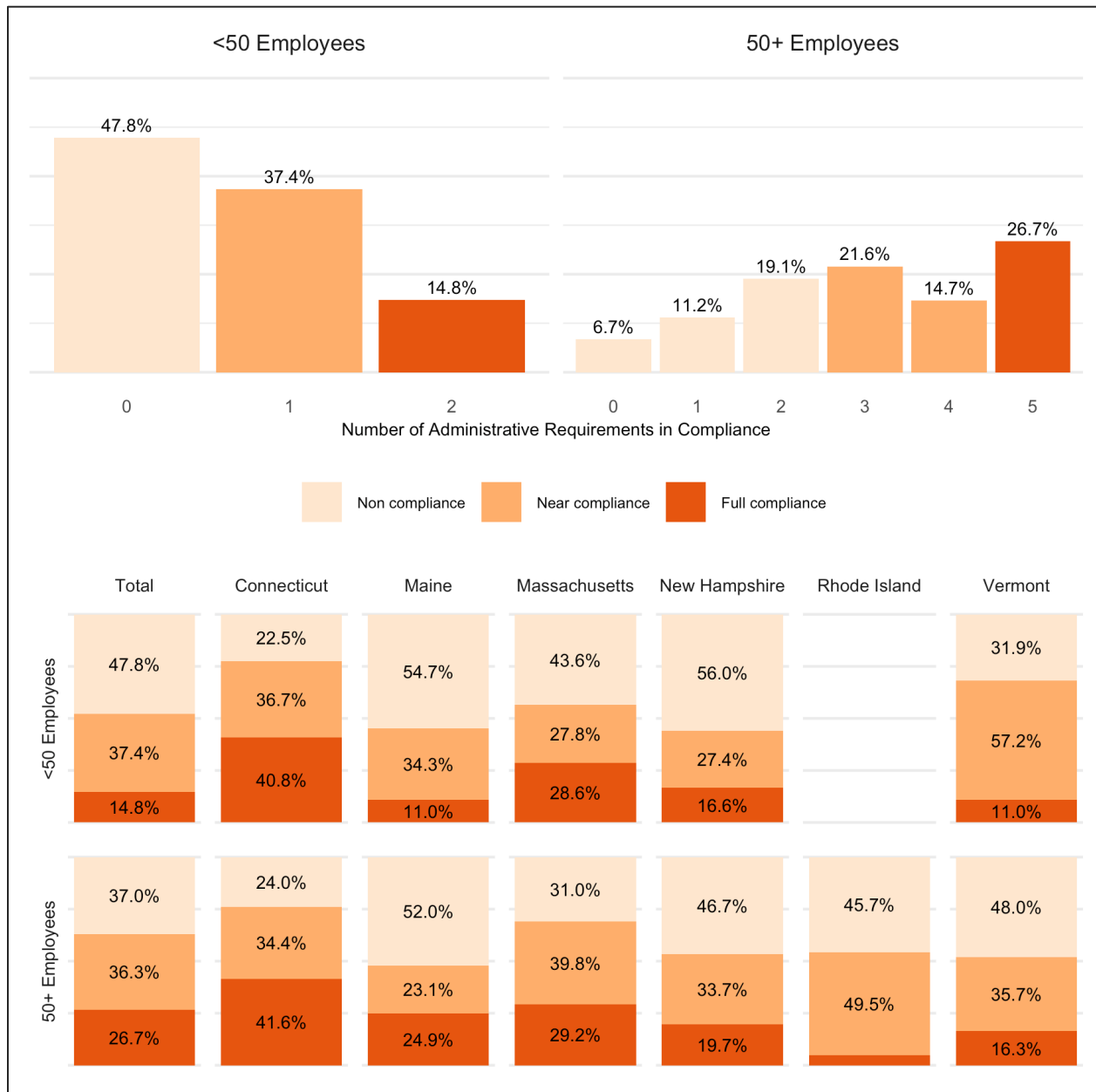
**Table 3: Number and distribution of requirements left to accomplish**

	<u>&lt;50 Employees</u>		<u>1 Req Left</u>		<u>50+ Employees</u>		<u>2 Reqs Left</u>		<u>3 Reqs Left</u>	
	Estimate	95% C.I.	Estimate	95% C.I.	Estimate	95% C.I.	Estimate	95% C.I.	Estimate	95% C.I.
Percent Distribution	37.6	32.9–42.5	14.7	11.9–17.8	21.6	18.4–25.0	19.1	16.1–22.3		
<b>Requirements for all municipalities</b>										
Self-evaluation	56.4	47.7–64.7	15.1	10.2–21.2	65.8	57.6–73.3	78.4	70.8–85.0		
Notification procedure	43.6	35.3–52.3	23.1	17.3–29.8	34.0	26.3–42.4	74.0	66.3–80.8		
<b>Requirements for municipalities with 50+ employees</b>										
ADA coordinator	-	-	2.5	1.0–5.2	5.0	3.0–7.6	11.3	6.1–18.6		
Complaint procedure	-	-	4.1	1.7–7.9	11.6	7.7–16.4	37.5	29.0–46.5		
Transition plan	-	-	55.1	44.8–65.1	81.5	75.3–86.8	92.0	83.3–97.1		

**Figure 1: Compliance with Title II Requirements**



**Figure 2: Compliance with Administrative Requirements**

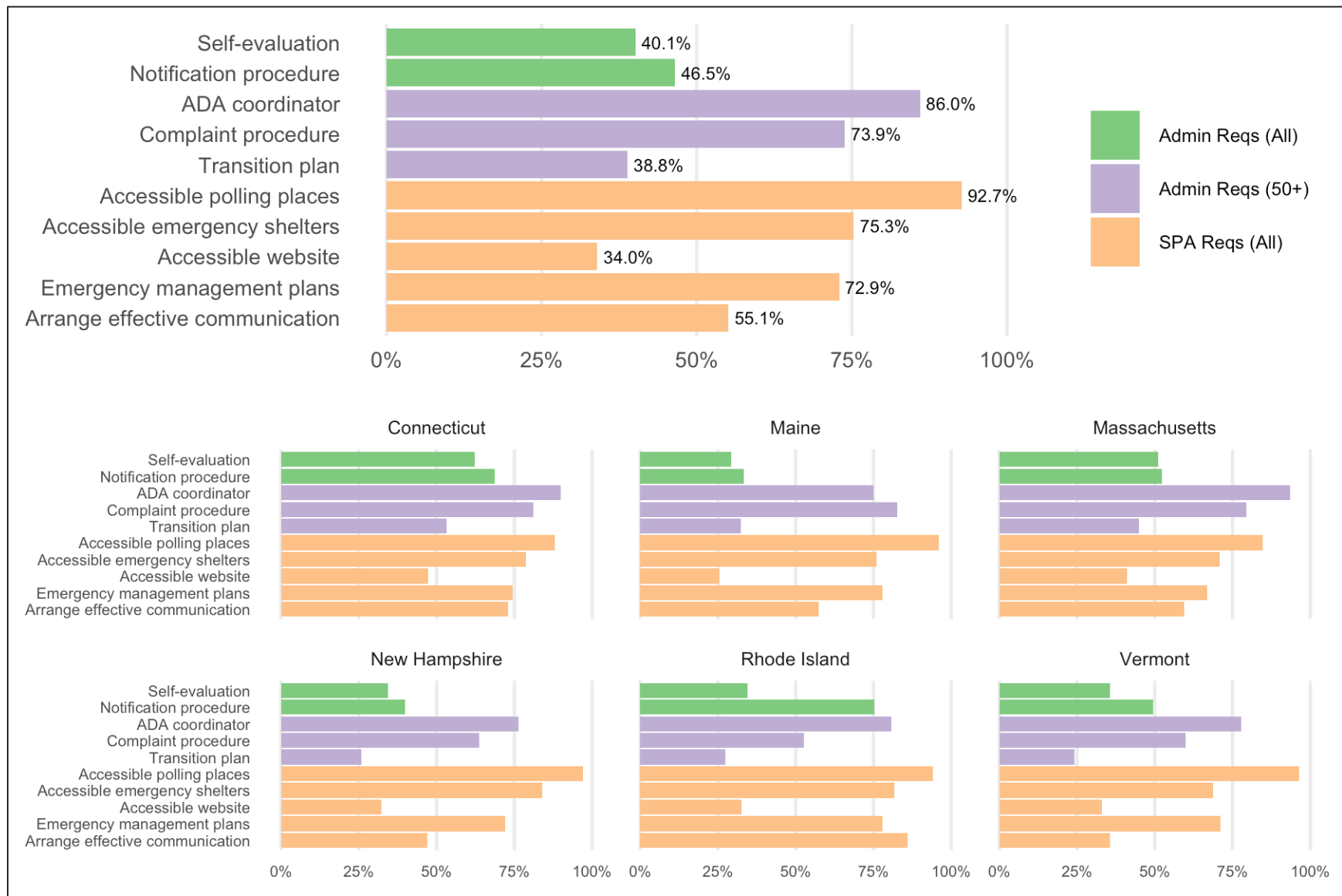


Note: In municipalities with less than 50 employees, "Non-compliance" is defined as having completed no requirements and "Near compliance" as having completed 1 requirement. In municipalities with 50 or more employees, "Non-compliance" is defined as having completed 0 to 2 requirements and "Near compliance" as having completed 3 to 4 requirements.

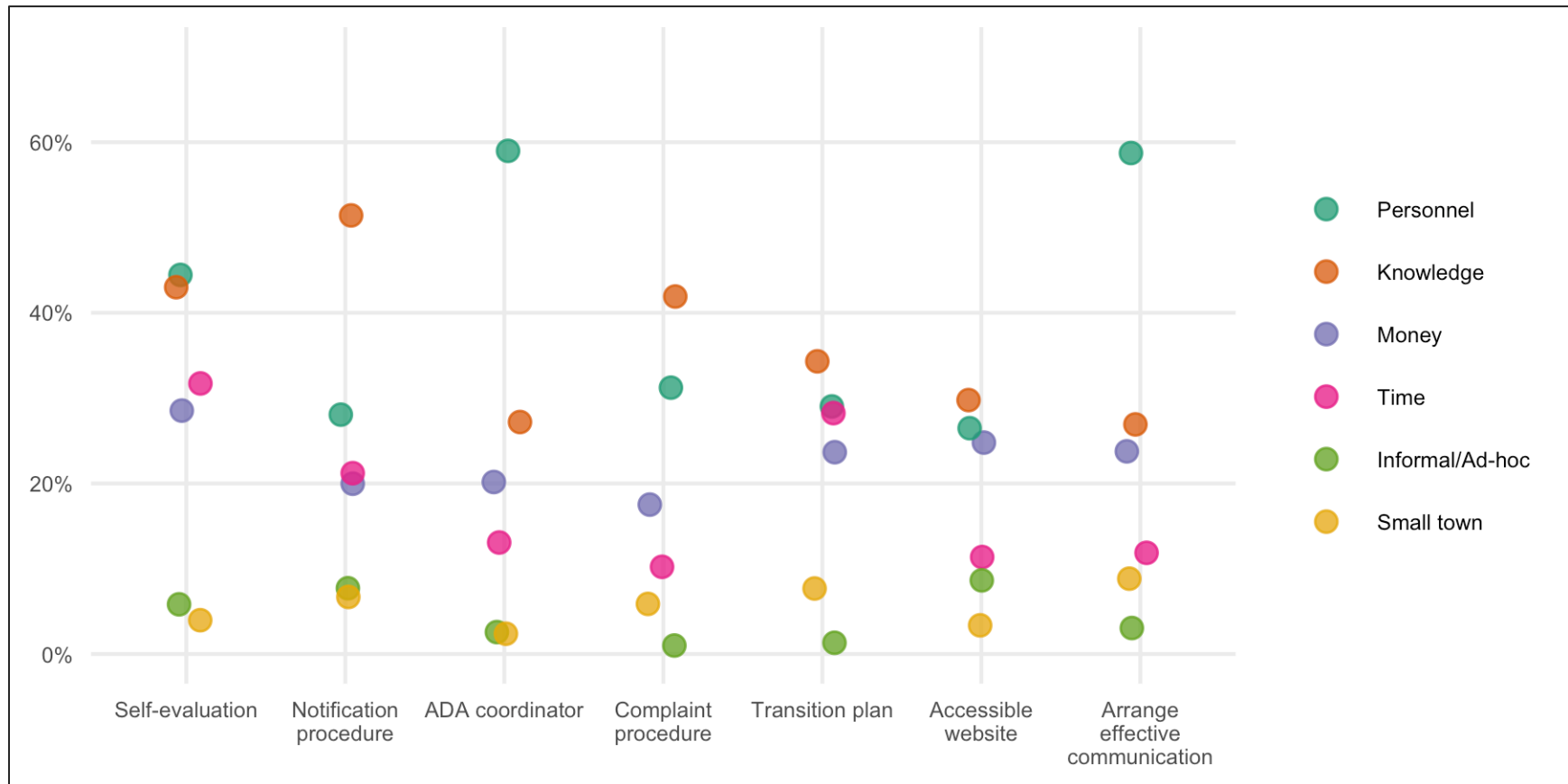
**Figure 3: Reasons for Non-compliance Overall by State**



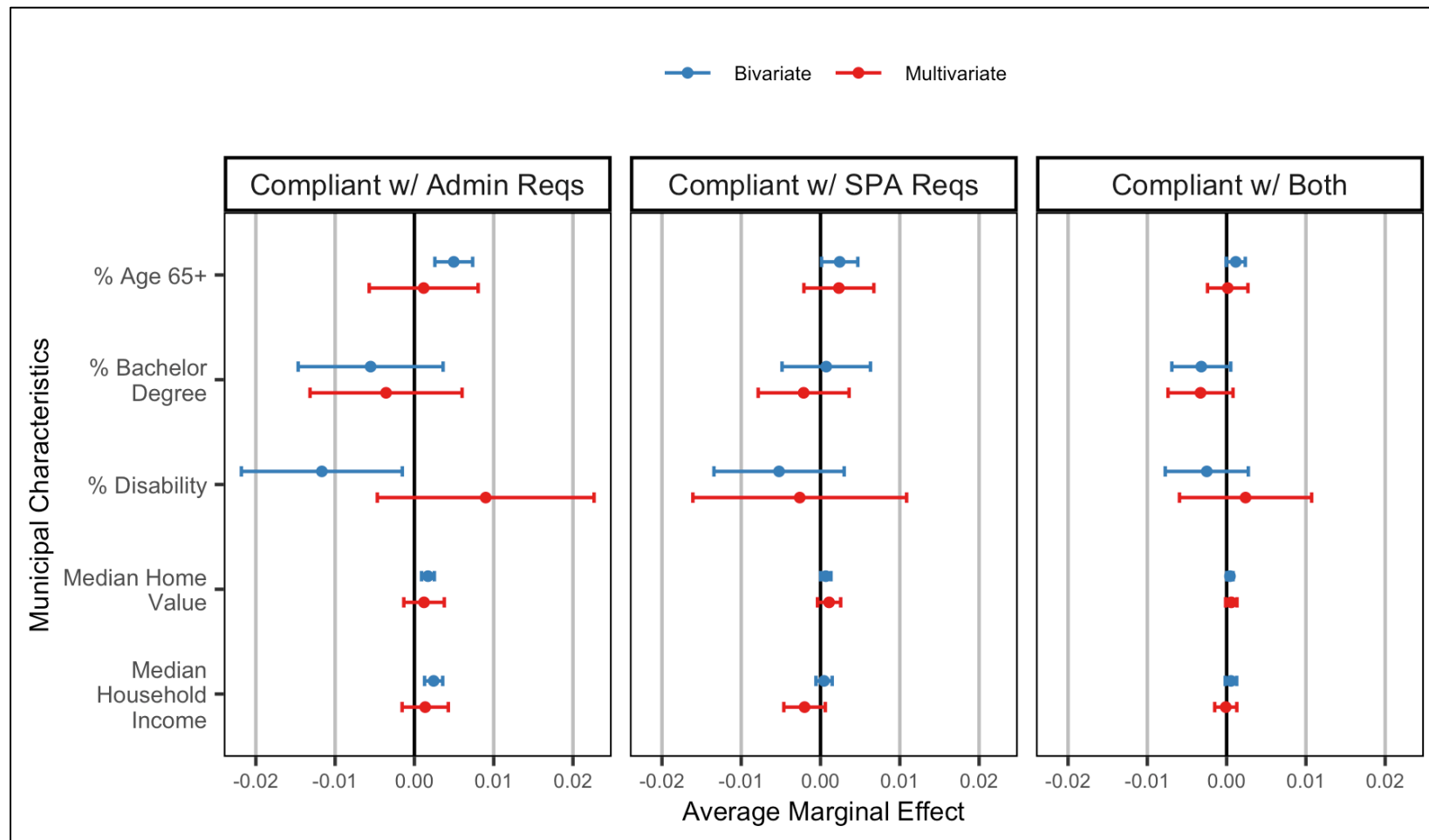
**Figure 4: Compliance with Individual Title II Requirements**



**Figure 5: Reasons for Noncompliance with Individual Requirements**

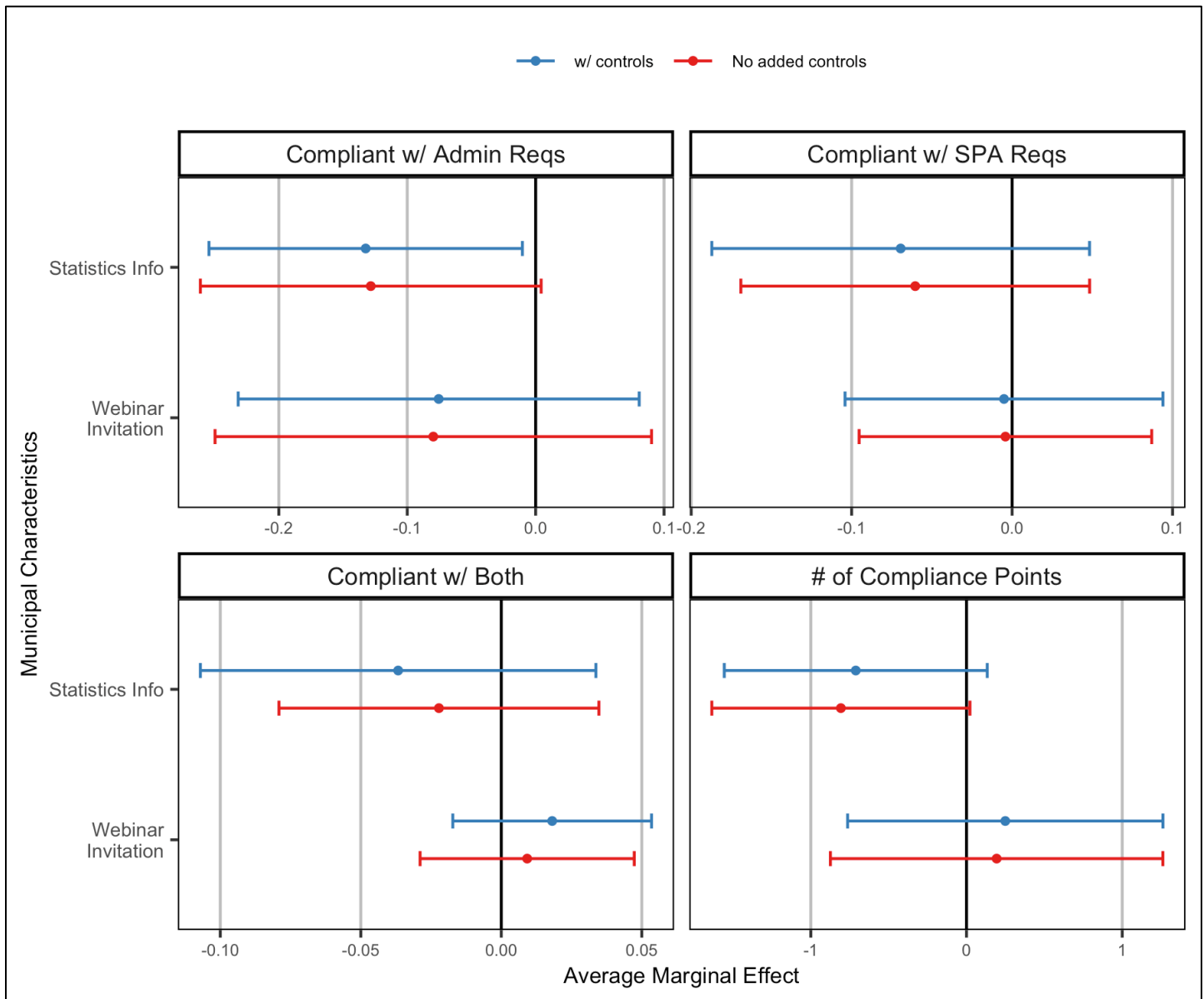


**Figure 6: Associations between Municipal Characteristics and Title II Compliance**



NOTE: Compliance was modeled using logistic regression. Average marginal effects were estimated from model coefficients.

**Figure 7: Effect of Randomized Interventions on Compliance Levels**



NOTE: Binary measures were modeled using logistic regression and counts (points) were modeled using poisson regression. Average marginal effects were estimate from model coefficients.

Controls include municipal characteristics from the 2018 ACS: % with a bachelor's degree, % 65 year old and older, median home value, median household income, and non-elderly adult disability rate. All models also included state fixed effects.

Compliance points are defined as 2 points for completing a requirement and 1 point for being "in progress". Points are totaled across administrative requirements.

## **Appendix A. Design of the ICIADA Survey, Sample Construction, and Weighting**

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The New England ADA Center staff developed the ICIADA survey questionnaire from their expertise as subject matter experts for ADA implementation and their experience providing assistance to municipalities across the region. The staff tested the phrasing of questions and response options with representatives from selected jurisdictions and built an online instrument using SurveyMonkey® to collect the survey responses.

The survey frame was developed by first taking the list of all cities and towns in the New England region and identifying possible contact information for one or more representatives from each who could reasonably answer the questions about the municipality's compliance with ADA requirements. A representative was identified in 933 of the 1,496 municipalities in New England, and attempts were made to secure responses while assuring that a sufficient sample was obtained from each state. Outreach was made through Constant Contact® email software, personal email, and over the telephone. Between June and October 2018, staff at the New England ADA Center and its state affiliates fielded round 1 of the survey and data were collected from 338 municipalities. Round 2 was collected between December 2019 and March 2020 and yielded 525 observations. Responses from each round were downloaded from the SurveyMonkey portal and loaded into R statistical software for analysis. An initial examination of the data found that 19 observations in round 1 and 69 observations in round 2 were either invalid or lack sufficient information to be considered "complete" and thus were dropped from the analysis. The final analysis dataset contains 775 observations; 319 from round 1 and 456 from round 2.

Internal consistency edits were not performed, however, two municipalities that failed to provide information about their population size were imputed values based on Census Bureau population counts. For any municipality with multiple responses – often because 2 or more members of the municipal government were contacted to obtain a survey response – all responses were retained, however, each was down-weighted.

Because the survey is characterized as a non-probability sample, making generalizations to the whole may be problematic, and yet, certain methods can be employed to help lessen bias.

Weighting, based on post-stratification to known counts, should partially correct for some differences between the sample and actual population of cities and towns in New England.

First, municipalities with 2 or more responses were given an initial weight ( $w_{0i}$ ) equal to the inverse number of responses. For example, a town that provided two responses would each have an initial weight of one-half. Using information about the location and population size of municipalities, we then calculated post-stratification adjustment factors to weight sample counts to known counts of municipalities by state and population size. The adjustment factor for a particular strata  $d$  is estimated as  $w_d = N_d / \sum_{i \in d} w_{0i}$ , where,  $N_d$  is the number of municipalities in strata  $d$  and  $\sum_{i \in d} w_{0i}$  is the sum of the initial weights in strata  $d$ . The final weight is the product of the initial weight and the adjustment factor:  $w_{fi} = w_{0i} \times w_d$ . A normalized average weight was also produced, which divides the average final weight in a strata by the overall average weight:  $\bar{w}_{fd} = \frac{n}{N \times n_d} \sum_{i \in d} w_{fi}$ . In this paper, all percentages are presented as weighted estimates, unless otherwise specified. Unweighted estimates are included in the appendix.

Using the name of the city or town, which a subset of respondents provided, survey responses were linked to information from the Census Bureau's 2018 American Community Survey and to treatment assignment in the intervention. To correct for any sample differences between those respondents that provided a town/city name and those that did not, a separate set of weights were used for analysis of the subset. Since there were no large municipalities from New Hampshire in the sample subset, the population size strata in that state were collapsed for the post-stratification step and then weights were raked so that the resulting margins match population totals.

All estimates of variance take into account the stratified sample across states and apply a finite population correction factor to account for the relatively large percentage of municipalities that participated (approximately 1-in-5 municipalities were in the sample).