

“I Think They Do This for People to Give Up”:  
The Politics and Usability of State Unemployment Insurance Websites

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Administrative burdens like confusing paperwork, required documentation, in-person visits are onerous parts of an application process that discourage participation from eligible individuals. Social welfare programs are rife with them. Previous research has identified politics and race as possible predictors of the intensity of administrative burdens. For unemployment insurance (UI), this pattern appears to hold true. There is substantial variation in people's experiences with UI between states based on local politics and the racial makeup of the state. However, previous literature has focused almost entirely on the physical parts of an application process. While these are worth considering, few researchers have included the burdens imposed by poor website design in their analysis. I adopt a set of criteria from the Nielsen Norman Group to calculate a usability score for each state's UI website. Then, I use multiple OLS regressions to look at the effects of state income, racial makeup, political party control, and political ideology on a state's usability score. In the end, politics and race appear to influence usability. States with higher percentages of Republican voters had worse usability scores. Likewise, states with greater minority representation also had worse scores. As government services like UI increasingly become online-only, web usability becomes critically important to how most people access social welfare benefits. Poorly designed websites risk excluding eligible people from much-needed government aid.

Key words: usability, administrative burden, unemployment insurance, state politics, race

The internet is one of humanity's most consequential inventions. Almost all parts of the modern human experience (social connections, employment, education, healthcare, transportation, etc.) rely on the internet in some form. Another essential human experience, interacting with the government, has also gone online. In the last 20 years, the U.S. government has significantly invested into digitizing its services (White House 2012). Individuals can now apply for Medicaid or receive food benefits through an online portal. Compared to mail or in-person visits, providing services online offers faster results, fewer user errors, and it lets people access services from anywhere (Thomas and Streib 2003; Gilbert et al. 2004; Wroblewski 2008).

Unemployment insurance (UI) is one example of a government service that has almost entirely transitioned to the digital world. It is designed to help workers who lost their jobs at no fault of their own. While filing for UI used to require filling out physical forms, every state now offers it online. In fact, many states encourage people to *only* apply online, leaving telephone or in-person visits as last resort options.

Transitioning to online-only is an attractive option for governments; however, it risks leaving some behind. Those without the internet cannot use online portals. The difference in access to the internet between groups—poor, rural, elderly, and handicapped versus rich/middle-class, urban/suburban, and young—is the digital divide (Dijk 2020). Fortunately, over the past decade, technology has gotten cheaper and the government has invested in internet infrastructure—Biden recently authorized over \$100 billion to bring affordable broadband to the entire US (Infrastructure Investment and Jobs Act 2021; Morrison 2021). As a result, the internet and connected devices are now in the hands of most Americans (Vogels 2021).

The pandemic has only exasperated the need for online benefits filing. With an airborne virus that spreads through face-to-face interactions, being able to apply without leaving one's home has never been more important. After Covid-19 closed businesses, newly unemployed people swarmed their state's online UI websites. Many sites crashed and desperate people had to wait months to receive their first check. The surge in unemployment has exposed just how unusable many states' unemployment websites are. Even recently modernized systems like Florida's are full of "pointless roadblocks" that slow or prevent people from getting the money they need (Wamsley 2020). As one woman in Michigan remarked as she tried to access her state's UI, "I think they do this for people to give up" (Badger and Parlapiano 2020).

These digital "roadblocks" are similar to the administrative burdens identified by previous researchers that make physical application processes more onerous (Burden 2012; Moynihan et al. 2014). Administrative burdens like complicated forms, mandatory face-to-face interviews, and requirements to provide extensive documentation are discouraging and decrease participation from eligible individuals (Brodkin and Majmundar 2010; Sommers et al. 2012; Moynihan et al. 2019). Interestingly, the presence of administrative burdens varies between states. Previous research has identified politics as a main driver of this variation (Fording et al. 2007; Moynihan et al. 2013). The difficulty of receiving Medicaid (a government service like UI) between states illustrates the relationship between politics and administrative burdens (Moynihan et al. 2013). Traditionally, Republicans have opposed social welfare programs like Medicaid and have pushed against their presence in the states they control (Rocco et al. 2020). In contrast, Democrats have supported them, especially Medicaid (Rocco et al. 2020). Unsurprisingly, Democrat controlled states had easier, less burdensome applications while those in Republican controlled states were longer and more burdensome. Their research suggests politicians may use administrative burdens to encourage nonparticipation in programs they disagree with.

However, research on administrative burdens has overwhelmingly neglected to include website usability. Unscannable blocks of text, non-mobile-friendly layouts, and confusing navigation structures are all similar burdens that impede people's ability to access what they want. As government services become online-only, web usability becomes even more important as a potential barrier to access. In this paper, I look at the predictors of the usability of a state's unemployment insurance website. Specifically, does a state's usability reflect its political orientation?

## LITERATURE REVIEW

### *Egovernment and The Digital Divide*

Governments across the world have been digitizing their services for years now. Due to their efforts, most services like unemployment insurance that would have required in-person visits and a pen can now be completed online. They have heavily invested in digital services (also known as egovernment) because of what being online promises: faster results, greater civic trust, fewer user errors, and more participation from the public (Thomas and Streib 2003; Gilbert et al. 2004; Yang and Rho 2007; Wroblewski 2008). But, its ability to deliver these benefits depends on 1) if people have access to the internet and 2) its usability.

First, online services mean nothing to those without the internet. The difference between those who can readily use the internet and those who cannot is the digital divide. Today, the internet has grown so essential to society's functioning that it is now a requirement to fully participate in the world (Tomer et al. 2020). Those without the internet are disadvantaged, leading to worse life outcomes (Whitacre et al. 2014). To avoid further alienating this group, governments must continue to offer their services through non-digital means. Thankfully, most states let people apply for unemployment benefits in-person and through the mail (Cook 2021). However, these non-digital options are becoming rarer and rarer as governments move their services entirely online.

Fortunately, the digital divide has shrunk substantially over the years and it will likely continue to shrink as the government keeps investing in affordable broadband (Vogels 2021; Infrastructure Investment and Jobs Act 2021; Morrison 2021). Mobile phones have also contributed to expanding internet access. Their affordability makes them accessible to those unable to buy a computer and broadband. For 15 percent of Americans, smartphones are their only way to use the internet (Perrin 2021). This rate is particularly high among poorer adults, who are the primary users of social welfare programs like unemployment insurance (Barnes et al. 2021). As the digital divide becomes a less pressing issue, the second requirement for effective egovernment, usability, becomes even more important.

### *Usability*

Usability is about how well people can use something. If it is an easy process and the user can reach their goal efficiently, it is usable. If the user struggles to find what they want and gives up, it is not usable (Nielsen 2012; Norman 2013; Krug 2014). Usability is a common theme in web design and relates to how well a website accommodates users' needs and contexts. If a lot of users come to a website from Spanish-speaking areas, a pro-usability choice would be to include a Spanish translation of the site. By accommodating their needs, it is a lot easier for them to get what they want.

Usability matters because, in combination with utility, it creates something useful. If a service is great at solving people's problems but is hidden behind an unusable interface, it is no good. People will avoid using something they cannot navigate (Nielsen 2012; Krug 2014; Zipperer and Gould 2020). On the other hand, it is also not useful to have an easy-to-use service that does not actually solve anyone's problems (Nielsen 2012; Norman 2013). Usability and utility must work in tandem to create something people will actually use and benefit from.

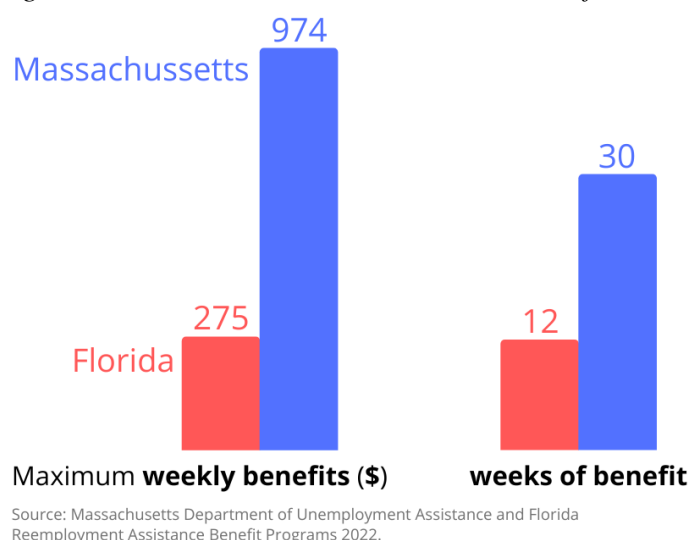
Government services need to both solve people's problems and be usable. Too frequently, they lock their utility behind flagrant usability roadblocks (Pew Center on The States 2008; Venkatesh 2017; Zipperer and Gould 2020). As a result, only 30 to 80 percent of those eligible for social welfare programs like unemployment insurance end up receiving them (Moynihan et al. 2015). If most people cannot access services specifically designed to help them, something is broken. In this case, it is broken by design.

### *Unemployment Insurance*

Unemployment insurance (UI) has seen a massive surge in use during the pandemic. Since it started, 1 in 4 workers have relied on unemployment aid from the government and over the course of 2021, more than a *billion* weekly unemployment payments were claimed, processed, and paid (Stettler and Pancotti 2021). All this usage has attracted attention to the frequently frustrating and unusable state unemployment insurance websites (Zipperer and Gould 2020).

UI is a government-funded social welfare program designed to help those who have recently lost their job. In the US, people file a claim for unemployment within their state. If their application is approved, they will receive a weekly check covering a certain portion of their previous income for a certain amount of weeks. Before the pandemic, the national average for weekly UI payments was \$387 (Kovalski and Sheiner 2020). Despite its name, UI does not cover all unemployed workers. People who voluntarily leave their jobs or people looking for their first jobs are not eligible. UI also has not traditionally supported gig and self-employed workers (Stewart 2020).

*How UI differs between states* States vary wildly in how they implement social welfare programs like UI (O'Brien et al. 2001; Moynihan et al. 2013). Much of this is to do with the defederalization of these programs and the resulting flexibility states have in deciding how to provide them. Other countries offer their safety net programs on a national level which means the experience is uniform across the entire country (Nathan and Gais 2001). In the United States, many programs are run at the state level with minimal federal guidelines. This arrangement came as a result of Republican lawmakers in the 80s and 90s who pushed to defederalize public services (Nathan and Gais 2001; Badger and Parlapiano 2020). Their justification was that operating programs on the state level would better serve the individual economic and social needs of each state. For UI, this gives states overwhelming control over benefit amounts, how long benefits get paid out, eligibility criteria, the application process, and more (Kovalski and Sheiner 2020). As a result, people's experiences with UI vary substantially between states. Comparing the UI benefits between Massachusetts and Florida illustrates just how different states' programs can be (see Figure 1).

*Figure 1: Massachusetts and Florida UI Benefits*

The autonomy afforded to each state has allowed local politicians to shape safety net programs to their own political wills (Fellowes and Rowe 2004; Kelly and Witko 2014; Stewart 2021). Many researchers have identified a connection between the political party that controls a state and the qualities of that state's social welfare programs (Moynihan et al. 2013; Moynihan et al. 2015; Gaines et al. 2021). Traditionally, Democrats have strongly supported UI and other social welfare programs (Pew Research Center 2019; Stevenson 2021). Unsurprisingly, Democratic-controlled states fund social programs like UI more and implement policies that promote constituent participation (Fellowes and Rowe 2004; Moynihan et al. 2013). In contrast, Republican-controlled states have not been as supportive of social welfare programs in their funding and policies, fearing that government benefits discourage people from being productive in society (Moynihan et al. 2013; Moynihan et al. 2015; Pew Research Center 2019; Gaines et al. 2021).

A recent example of the political divide over UI is each state's decision to end or continue the \$300 a week federal unemployment pandemic assistance. When the American Rescue Plan was first signed in March 2021, it expanded and extended unemployment benefits to any states that opted in (Stewart 2021). In the beginning, all states agreed to provide the expanded benefits. However, months later, almost all Republican-controlled states canceled the extra benefits for their constituents. They cited that the benefits were unnecessary and hurt the economy. In contrast, Democrat-lead states maintained the weekly benefits, worried that people were still suffering from the pandemic's new variant and needed help (Hunnicuttt and Schneider 2021). People's experience with UI appear to vary between states depending on that state's political context.

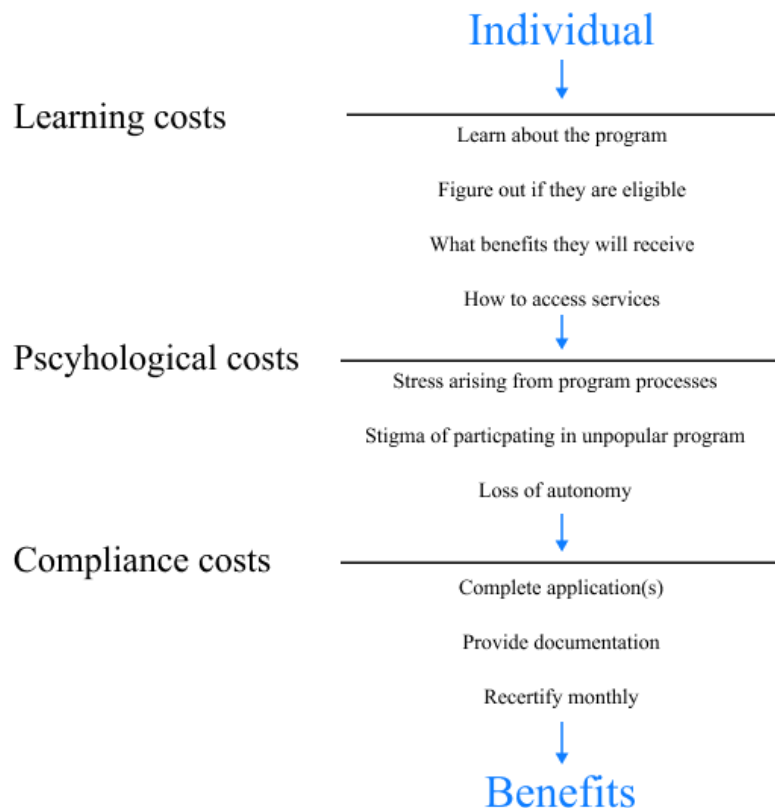
*Why UI matters* UI has several important benefits for society. During a recession, social programs like UI are good economics. They encourage households to keep spending instead of cutting back, which benefits the economy (Ganong and Noel 2019; Bivens 2020; Samuels and Lewis 2022). By putting cash into people's hands, UI catches the economy before it can fall to dangerous levels. The reason why UI is so effective at rebooting the economy is that the money goes to those who are most likely to spend it immediately. People who have lost a portion or all of their income still have bills to pay. Every dollar given out through UI boosts economy-wide

spending by up to \$2 (Vroman 2010). Providing UI also reduces the stress associated with job insecurity (Sjöberg 2010). It keeps the lights on and feeds families when the times are roughest. This is especially relevant during a pandemic when millions lost their job at no fault of their own. However, these benefits only apply if people participate in UI. Administrative burdens that discourage people from applying stifle the positive effects of UI.

### *Administrative Burden*

Administrative burden is “an individual’s experience of policy implementation as onerous” (Burden et al. 2012). Burdens represent the oppressive costs required to interact with the government. Moynihan et al. identify three major components to administrative burden: learning costs, psychological costs, and compliance costs (2014). For social welfare programs, individuals must go through all three to receive benefits (see Figure 2).

*Figure 2: Administrative Burden Framework*



Learning costs are the burdens associated with finding out everything someone needs to know to successfully apply for a program. People may not know that a program even exists in the first place and once they do find out, they have to learn how it will benefit them and all the rules for applying. This may be a difficult process depending on how accessible the information is. It is common for this kind of information to not be obviously presented to applicants and written in complicated language (O’Brien et al. 2001; Lowrey 2021).

Next, psychological costs come as a result of stressful or anxiety-inducing parts of the application process. Initially, people may feel apprehensive about participating in stigmatized social welfare programs, not wanting to be perceived as a “welfare queen” (Lybarger 2019). Additionally, overbearing application processes like requiring urine samples may be felt as

degrading and intrusive (Moynihan et al. 2015). Many also feel anxiety over losing their autonomy as they submit to extensive rules and requirements in the process of applying for government benefits (Brodkin and Majmundar 2010; Moynihan et al. 2015).

Finally, compliance costs are the burdens involved in following through with an application. Filling out forms and collecting extensive documentation for submission take time and effort. Requiring in-person meetings as part of the application process may also be burdensome for those who live far away or do not have a means of transportation. These costs are often compounded by restrictive rules such as only being able to submit an application at certain hours or requiring a processing fee on submission (Moynihan et al. 2015).

*The effects of burden* At first glance, bureaucratic roadblocks like paperwork and complicated rules may just seem like a few extra steps that have little impact on applicant behavior. However, a large body of research from behavioral economics demonstrates otherwise. People systematically exhibit a disproportionate response to administrative burdens (Thaler and Sunstein 2009; Kahneman 2011). Minor burdens that appear harmless can have major effects on a population. A popular example is organ donorship in European countries (Thaler and Sunstein 2009). In Austria, people are automatically enrolled as organ donors. If people do not want to donate, they can easily opt-out by sending their government a note. In contrast, Austria's neighbor Germany has an opt-in system where people must explicitly tell their government that they want to donate their organs. Their donor rates are consistently below 20 percent while Austria's are consistently above 90 percent (Davidai et al. 2012). The smallest of burdens (sending in an email/letter) helps register millions of organ donors in Austria.

In the context of social welfare programs, many empirical studies have demonstrated a negative relationship between the presence of administrative burdens and participation rates (Bartlett et al. 2004; Wolfe and Scrivner 2005; Currie 2004; Brodtkin and Majmundar 2010; Klerman and Danielson 2011). Successful participation from eligible recipients (referred to as take-up) decreases as more administrative burdens are present. The inverse is true too. When burdens are removed and processes simplified, take-up improves. For example, in states that required fewer recertifications for SNAP food benefits, more people successfully enrolled (Hanratty 2006; Ratcliffe et al. 2007).

Another characteristic of administrative burdens that reduces successful participation is their tendency to induce errors. As forms get longer, rules more precise, and language harder to read, the risk of making an error increases (Sweller et al. 1990. Krug 2014). Since states commonly discard applications with errors, the risk of exclusion from a program goes up with the presence of administrative burdens (Lowrey 2021).

*Unequal experiences with burden* Previous research has shown that people's experiences with social welfare programs are not equal (Currie 2004; Ray et al. 2020; Stettner and Pancotti 2021). Black, Hispanic, and poor areas have worse access to benefits and lower take-up rates than other areas (Currie 2004; Hahn et al. 2017; Kuka and Stuart 2021). One possible explanation for this inequality is administrative burdens. They disproportionately affect disadvantaged groups (Ray et al. 2020). First, they are not equally distributed across the racial landscape. Areas with higher percentages of minority groups have more burdensome application processes (Brown 2013; Ray et al. 2020). Research suggests that this inequality stems from racist attitudes towards minority groups (Moynihan et al. 2013; Ray et al. 2020). People may believe that minority groups are not deserving of aid or that they are more likely to exploit the system. As a reaction, politicians introduce more administrative burdens into application processes which make it harder to access services.



Second, when administrative burdens are encountered, minority groups feel the effects of burdens more intensely than other groups. Time, money, energy, transportation access, education, etc. allow individuals to overcome administrative burdens (Moynihan et al. 2013). These resources are typically less available to minority groups (Hanks et al. 2018). Poverty alone has a comparable effect on cognitive functioning to pulling an all-nighter, making it harder to navigate an application process (Mani et al. 2013). Other factors like language barriers, for example, exacerbate learning costs and make completing applications not explicitly written in their language more difficult (Lowrey 2021). Having fewer years of formal education also makes it harder for people to read confusing paperwork and correctly answer complicated questions (O'Brien et al. 2001; Moynihan et al. 2015). As a result, participation from eligible people is substantially lower in these groups (Currie 2004; Kuka and Stuart 2021). For UI during the pandemic, while 25 percent of unemployed workers were Latinx, only 7 percent of those who received benefits were Latinx. Given the obstructing power of administrative burdens, they are likely to blame for some of this disparity. Confusing, burdensome processes that are already difficult for an average person to complete become impossible for low-income Americans and people of color.

Some theorize that these burdens are intentionally introduced as a way to bureaucratically disentitle minority groups (Lipsky 1984; Heinrich 2015; Ray et al. 2020). Governments can openly provide and support social programs, but use legislation to prevent minority groups from benefiting from them. Introducing oppressive administrative burdens into an application process is one avenue to accomplish this. They keep minority groups from accessing benefits that are designed to help them escape their dire conditions. In effect, the unequal distribution of burdens serves as an inequality reproducing mechanism (Ray et al. 2020).

*Political predictors of administrative burden* Researchers have investigated the factors influencing the presence and quantity of administrative burdens in social welfare programs and have consistently found politics to be a predictor (Fording et al. 2007; Moynihan et al. 2013; Heinrich 2015). Because federal legislation has allowed individual states to have a substantial say in how social welfare programs are run, inter-state comparisons highlight the effect of politics. Notably, in Moynihan et al.'s study of Medicaid, they found that the application processes in Democratic-controlled states were less burdensome than those in Republican-controlled states (2013). Their work demonstrates the connection between the political beliefs of a state and the administrative burdens associated with applying to a state's social welfare programs.

*How politics shapes burden* Politics influences administrative burden either indirectly as a byproduct of policy or directly with the intent to control people's access to a program (Moynihan et al. 2015). The first mechanism is policy. When a political group holds power, they implement policies that reflect their partisan beliefs. These policies may then have administrative consequences. For example, a politician that wants to discourage drug use could introduce a bill that requires social welfare claimants to submit proof of non-use through a urine sample. The drug test makes the application process more burdensome, which, as previous research has shown, will decrease participation (Currie 2004; Moynihan et al. 2013). Perhaps inadvertently, a politician introducing an anti-drug policy will have reduced the number of people who apply for social welfare programs.

The second method is more direct. Some scholars suggest that politicians may introduce administrative burdens with the overt intention of discouraging use (Brodtkin and Majmundar 2010; Moynihan et al. 2015). Once again, political beliefs motivate action, but the intent to

control access using administrative burdens is there from the start. For understandable reasons, politicians have rarely openly admitted to this kind of behavior. However, there is strong theoretical support for this being an attractive political strategy (Moynihan et al. 2018). The opaque and justifiable nature of administrative burdens makes them an effective tool for “policymaking by other means” (Lineberry 1977; Moynihan et al. 2013). First, they are “opaque,” meaning that their impact may not be fully understood by the public (Moynihan et al. 2015). While administrative burdens may have a substantial effect on reducing participation, the connection between cause and effect is not as clear as it is for a policy that outright limits who is eligible.

Second, administrative burdens are justifiable in a way that makes them a hard target for criticism and reform. For social welfare programs, fraud is commonly used to justify burdensome administrative processes despite it being a rare occurrence (Podkul 2021; Samuels and Lewis 2022). Politicians can require more documentation, more paperwork, and more effort with the pretense that it helps prevent fraudulent claims (Moynihan and Herd 2019). In these cases, the public may support the overbearing administrative work even if it keeps *eligible* people from accessing benefits.

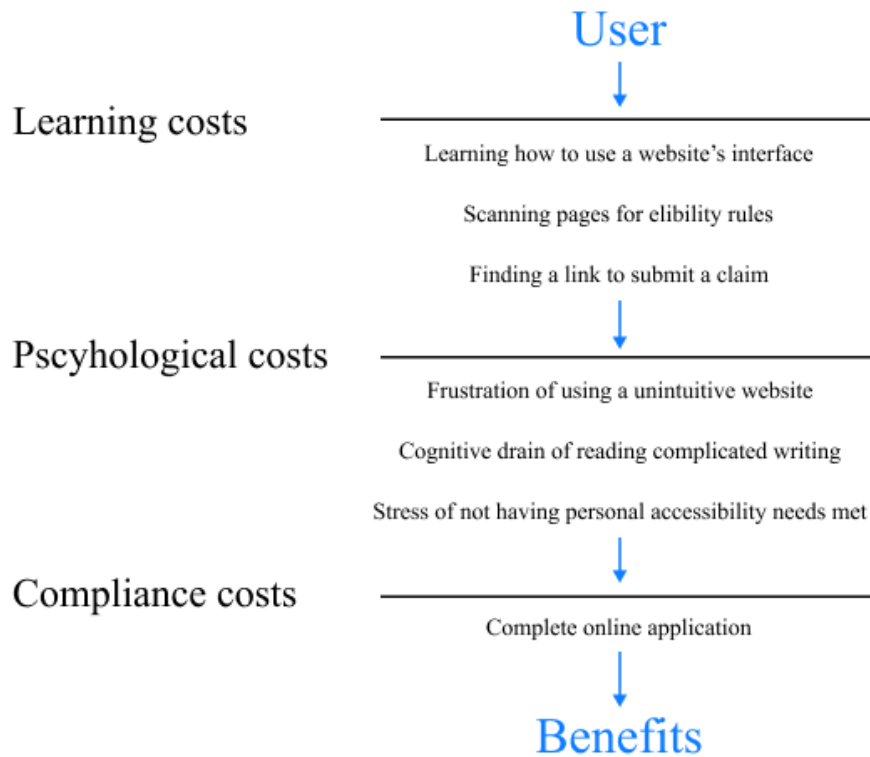
#### *Website Usability as Administrative Burden*

As websites become *the way* to access government services, it is vital that the burdens associated with using a website are also taken into account. Examples include unintuitive page layouts, poorly organized information architectures, confusing navigation tools, unscannable text, no search function, and more. While these usability problems may seem trivial in the grand scheme of things, a significant body of research documents just how much users are put off by even a hint of difficulty on the web (Swaak et al. 2009; Hausman and Siekpe 2009; Belanche et al. 2012). In the private sector, companies invest millions into user experience design (UX) to maximize their product’s usability (Hogan and Laufer 2016). It is critical to a business’s success: “every dollar invested in UX brings 100 in return” (Lyonnaix 2017). Companies with highly-usable products beat out other companies. The simple fact responsible for this life or death scenario is that people do not like interacting with unusable products; they find them too burdensome.

I propose that web usability is a logical, necessary extension of the administrative burden framework. Previous literature has focused almost entirely on the physical parts of an application process (length of forms, in-person visits, hard-to-read paperwork, etc.) (Ratcliffe et al. 2007; Brodtkin and Majmundar 2010; Moynihan et al. 2013). While these are worth considering, few researchers have included the burdens imposed by poor website design in their analysis. As government services increasingly become online-only, web usability becomes critically important to how most people access social welfare benefits.

Within the administrative burden framework, web usability influences the learning and psychological costs that come from the lead-up to the application. People must navigate a website to learn how to apply, about eligibility rules, and to find the actual online application. Poorly-designed websites make this a burdensome process. Additionally, it is stressful to use software not designed with users' needs in mind (Grünberg 2016). This is especially the case in high-stakes contexts such as receiving desperately-needed welfare benefits. As Moynihan et al. point out these learning and psychological costs can be a major deterrent, preventing eligible people from receiving benefits (2015). I propose a new, modernized framework for administrative burden that includes web usability into the burden calculus (see Figure 3).

*Figure 3: Website Usability as Administrative Burden*



In my analysis, I look at UI websites since they have come into the national spotlight and are notoriously out of date and difficult to use (Botella 2020). In 2020, fewer than half of states had modernized their UI system (Simon-Mishel et al. 2020). As a consequence, usability problems are rampant, keeping people away from services they desperately need. Like administrative burdens, does website usability vary systematically between states? If so, what are the predictors? Previous research has connected politics to burdens; is this also the case for usability?

## METHODOLOGY

The usability of UI websites needs a measure to reveal the level of burdens someone would encounter as they try to use them. Greater usability would indicate that a website is less burdensome to use. With fewer burdens, research suggests more people would be able successfully apply for UI, leading to greater take-up (Moynihan and Herd 2019). Measuring every state's UI website (n=50) also allows for an analysis of the predictors of usability. I measured several state-level factors that potentially influence usability: state income, racial makeup, political party control, and political ideology.

### *Usability Criteria*

To measure the usability of each state's UI website, I adopted a set of usability criteria from the Pew Center on the States' 2008 analysis of state election websites. They collaborated with the Nielsen Norman Group (NNG) to develop the criteria. While web design has evolved since 2008, the needs of users have largely stayed the same. Good design is perennial. As such, only a few modifications were made to NNG's original criteria. Most notably, the original "Site tools" category was replaced by "Mobile Friendly" to reflect the increasing importance of smartphones to internet use. A full list of changes is available in the Appendix.

An overall usability score for each website was generated from a composite of seven category scores. Each category has several sub-criteria that were scored 0 to 3, with 0 being extremely poor/no compliance and 3 being the most usable/full compliance. A general scoring key, as well as keys for special categories like web presence, can be found in the appendix. The scores for each sub-criterion were added together to create an overall category score. The category score was then divided by the total possible score for that category and weighted to reflect its contribution to overall usability. Table 1 displays the weighting breakdown.

I evaluated the websites from February to March 2022 (websites may have changed since then). They were viewed using Google Chrome (v. 97) because, according to NetMarketShare, Chrome was the most popular browser at the time of the assessment, with a 66% percent market share. When testing for web presence, I used Google's search engine since, once again, they have the dominant market share.

*Table 1: Category Weights*

20%	Web Presence
20%	Navigation and Information Architecture
20%	Content
15%	Homepage
10%	Accessibility
10%	Mobile Friendly
5%	Search

When evaluating websites, I created the following task scenarios and performed them on each site:

1. How do I apply for unemployment benefits?
2. I work a part-time job. Am I still eligible?
3. What documents do I need to submit my claim?
4. How much are my benefits? How long will they last?

They reflect what claimants most need to know to complete an application. Additionally, answering these questions provided the basis for evaluating the quality of the navigation/information architecture and the content of a website (e.g. finding information about eligibility rules required me to use a site's navigation tools and to read its content).

*Web presence* relates to how easily users can find the right UI website when they start looking for it. This is evaluated by checking how high up a state's official UI website comes up when performing standard searches for key phrases related to unemployment benefits. Whether or not a state provides a link to their official UI website from their main government website also contributes to the score.

With government programs like UI, there are dozens of adjacent sites that might come up under a search for "[state] unemployment." If the official UI website does not show up first or if it cannot be found on a state's main government website, users have to spend longer looking for the right one. Additionally, poor web presence (e.g. not showing up in the first few results for a Google search) risks users ending up on malicious websites where they may get scammed (Gressin 2021).

*Navigation and information architecture* refers to the quality of the navigation tools offered to users and a person's ability to locate what they want within a site. Both are critical to a site's usability. Just like driving down a highway without road signs, using a website with confusing information architecture is a frustrating, time-consuming experience. Users get lost and cannot figure out where they are or how to get where they want to go. Logical and consistent signage like breadcrumbs, page titles, and descriptive links solves this problem (Cardello 2014; Krug 2014; Farrell 2015).

*Content* covers a website's ability to provide key information in an accessible, easily understood format. The UI application process is frequently complex, requiring applicants to be deeply familiar with a long list eligibility requirements and rules for applying. If websites do not present this information in a user-centric way, users struggle to understand it and are more likely to make mistakes (Krug 2014). This is especially important when an error interpreting a state's eligibility rules could mean being denied urgently needed cash assistance.

There are several best practices websites should follow to maximize usability. First, all text should be written 'for the web' in short, scannable nuggets. When people use the internet, they scan pages, instead of reading them in depth (Nielsen 2012). Displaying text in such a way that accommodates this behavior helps users better understand what they need to know. Examples include bolding important points, placing the most important information at the top of the page, and using bulleted lists.

Second, writing should be between an eighth- and a twelfth-grade level with lower being better. Concise, clear writing benefits everyone but is especially important when considering those with a high school diploma or less make up a majority of government assistance recipients (King 2021). The content grade level was assessed using the Flesch-Kincaid Grade level metric, which is one of the most widely used readability tests to determine comprehension difficulty (Pew Center on The States 2008). The metric calculates a score from text based on the number of words and syllables in each sentence. Then, the score is translated to a specific grade level needed to understand it. The Flesch-Kincaid formula can be found in the Appendix. I used an online readability test from WebFX to automatically calculate the reading level for the websites.

Finally, all key information should be displayed in HTML (plain text), not embedded in images or PDFs. Images, even with alt-text, are inaccessible to those using screen readers and can be difficult to load for users with poor internet connections. Modern screen readers can read most PDFs, but the format is still a poor choice for displaying key information. PDFs make for a jarring user experience and can trip up the most digitally literate users (Nielsen and Kaley 2020). Additionally, long PDFs may be slow and costly to download for users on cell service. Not to mention that PDFs are sized for paper, not screens leading to awkward sizing issues.

*Homepage* A website's homepage is its hub. A well-organized homepage is the first step to ensuring users can quickly find what they want (Nielsen 2002). Consequently, the usability and design of a website's homepage matter a lot. The homepage should immediately inform a visitor of the purpose of the site and highlight its most important offerings. It should be easy to scan and organized in such a way that users can quickly tell which information is intended for them. It is likely that most unemployed people come to an UI website to find information on how to apply, eligibility rules, and benefits amounts. Thus, links or information on these categories should be displayed prominently towards the top of the page.

*Accessibility* aims to measure how well users with disabilities can use a website. Visual, motor, and other impairments can make using sites not optimized for accessibility frustrating or impossible (Kearney et al. 2021). I used Google Developer Accessibility tools (recommended by the World Wide Web Consortium) to assess accessibility. Examples of accessible design include, but are not limited to, keyboard navigation, high contrast coloring, alt-text on images, logical heading hierarchies, and captions on audio/visual content (Krug 2014; 18F 2022). Beyond being required by law for government websites, accessibility also allows all users to access content better (World Wide Web Consortium 2021). Consider how many situational contexts reduce people's ability to use a website. For one, the stress of poverty stunts cognitive functioning akin to pulling an all-nighter (Mani et al. 2013).

Another accessibility consideration is language. Websites that are natively translated into a user's preferred language help them access what they need better (Nantel and Glaser 2008). Native translations refer to versions of the website translated by the site owners, not automatically by the browser. For example, if one has their default language set to Spanish, Google Chrome will automatically try to translate sites into Spanish. These translations are based on an automatic algorithm and are not perfect, potentially causing problems for site navigation (DePalma 2006). Granted, bad translations are better than no translations, but native translations are best.

*Search* lets users find exactly what they are looking for, without having to go through a site's navigation structure (Nielsen 2001). Providing it is essential to creating a positive user experience. Some users even exclusively use search to find what they need on a website (Krug 2014). Search should be an obvious box, located in the same spot on every page. The results returned by a search should be appropriate to the query with scannable titles. When testing the quality of the search, I searched for "how to submit a claim," "benefits amount," and "eligibility rules."

*Mobile friendly* refers to how well a website can be used on a mobile phone, which usually has a smaller, vertical screen. As more and more people use smartphones as their primary way of accessing the internet, mobile friendliness has become a necessity. Pew Research reports that 15% of American adults currently depend on smartphones to use the internet at home (Perrin 2021). Smartphone dependence is even higher for lower-income adults. This makes mobile friendliness even more of a priority given that social welfare services are designed to help low-income Americans (Barnes et al. 2021). To evaluate mobile friendliness, I used Google's Mobile-Friendly Test, which automatically checks for mobile usability errors like having text that is too small to read or if clickable elements are too close together.

### *State-Level Predictors of Usability*

I used several state-level factors inspired by Moynihan et al.'s study of Medicaid burdens to help explain the variation in usability across states' UI websites: per capita personal income,

racial makeup, historical political party control, and political ideology (2012). Years of decisions and contextual factors may have built up to create the current condition of UI websites. Thus, when I can, I average data for my independent variables over an 11 year period (2010-2020).

*Economic factors* A state's economic resources likely influence its ability to fund programs. Indeed, research suggests that a state's fiscal constraints inhibit its willingness to improve its egovernment services (Norris and Moon 2005; Rubaii-Barrett and Wise 2008). Modernizing outdated systems and funding social welfare programs are expensive and states with more money are better equipped to do it. I used per capita income since it has been previously used as a measure of a state's wealth (Norris and Moon 2005; Moynihan et al. 2013). I averaged each state's inflation-adjusted (to 2020 dollars) income data for 2010, 2015, and 2020. For analysis, I converted all data into thousands of dollars ( $M = 52.2$ ,  $SD = 8.1$ ). Data are from the Bureau of Economic Analysis.

*Racial context* Race has historically been an important factor in the context of social welfare programs. Many social welfare programs have a legacy of excluding minority groups from accessing benefits (McDaniel et al. 2017). The pattern appears to continue today. Researchers have shown a connection between the racial composition of an area and the quality of social welfare programs where quality goes down as minority representation goes up (Brown 2013; McDaniel et al. 2017). Specifically, the racial makeup of those receiving benefits appears to influence the administrative burdens associated with applying for benefits (Moynihan et al. 2013; Ray et al. 2020). Thus, I include a measure of a state's racial makeup in my analysis. I averaged the American Community Survey 1-year estimates for 2010, 2015, and 2019 to create a variable that captures the percentage of minorities in each state ( $M = 23.0$ ,  $SD = 12.8$ ).

*Political context* The political context of a state shapes the policy decisions that get made. Republican states will make more decisions aligning with Republican values and vice versa. To measure political context, I include two variables: historical political control and general political ideology. Political control represents a political party's ability to influence programs in a state. Moynihan et al. found that states where Democrats controlled all parts of the government had fewer administrative burdens in the Medicaid applications (2013). Based on their work, I generated three variables measuring on the partisan control of states. The first was a measure of unified Republican control over a state. The measure captures the percentage of years the Republican Party controlled the state's house, senate, and governor's office between 2010-2020 ( $M = 43.1$ ,  $SD = 40.2$ ). The second and third variables measured unified Democrat control ( $M = 22.18$ ,  $SD = 40.7$ ) and divided party control ( $M = 34.4$ ,  $SD = 31.1$ ) in the same way. Data were drawn from Ballotpedia. Nebraska's nonpartisan legislature was coded as continuously divided control.

Given that, in theory, politicians aim to serve their constituents, the political beliefs of the population should influence a state's policy decisions. To measure a state's overall political ideology, I used state-level 2020 presidential election data from the MIT Election Lab. In my analysis, I specifically looked at the percentage of voters in a state who voted Republican for President ( $M = 50.1$ ,  $SD = 12.8$ ).

### *Theoretical Expectations*

If politics shape the administrative burdens present in social welfare programs, I expect that states with more liberal constituencies and a greater level of Democratic control will have more usable UI websites. Additionally, states with more economic wealth should have better websites given that they have more resources to allocate to its improvement. Finally, based on

the systematic racial differences in social welfare program accessibility, states with a greater minority population should have lower usability scores.

I used Stata to run multiple OLS regressions looking at the effects of state income, the racial makeup of a state, political party control, and political ideology on a state's usability score. I ran several diagnostics (multicollinearity, heteroskedasticity, outliers) and only found heteroskedasticity. As a result, I ran my models with the *robust* option.

In my analysis, I use effect size to measure the strength of the impact of a variable on usability. Higher effect sizes (either positive or negative) indicate that one variable has a greater influence over the dependent variable. I avoid using statistical significance because 1) my data are the population and 2) statistical significance has been increasingly abandoned because its misleading effects on research ([see more](#)).

There were several limitations to my research. To start, I was the sole coder and the scoring was entirely left to my discretion. My interpretation of usability may not be the same as someone else's. In future research, using multiple coders with demonstrated intercoder reliability would reduce the subjectivity of the scoring system. Additionally, I used automatic tools to measure certain criteria for accessibility and mobile friendliness. Automatic tools detect obvious problems in the code but cannot *determine* if something is accessible or mobile-friendly without human judgment. For example, they can check if images have alt-text, but cannot evaluate if that alt-text is at all helpful or descriptive.

## RESULTS

### *Usability*

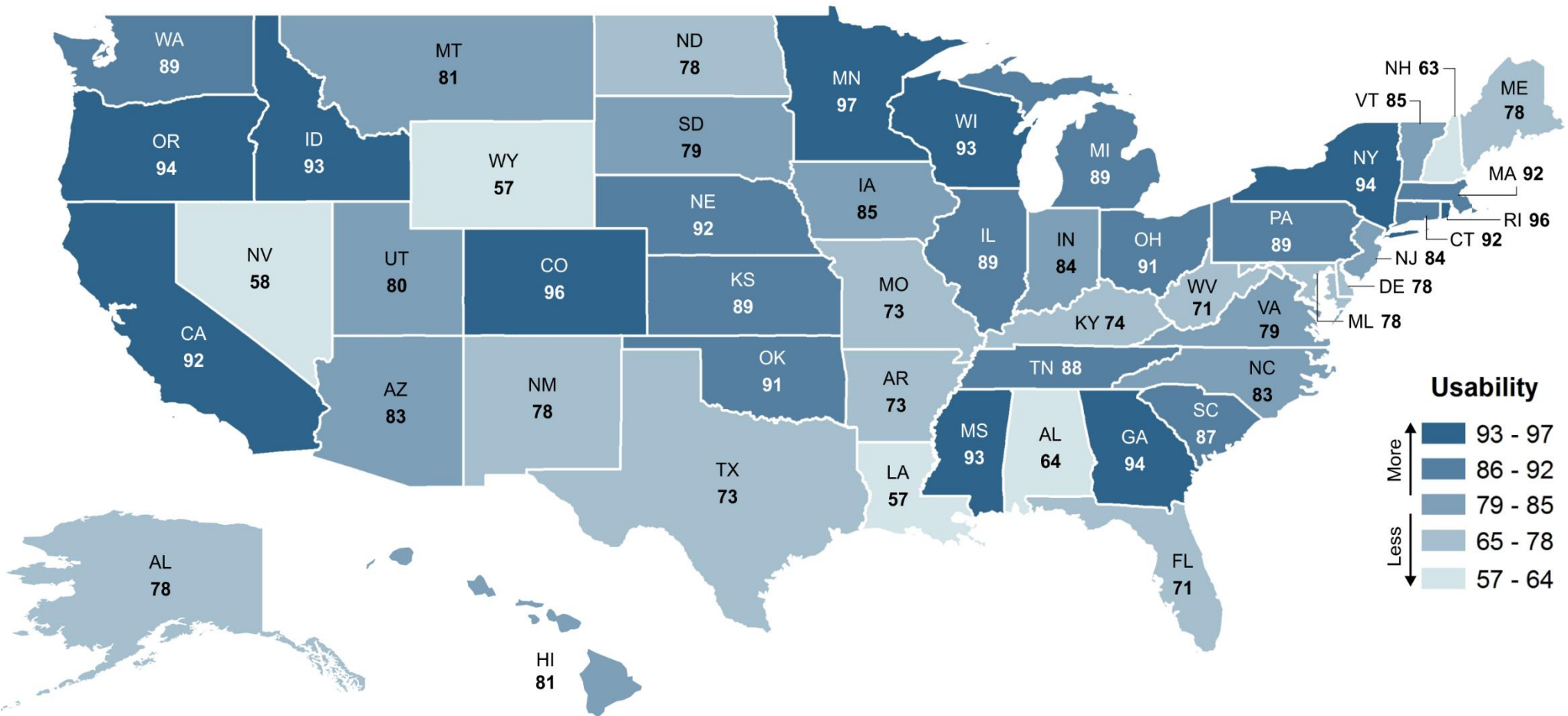
Overall, while some websites had glaring problems, most were quite usable and had high usability scores. The average score was 82.6 with a STD of 10.6. The lowest scoring websites were Wyoming and Louisiana's with 56.9 and the highest was Minnesota's with 96.9. Table 2 shows the top and bottom 10 scoring states. A full table of all the usability scores is available in the Appendix. At a glance, most of the top scoring states are commonly considered to be strong Democratic states while the bottom states are mostly Republican. Although, there are certainly exceptions. Georgia, Idaho, and Mississippi have all been Republican controlled for a large majority of the past decade and scored highly on usability.

*Table 2: Top and Bottom Scoring States*

Top 10			Bottom 10		
Rank	State	Score	Rank	State	Score
1	Minnesota	96.9	41	Missouri	73.3
2	California	96.7	42	Texas	73.1
3	Rhode Island	96.1	43	Arkansas	72.5
4	Colorado	95.8	44	Florida	71.4
5	Oregon	94.4	45	West Virginia	70.6
6	Georgia	94.2	46	Alabama	64.4
7	New York	93.6	47	New Hampshire	63.3
8	Wisconsin	92.8	48	Nevada	58.3
10	Idaho	92.5	50	Louisiana	56.9
10	Mississippi	92.5	50	Wyoming	56.9



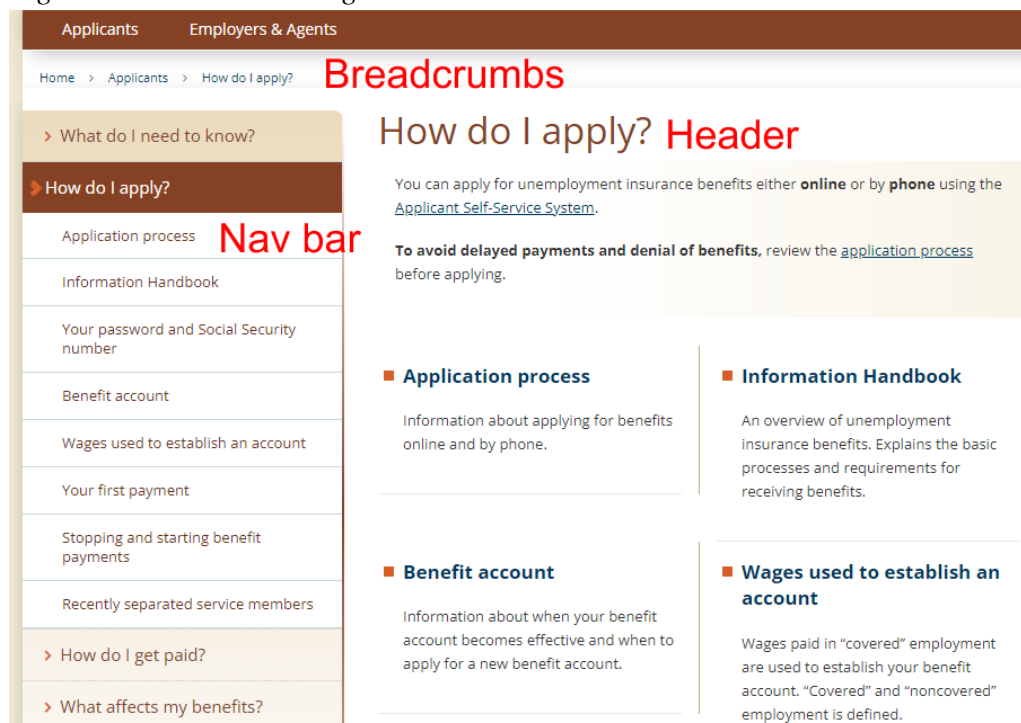
Figure 4: Usability Scores of States



*Figure 5: Minnesota Homepage*

**Good usability** The top scoring websites were easy to find, navigate, and read. Being tied for the highest usability score, Minnesota excels in user-centric design. Their homepage (Figure 5) starts users off with only two options. Dividing the unemployment website into two sections (one for applicants and the other for employers) was common among high scoring websites. This way, claimants would not have to read information intended for employers and vice versa. Also notice the presence of three, natively translated language options (Español, Hmoob, and Somali) at the bottom of the Applicants box.

Minnesota's site also illustrates what an effective navigation structure looks like (Figure 6). On all pages, users should easily know where they are and how to move elsewhere. This is

*Figure 6: Minnesota Navigation*

commonly accomplished with a strong header, navigation bar, and breadcrumbs. Headers, like the one shown, should be loud and clear so users immediately know what page they are on. A navigation bar informs users of other important pages and lets them travel there whenever they want. Finally, breadcrumbs identify the path a user took to reach their current location and offer quick links backwards if they want to backtrack.

Rhode Island's homepage is another example of user-centric design (Figure 7). Content is chunked into groups (Apply for Unemployment, Manage My Claim, etc.) so users immediately know which ones to pay attention to and which to ignore. Additionally, the text is highly scannable with important links clearly visible at the top of the page. Once again, Rhode Island uses an effective header, navigation bar, and breadcrumbs to communicate a user's location and available options.

On top of being highly usable and logically organized, Rhode Island has fantastic accessibility settings (Figure 8), letting users customize a website to their specific needs.

Figure 7: Rhode Island Homepage

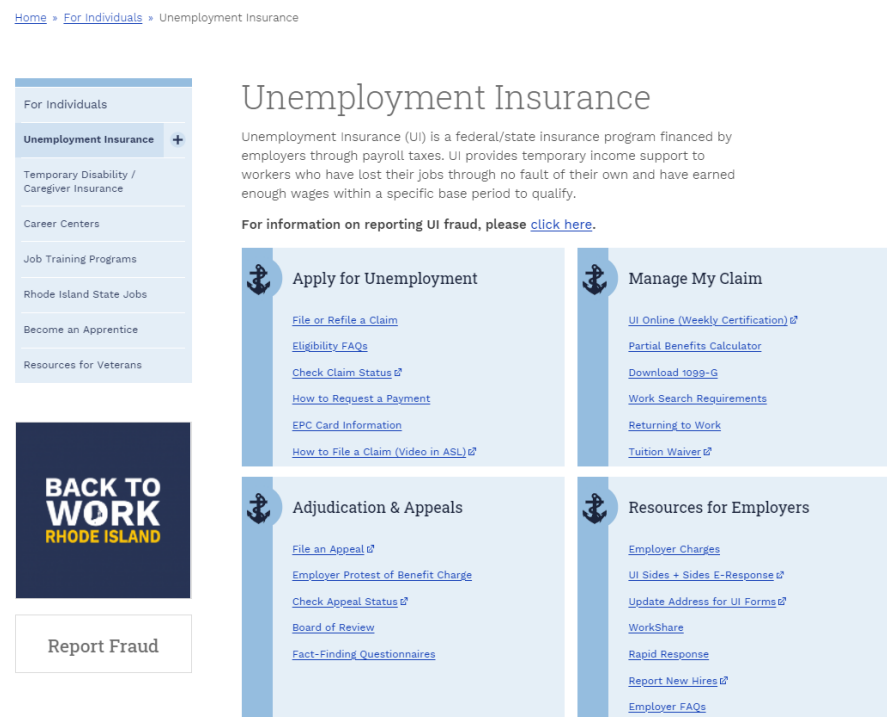
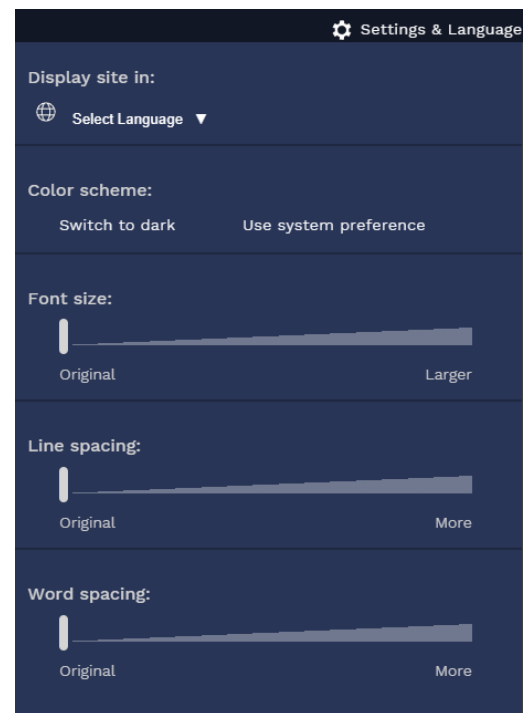


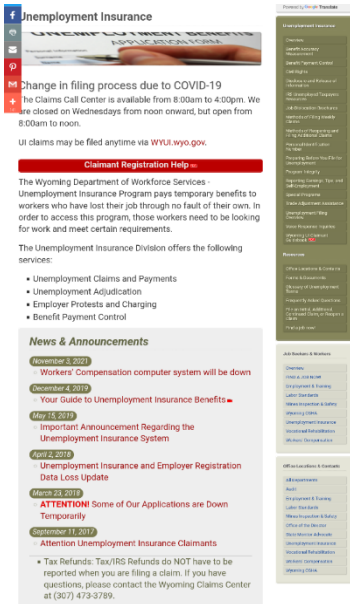
Figure 8: Rhode Island Accessibility



*Poor usability* Websites that scored lowest were the opposite; they were confusing to navigate, failed accessibility and mobile-friendliness tests, and key content was hard to access.

Wyoming's homepage (Figure 9) hides key information across a long page. It does not logically group content together nor does it prioritize important items at the top of the page. This makes it hard for users to find all the information they need, requiring them to bounce around different links.

Figure 9: Wyoming Homepage



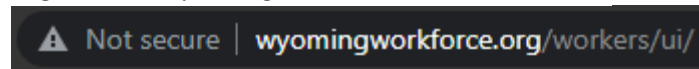
Key claimant  
information

Figure 10: Wyoming Header



Additionally, Wyoming had several accessibility problems. Figure 10 provides an example. If you look closely, there is a search bar in the upper right-hand corner. Because of how well it blends in with the header, it would be difficult or impossible for someone with impaired vision to find.

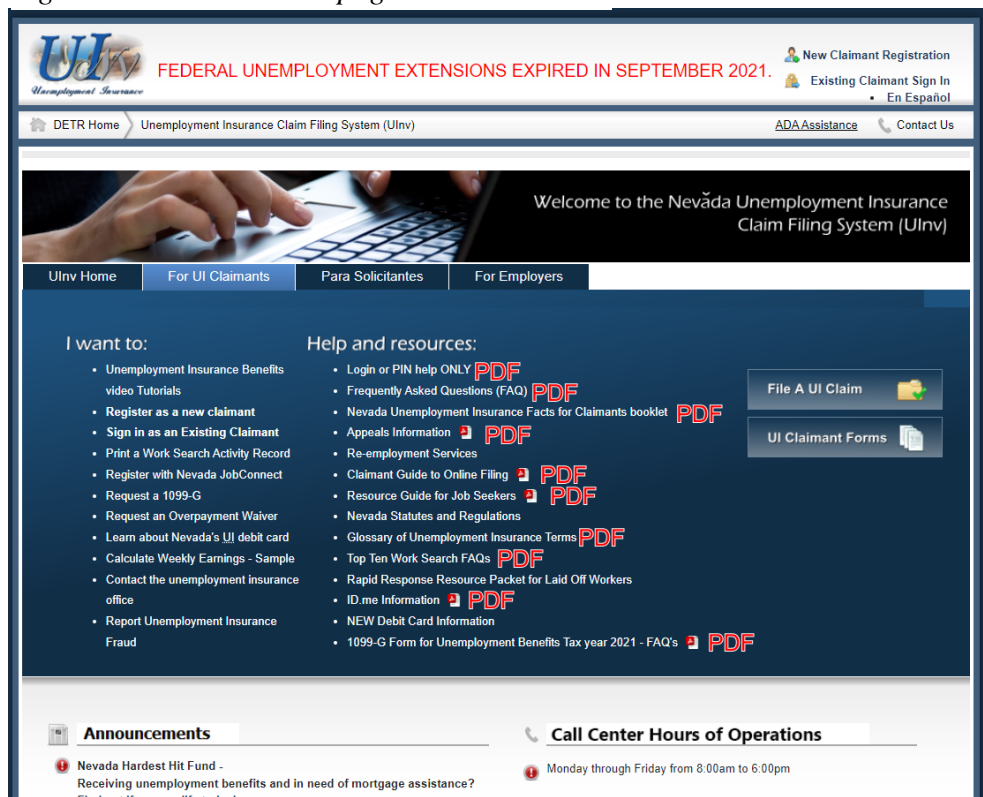
Figure 11: Wyoming URL



While I did not include the url as part of the evaluation criteria, it is critical that users immediately know that they are on a trustworthy, official site. This is jeopardized by not having an official .gov domain and a secure connection, something that Wyoming fails at (Figure 11).

Nevada's homepage contains similar issues (Figure 12). While the content is light on prose, it is still not scannable due to its lack of organization. The help and resources section jumps between advice on how to log in to hyper-specific FAQs about tax forms. A more user-friendly solution would be to sub-divide the section into areas like How to Apply, Tax Information, Online Claiming, etc. Additionally, almost all key content is hidden in long PDFs (shown in red text). Also, there is no search bar. This forces users to tediously open and close PDFs until they find the one piece of information they want.

Figure 12: Nevada Homepage



Key claimant  
information

*Predictors of Usability*

Looking deeper into the factors influencing the variability in usability scores, Table 3 provides multiple OLS regression results. Overall, personal income, the percentage of minorities, political control, and political ideology account for ~19% of the variance across state usability scores ( $R^2 = .187$ ).

*Table 3: OLS Regression Results*

	Model 1	Model 2	Model 3	Model 4
Personal income	0.25 (0.18)	0.23 (0.23)	-0.07 (0.21)	-0.02 (0.22)
Percent minority	-0.00 (0.12)	-0.01 (0.12)	-0.11 (0.13)	-0.14 (0.12)
Percent of years Rep party control		-0.01 (0.05)		0.07 (0.04)
Percent Vote Rep in 2020			-0.46 (0.20)	-0.63 (0.23)
Constant	69.68 (8.02)	71.40 (11.97)	111.72 (19.27)	114.87 (19.77)
$R^2$	0.04	0.04	0.15	0.19

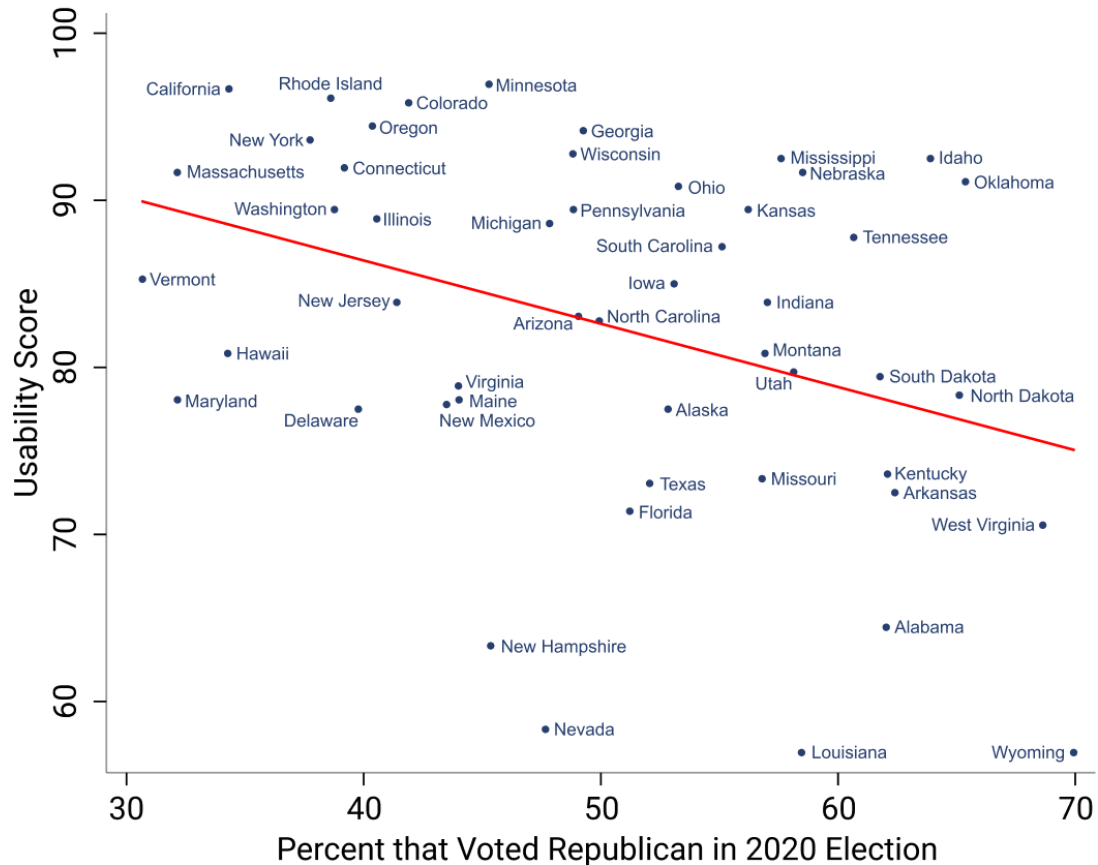
Standard errors in parentheses

N = 50

Initially, income showed an effect on usability, but it appears to have been fronting for the political ideology variable. This makes sense as Democratic states are richer than Republican states on average (Muro and Whiton 2019). In the final model, personal income has almost no association with usability (-0.02). Thus, on a broad scale, a state's economic resources do not appear to be a limiting factor in developing usable websites. Controlling for politics, states with low incomes are just as able to have high-quality websites as states with higher incomes. The percentage of minorities in a state has a negative impact on usability (-0.14). On average, for every 10% increase in the percentage of minorities in a state, the state's usability score went down by 1.4 points. Interestingly, the percentage of years Republicans controlled a state between 2010-2020 has a positive association with usability (0.07). If Republicans had total control (100%) over a state between 2010 to 2020, their scores were 7 points higher than states that did not. As examples, Idaho and Georgia both scored in the top ten and were also under complete Republican control from 2010-2020. This result is inconsistent with previous research on administrative burdens that found fewer burdens in Democrat controlled states (Moynihan et al. 2013). Finally, the percentage of people that voted Republican in the 2020 election has a large, negative effect on a state's usability score (-0.63). For every 10% increase in Republican voters in a state, a state's usability score went down 6.3 points.

To illustrate the effects of political ideology on usability, I also include a bivariate scatterplot comparing the voting habits of a state and its usability score (see Figure 14). On average, as states have more Republican constituencies, the usability score for their website goes down. The red line represents the line of best fit. The figure also highlights the high degree of variability in usability scores between states.



*Figure 14: Political Ideology Vs Usability Scores*

## CONCLUSION

The usability of unemployment insurance websites varies substantially between states. This variance appears to be partly accounted for by a state's political context. However, the conflicting effects of political ideology and political control on usability suggests a rethinking of political context. Mainly, that the party in control of a state may not perfectly reflect its political ideology. The correlation between the two variables is strong, but it is not one to one (Pearson's  $r = .67$ ). There are Republican controlled states that have liberal leaning constituencies. In this case, a state population's political ideology may matter more than political control. After all, politicians usually need to serve the people to stay in power. If those people support more liberal policies, politicians will follow suit, even if they technically fall into the Republican camp.

My research supports usability's inclusion into a modernized administrative burden framework. Like burdens, usability is, at least partly, shaped by politics and race. While politics may not be the sole determinant of usability, it clearly has an impact. States with more Republican constituencies have less usable UI websites on average. This variability is likely a reflection of differences in adjacent policy decision-making. For example, based on their pro-government beliefs, a Democratic state may allocate more funding to their government programs than a Republican state. As a result, government teams within those programs will have more

resources to allocate towards improving their websites and backend systems. This is but one of the many possible avenues for politics to indirectly shape usability. As for direct intervention, it is hard to “prove” anything. Using the previous example, a politician may choose to fund a program more or less with the intent to increase/decrease usability and take-up rates. However, it is unlikely that anyone but the politician will ever know if such a policy decision was intentional or not. Nevertheless, the data show a clear connection between politics and usability.

Race also appears to influence usability. The less white a state is, the worse its website’s usability is on average. This result suggests that usability may be an extension of the systematic inequalities that exist between whites and non-whites in their access to social welfare programs (Brown 2013; McDaniel et al. 2017). Answering why and how usability gets worse for these states will be an important step for future research. For now, previous literature indicates that these kinds of burdens may be shaped by people’s beliefs about minorities not deserving social welfare benefits (Ray et al. 2020). In this context, legislators implement policies with the intent of making it harder for minority groups to access social programs.

Further research should continue to examine the predictors of usability since there is still a lot of unaccounted for variance left to be explored. To start, specific information technology (IT) funding may be a possible predictor, even if state income is not. In the past, government teams have specifically cited IT-related constraints as inhibitors to improving existing government websites (Norris and Moon 2005). Specifically, with more funding, teams would be able to hire more digital services staff and pay for new technology that would likely improve the usability of their websites. Another variable to consider is a state’s written policy regarding usability. Barrett and Wise identified a connection between the quality of a state’s web accessibility policy and its web accessibility (2008). It is possible this connection extends to usability.

Without a doubt, government services take place online. Alternate means of access like through telephone or mail are backups and used in special cases. As I scored each state’s UI website, I overwhelmingly got the impression that states wanted people to apply for unemployment online. Applying over the phone and in-person were infrequently listed as options and if they were listed, they were intended as last-resorts. This is the world we currently live in: everything takes place online through a website. It is for this reason that web usability is so important.

Usability almost entirely shapes a person’s ability to successfully get what they want out of a website. Unusable websites cause people to give up, make mistakes, or not start altogether. For government programs like UI, this is of critical importance. Unusable websites are barriers to entry that prevent people from accessing benefits they may desperately need. Unintuitive layouts, unhelpful navigation, and unscannable blocks of text are oppressive burdens that an individual must conquer to get basic help. For government programs looking to support the masses, poor web usability is unacceptable. If people cannot reach the benefits that a program intends to provide, why even have the program at all?

## APPENDIX

# Usability Criteria

### *Web Presence (20%)*

1. Search for “[state] unemployment insurance”
2. Search for “[state] unemployment benefits”
3. Search for “[state] unemployment”
4. Link to unemployment insurance website on the state site’s homepage.

### *Navigation and Information Architecture (20%)*

1. Global and local navigation features are logical, persistent, and consistent.
2. Effective use of page titles, navigational highlighting and breadcrumbs to help users determine where they are within the site.
3. Descriptive link names clearly indicate content the user is navigating to (instead of generic links such as “Click Here” or “Go”).
4. Site architecture groups information logically and allows easy access to information without having to jump around the site or visit numerous pages (e.g., Benefits information is not located across 5 different pages).

### *Content (20%)*

1. Key information written at an eighth-grade level.
2. Written for the web (concise, bullet points, easy to scan, and hyperlinks used to direct users).
3. Basic content available entirely in HTML (e.g., information about eligibility not present only in an image or downloadable PDF).

### *Homepage (15%)*

1. Homepage is easy to scan —light on prose-style content.
2. Chunking of information so that users can easily determine which information is intended for them as opposed to employers and researchers.
3. Links to key content and functionality are grouped and located noticeably on the homepage above the fold: Eligibility? How to apply? Benefits?

### *Accessibility (10%)*

1. [Lighthouse desktop accessibility performance](#) score.
2. Natively translated versions of the site available in at least one other language that is not English.

### *Search (5%)*

1. Search field (or link) located on every page in a consistent location.
2. Search results are appropriate to the query and easy to scan.



### *Mobile Friendly (10%)*

1. [Google's Mobile-Friendly test](#) score.

## Scoring

Each criterion was scored on a scale from zero to three. Most of the criteria were scored according to a general scoring key (below). Any exceptions are listed below.

### *General Scoring Key*

- 3 - Full compliance/User-centric implementation
- 2 - Partial compliance/User needs considered
- 1 - Poor compliance/Requires significant improvement
- 0 - Not available on site/Extremely poor

### *Web Presence*

For the first three criteria of web presence, scoring was determined based on the location of the result in the search results using the following scoring:

- 3 - First result
- 2 - Within first 5 results
- 1 - Within first page of results
- 0 - Not on first page

The fourth criteria (link to UI website on state's homepage) was graded using this scoring:

- 3 - Link to the official unemployment insurance website noticeably above the fold
- 2 - Link is beneath the fold or can be found through the search tool
- 1 - Link cannot be easily found, even through the search tool
- 0 - Not present anywhere on site

### *Content*

1. Key information written at an eighth-grade level.
- 3 - 8th grade or lower (grade school to junior high)
  - 2 - 9th-12th grade (high school)
  - 1 - 13th-16th grade (undergraduate)
  - 0 - Higher than 16th grade (graduate)

Grade level measured using the Flesch-Kincaid grade level formula through [WebFX's readability tool](#)

Flesch-Kincaid grade level formula:

$$\text{Grade level} = 0.39 \left( \frac{\text{total words}}{\text{total sentences}} \right) + 11.8 \left( \frac{\text{total syllables}}{\text{total words}} \right) - 15.59$$

### *Accessibility*

1. [Lighthouse desktop accessibility performance](#) score.

3 - 90-100

2 - 60-89

1 - 30-59

0 - 0-29

2. Natively translated versions of the site available in at least one other language that is not English.

3 - Clearly labeled translation buttons located in an obvious place. Translations are not automatically generated.

2 – Buttons located in an obvious place, but translations are automatically generated.

1 – Buttons located in a hard-to-find place and translations are automatically generated.

0 - No translation options

### *Mobile Friendly*

1. [Google’s Mobile-Friendly test](#) score.

3 - Homepage and key content pages pass mobile-friendly test

2 - Most pages pass while a few fail

1 - Most pages fail

0 - All pages fail

## Changes to NNG’s Scoring

<i>Original Weightings</i>		<i>New Weightings</i>	
20%	Web Presence	20% ▼	Web Presence*
20%	Navigation and IA	20%	Navigation and IA
20%	Content	20%	Content
15%	Homepage	15%	Homepage
10%	Accessibility	10%	Accessibility
5%	Search	5%	Search
10%	Site Tools	10% ▲	Mobile Friendly

\* As algorithms have gotten better, even websites with poor search engine optimization can appear as the top search result. Additionally, I reduced the weight to allow Mobile-Friendly to have a greater percentage.

### *Accessibility Scoring*

Originally, this category was full of specific accessibility questions like if there is a skip navigation button on pages or if all images had alt text. Much has changed in the world of web accessibility since 2008 when NNG originally developed the criteria. Nowadays, there are automatically tools (like [Google's Lighthouse tool](#) which I use) that can automatically check for everything NNG identified as important and more. I also added translations to the criteria given the research supporting translations as an accessibility/usability constraint (Nantel and Glaser 2008).

## Usability Scores

State	Overall Usability Score	Web Presence	Navigation and IA	Content	Homepage	Accessibility	Search	Mobile Friendly
		Out of 20	Out of 20	Out of 20	Out of 15	Out of 10	Out of 5	Out of 10
Minnesota	96.9	20.00	20.00	17.78	15.00	10.00	4.17	10.00
California	96.7	18.33	20.00	20.00	15.00	8.33	5.00	10.00
Rhode Island	96.1	20.00	20.00	17.78	15.00	8.33	5.00	10.00
Colorado	95.8	20.00	20.00	20.00	15.00	6.67	4.17	10.00
Oregon	94.4	20.00	18.33	17.78	15.00	8.33	5.00	10.00
Georgia	94.2	20.00	18.33	20.00	13.33	8.33	4.17	10.00
New York	93.6	20.00	18.33	17.78	15.00	8.33	4.17	10.00
Wisconsin	92.8	20.00	16.67	17.78	13.33	10.00	5.00	10.00
Idaho	92.5	16.67	20.00	20.00	15.00	8.33	2.50	10.00
Mississippi	92.5	18.33	18.33	20.00	13.33	8.33	4.17	10.00
Connecticut	91.9	20.00	15.00	17.78	15.00	10.00	4.17	10.00
Massachusetts	91.7	16.67	20.00	20.00	13.33	6.67	5.00	10.00
Nebraska	91.7	18.33	18.33	20.00	13.33	8.33	3.33	10.00
Oklahoma	91.1	16.67	20.00	17.78	15.00	8.33	3.33	10.00
Ohio	90.8	20.00	16.67	20.00	15.00	8.33	0.83	10.00
Pennsylvania	89.4	18.33	20.00	17.78	15.00	6.67	5.00	6.67
Kansas	89.4	18.33	20.00	17.78	15.00	8.33	3.33	6.67
Washington	89.4	18.33	16.67	17.78	13.33	8.33	5.00	10.00
Illinois	88.9	20.00	16.67	15.56	15.00	6.67	5.00	10.00
Michigan	88.6	20.00	18.33	17.78	13.33	5.00	4.17	10.00
Tennessee	87.8	18.33	18.33	17.78	13.33	6.67	3.33	10.00

South Carolina	87.2	15.00	18.33	15.56	15.00	8.33	5.00	10.00
Vermont	85.3	18.33	15.00	17.78	11.67	8.33	4.17	10.00
Iowa	85.0	16.67	16.67	20.00	11.67	5.00	5.00	10.00
Indiana	83.9	16.67	16.67	15.56	13.33	6.67	5.00	10.00
New Jersey	83.9	20.00	16.67	15.56	11.67	6.67	3.33	10.00
Arizona	83.1	18.33	13.33	15.56	13.33	8.33	4.17	10.00
North Carolina	82.8	20.00	20.00	17.78	15.00	6.67	3.33	0.00
Montana	80.8	18.33	16.67	13.33	13.33	5.00	4.17	10.00
Hawaii	80.8	20.00	11.67	13.33	11.67	10.00	4.17	10.00
Utah	79.7	18.33	13.33	15.56	11.67	6.67	4.17	10.00
South Dakota	79.4	15.00	15.00	17.78	10.00	8.33	3.33	10.00
Virginia	78.9	20.00	15.00	15.56	6.67	6.67	5.00	10.00
North Dakota	78.3	15.00	16.67	13.33	13.33	5.00	5.00	10.00
Maine	78.1	16.67	15.00	15.56	11.67	5.00	4.17	10.00
Maryland	78.1	18.33	15.00	15.56	8.33	6.67	4.17	10.00
New Mexico	77.8	18.33	15.00	17.78	10.00	6.67	0.00	10.00
Alaska	77.5	20.00	15.00	13.33	10.00	5.00	4.17	10.00
Delaware	77.5	18.33	15.00	13.33	11.67	5.00	4.17	10.00
Kentucky	73.6	18.33	15.00	11.11	8.33	6.67	4.17	10.00
Missouri	73.3	16.67	11.67	13.33	11.67	5.00	5.00	10.00
Texas	73.1	18.33	15.00	15.56	10.00	10.00	4.17	0.00
Arkansas	72.5	18.33	13.33	13.33	8.33	8.33	4.17	6.67
Florida	71.4	16.67	16.67	15.56	10.00	8.33	4.17	0.00
West Virginia	70.6	18.33	15.00	8.89	10.00	5.00	3.33	10.00
Alabama	64.4	20.00	11.67	11.11	11.67	3.33	0.00	6.67
New Hampshire	63.3	18.33	10.00	13.33	8.33	6.67	0.00	6.67
Nevada	58.3	18.33	13.33	6.67	11.67	8.33	0.00	0.00
Louisiana	56.9	13.33	10.00	11.11	13.33	1.67	4.17	3.33
Wyoming	56.9	13.33	13.33	11.11	8.33	8.33	2.50	0.00

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