

USABILITY OF GRANT WEBSITES

by

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Senior Honors Thesis

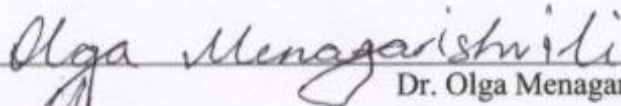
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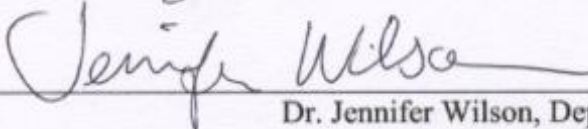
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### Abstract

Website usability is a widely explored area in the professional writing field, and many different types of websites have been analyzed for usability. However, grant websites have not been studied from this perspective. According to Jakob Nielsen and Kara Pernice (2010), a website's usability centers around considerations of page layout, navigation, functional web design elements, pictures, and advertisements. This study explores how 2 items from this list -- page layout and functional web design elements criteria -- are presented in two national grant websites, grants.gov and grantwatch.com, and two local grant websites, arc.gov and cfwnc.org. In this study, I attempt to find out how national and local grant websites differ in terms of usability. I found that usability is higher in the local grant websites according to the chosen criteria and that the functional web design elements criteria were non-problematic across all four websites.

*Keywords:* grant websites, usability, Nielsen, national websites, local websites

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## Usability of Grant Websites

With the growing use of technology, information on grants has been added to the Internet through grant websites. Without grant websites, it would be harder for organizations and individuals to find the right grants for their projects. Due to the importance of grant websites, it is necessary to study them from different angles. Usability is a widely discussed topic in the field of professional writing. There is ongoing research on the usability of websites. However, though many websites have been created for connecting organizations with grant providers, there have not been any studies of the usability of grant websites specifically. In an effort to help close the gap in the research of grant website usability, I analyzed and compared four grant websites: grants.gov, grantwatch.com, arc.gov, and cfwnc.org. This study will attempt to find out how these national and local grant websites differ in terms of usability.

### **Literature Review**

The topic of usability is widely discussed in the professional writing field. I will now discuss the sources that focus on defining usability, types of websites evaluated for usability, and methods for testing usability.

#### **Defining Usability**

As the sources below demonstrate, there are many definitions of usability available. Mathis (2016) and Nielsen and Pernice (2010) discuss the many factors that go into usability in great detail. Both Mathis and Nielsen and Pernice consider navigation, content, images, and page layout as factors that affect a website's usability; according to their definitions of usability, a website should have a hierarchy that is easy to follow, especially in the navigation, and the content and layout of the pages should be easy to comprehend with plain language, no fluff, and use of white space. Furthermore, they agree that text should be considered carefully, suggesting a

font size that is large enough to be read easily and a typeface that reads well on a screen, preferably a sans serif font. However, Nielsen and Pernice (2010) also include functional web design elements, images, and advertisements in their definition of usability. Mathis (2016) makes the point that website designers should focus on designing user centered websites and not focus on management, visual aesthetics, or coding.

Holst (2016), Seckler and Tuch (2012), Lindgaard, Dudek, Sen, Sumegi, and Noonan (2011) and Tsiaousis and Giaglis (2014) define usability in narrow terms, each looking at specific aspects of usability and the importance of those aspects for maintaining the usability of a website. Holst discusses the effectiveness of three different design patterns for their usability: pagination, “load more” buttons, and infinite scrolling on both desktop and mobile platforms. Holst found that though pagination is the most popular method, because it is a default option on many platforms, it does not help a website’s usability; in fact, pagination hurts usability by slowing users down and discouraging them from following links and opening pages. Infinite scrolling rose similar issues while “load more” buttons proved to be the most effective method, encouraging users to continue their use of the website and view more of the website (Holst, 2016).

Similarly, Lindgaard et al. (2011) looked at how visual appeal correlated with trustworthiness and perceived usability. They found that though all types of judgments are driven largely by visual appeal, cognitive judgments rely on different visual attributes, such as white space.

Seckler and Tuch’s (2012) study explored the way in which design factors of a website are linked with subjective aesthetics of a website, including simplicity, diversity, colorfulness, and craftsmanship. The results demonstrated that structural factors, which include vertical

symmetry and visual complexity, greatly impact the subjective aesthetics of a website, and that color aspects like hue, saturation, and brightness played a role in the perception of a website's usability. While many believe that a website's usability cannot be defined by its visual appeal alone, it seems that Holst (2016), Lindgaard et al. (2011), and Seckler and Tuch (2012) all agree that while that is true, visual appeal does still play a large role in the usability of a website and overall satisfaction of a user.

Tsiaousis and Giaglis (2014), on the other hand, do not consider design factors as highly as Holst (2016), Seckler and Tuch (2012), and Lindgaard et al. (2011). Instead, Tsiaousis and Giaglis examine how environmental context can affect the usability of a mobile website, suggesting website creators should consider outside aspects when creating websites. They tested mobile websites for efficiency, effectiveness, and perceived satisfaction and found that environmental distractions impact user performance but not user satisfaction. With much of the US using smartphones, considering possible environmental distractions when designing a website could increase user performance for mobile websites (Tsiaousis & Giaglis, 2014).

#### **Usability versus accessibility.**

Aleixo, Nunes, and Isaias (2012) and Youngblood (2012) believe that usability and accessibility go hand in hand and should always be considered in relation to one another when considering a website's usability. Aleixo et al. focus on digital inclusion in e-government websites specifically. They also note that digital competence and information literacy go hand in hand, and the lack of them will lead to further digital exclusion. According to Aleixo et al. (2012), the goal of website developers should be to eliminate digital exclusion and improve accessibility guidelines before focusing on the affects digital exclusion could have.

Youngblood (2012) makes similar observations, but she aims her suggestions towards novice website developers specifically. She defines usability as the extent to which a product can be used by specified users to achieve specified goals and says that accessibility parallels usability. According to Youngblood, accessibility can be improved in many ways. The use of screen readers is suggested as a useful method for meeting many different types of needs, but screen readers come with difficulties like learning to use them and their price. Youngblood goes on to inform novice website developers that there are simpler and more affordable methods for increasing accessibility and usability, including larger text, easier to read fonts, less text, and more white space to name a few. Youngblood and Aleixo et al. (2012) touch on the idea that accessibility for more people does not mean sacrificing usability for others without disabilities, encouraging website developers to have real users present, especially those with disabilities that may affect their use of the websites.

### **Methods for Testing Usability**

There is an abundance of different methods available for testing a website's usability.

#### **Existing methods.**

Chopra (2012), Bias, Moon, and Hoffman (2015), Bacha (2017), and Spiliotopoulos (2010) each discuss existing methods for evaluating usability. Chopra examines the A/B Testing method, which looks at wording, size, color, placement of buttons, headline or product description, form's length and types fields, layout and style, images on landing and product pages, amount of text on pages, and product pricing and promotional offers. He defines A/B Testing as a test which looks at two versions of an element simultaneously using two test groups, and the version which is found more successful is the one chosen for real world use. Chopra

(2012) found A/B Testing to be a well-designed user test that focuses on measuring actual performance of a website instead of having users report on their own behavior and preferences.

Bias et al. (2015) approach testing website usability with a concept mapping approach. Using this approach, Bias et al. examine a definition of usability that says the usability of the artifact's audience to carry out tasks solely, effectively, efficiently, and joyfully. Instead of having users test the websites, webmasters were given concept maps in this study and were asked to complete questionnaires based on the map's value regarding subsequent website redesigns (Bias et al., 2015). Bacha (2017), however, suggests a mixed-method approach is ideal for testing a website's usability. This mixed-method approach combines network theory, storytelling, and process mapping. With this approach, he follows the idea that product development practices should be dictated by human needs and their experiences, noting that a research approach that employs reflective storytelling is more effective than empirical data gathered in a usability lab (Bacha, 2017).

Similarly to Bacha (2017), Spiliotopoulos (2010) also discusses multiple methods and how they may work together. These methods include DEPTH, WDP, and MUST, each of which aim to minimize the time factor of usability tests. DEPTH is an innovative method of scenario-based heuristic usability evaluation for e-systems, while WDP is a technique that combines web design perspectives and the heuristic evaluation method and MUST is multi-user simultaneous testing that reduces testing time by allowing data collection from many users at the same time. The MUST method consists of two sub-methods, self-paced and moderate; Spiliotopoulos tested these two sub-methods and found that though the self-paced method was slower, the moderate method was greatly affected by outside factors, especially the effect that a participant's awareness of others during the usability test affects their speed and effectiveness with

completing tasks. Rather than proposing that one of these 3 methods is more effective, Spiliotopoulos (2010) instead says that each builds upon the other and should be chosen from based on the needs of the usability test being conducted.

Thielsch, Engel, and Hirschfeld (2015), Wang and Senecal (2007), Tullis and Albert (2016), and Groth and Haslwanter (2014) discuss perceived usability of websites. Thielsch et al. use empirical website testing to prove that expected usability does not equal a website's actual usability, meaning that a website that looks usable may not actually be usable when used. Using both group and individual levels of testing for examining this, Thielsch et al. found that interactions with tasks found expected usability relates more to a website's aesthetics than to a website's usability. Furthermore, the results showed that there was a need for interaction in empirical website usability (Thielsch et al., 2015).

But while Thielsch et al. (2015) discuss perceived usability, Wang and Senecal (2007) and Tullis and Albert (2016) focus more on measuring this perceived usability. Wang and Senecal propose a multidimensional usability scale as a method for measuring perceived usability. The aim of this method is to provide a scale that is short, reliable, and valid to usability testers. Tullis and Albert, on the other hand, suggest the use of automated studies that allow participants to make verbatim comments at a page or task level to collect data. Regardless of the method, both Wang and Senecal (2007) and Tullis and Albert (2016) noted that it is important to look at the frequency of usability issues when examining perceived usability of a website.

Groth and Haslwanter (2014), on the other hand, discuss perceived usability in terms of display on a mobile screen versus on a desktop screen. They use responsive web design, or RWD, which looks at how websites adjust their layout and content to fit different screens and how these differences are perceived by users. They found that differences in perceived usability

occurred between the use of mobile and desktop versions and in user experience between the two. Overall, Groth and Haslwanter (2014) observed that mobile versions varied less and were often perceived as being higher in usability because of this.

Bergstrom, Olmsted-Hawala, and Jans (2013) and Wagner, Hassanein, and Head (2014) examined the role that age plays in a website's usability through different methods. Bergstrom et al. specifically look at how cognitive decline with age affects the usability of a website using eye tracking. In this study, they found that age-dependent differences do occur in eye movement and in performance, especially with lower accuracy and slower speed found in older participants compared to younger participants (Bergstrom et al., 2013). Wagner et al. propose an age-related web usability model to examine how age impacts web usability. They also considered age's impact on usability with diminishing cognitive skills but found that age affected usability through disorientation, declining levels of spatial ability, and mental model accuracy as factors in their study (Wagner et al., 2014).

Nielsen and Pernice (2010), similarly to Bergstrom et al. (2013), use eye tracking to test website usability. However, Nielsen and Pernice discuss modern eye tracking specifically, looking at both foveal and peripheral visions to find fixations and saccades, and they also used eye tracking to determine why users might not see something on a webpage. Nielsen and Pernice note that eye tracking has modernized as computer power has improved to allow a separate video camera to look at the user's head and calculate the user's head in real time. Another advancement is the inclusion of other cameras that catch close-ups of the eyes that allow researchers to average calculations of the eyes to determine where the user is looking. A final advancement Nielsen and Pernice (2010) discuss is bouncing a beam of invisible infrared light



off the user's face to help identify the position of the pupils without doing intense image recognition.

Roy, Pattnaik, and Mall (2014) and Johnson and Martin (2014) use questionnaires as part of their methods for testing website usability. In their approach, Roy et al. use pre-questionnaires to gain an idea of the testing user's ideas towards the usability of higher education websites, as discussed in the above section. Different from Johnson and Martin, however, Roy et al. employ performance-based evaluations to examine the correlation between expected usability and actual usability. Johnson and Martin use questionnaires similarly to Roy et al.'s use of them, but Johnson and Martin specify that they use them in place of usability testing to gather data on people's experiences with hospital websites. Johnson and Martin (2014) also employed the use of interviews to gather more specific data on issues found in hospital websites and found low levels of usability, especially in navigation, which caused issues of credibility.

### **Improving methods.**

Geng and Tian (2015), Patil and Khandagale (2016), and Lazar (2006) discuss how usability testing can be improved. In doing this, Geng and Tian and Patil and Khandagale consider actual usage and anticipated usage. Geng and Tian, however, focus on presenting a new method for identifying navigation-related website usability problems. To gain data on actual usage, website server logs were routinely recorded by identifying users, user sessions, and user-task oriented transactions (Geng and Tian, 2015). Similarly, Patil and Khandagale use a server side log record file as part of the process for their method that is meant to provide a standard way for website developers to gauge usage behavior and anticipated usage behavior. But while Geng and Tian suggest an entire new method for usability testing, Patil and Khandagale suggest improving mining methods, especially in terms of updating website links to match mining

patterns. Their research shows that both website developers and users found the mining system more useful with these improvements (Patil & Khandagale, 2016).

Lazar (2006) discusses how usability testing can be improved by considering the addition of skills and techniques that will help users. A user-centered development life cycle from the initial idea of developing a website is proposed for implementing and designing a website. He provides concepts and tools for designing effective websites that are aimed to meet the needs of various users in this approach. Lazar (2006) found that starting a website with the intended users in mind and not with content in mind led to higher usability when tested.

### **Types of Websites Evaluated for Usability**

A wide variety of websites have been evaluated in terms of usability. The majority of sources I found discuss the usability of websites connected with higher education institutions. Other types of websites that are discussed below include tourism websites and library and hospital websites.

#### **Higher education websites.**

Hasan (2014), Roy et al. (2014), Erickson (2013), and Peker, Kucukozer-Cavdar, and Cagiltay (2016) evaluate the level of usability in higher education websites; overall, they found that most higher education websites were not considered highly usable by users, especially in terms of navigation. Both Hasan and Roy et al. consider the different users that visit higher education websites in their studies. Hasan looked for differences in how males and females viewed categories of content different and found that differences do exist; he also considered if different faculties viewed the categories differently as well. Looking at nine Jordanian websites, Hasan found that males and females view the categories mostly the same, but females considered content most important while males considered it the second important category; however,

navigation scored the lowest for both males and females. Additionally, Hasan found that individuals in different disciplines were often persuaded more by certain factors of usability as well; for example, those in administrative disciplines might consider the content and navigation as most important when designing the usability of their websites. Roy et al., consider four different types of users who might visit higher educational websites: prospective students and parents, current students and disciplines, researchers, and alumni. Their study looked at three higher education websites to determine the user satisfaction and pleasure associated with the websites. After a pre-questionnaire and a performance-based evaluation, Roy et al. found that the participants had difficulties completing the tasks and that task completion time's correlation with participant's satisfaction levels varied across the different websites but was overall negative.

Erickson (2013) focuses on how lack of accessibility is affecting users, specifically looking at whether college websites are usable for individuals with visual impairments, individuals with reading-related disabilities, and individuals without disabilities. 30 college websites were evaluated overall, and the study found that less than 1% of pages met web accessibility standards; none of the home pages, financial aid pages, or academic program pages passed the usability tests. A specific issue that arose during the usability testing was during the testing of the online admission application: 50% of users found the application frustrating and less than 33% could complete it without assistance. Due to these issues, Erickson (2013) found community college websites fared poorly in both accessibility and usability.

Finally, Peker et al.'s (2016) explore the correlation between website usability and web presence. Looking at five Turkish university websites, they found that university websites with strong web presence typically have higher success and satisfaction rates during tasks. The most common issue found was with weak navigation: links opening in different tabs and pages of

information having to be downloaded to be opened was regarded poorly by the participants. In addition, Peker et al. (2016) found that navigation menus were often inappropriately designed, containing misleading words, non-descriptive labels, and crowded menu options.

The issues the above four sources discuss suggest that higher education websites are not meeting the usability, or accessibility, standards that they should be. This is likely causing misinformation and confusion for individuals using these websites.

### **Tourism websites.**

Groth and Haslwanter (2014) and Jong and Wa (2018) look at tourism websites. Groth and Haslwanter focus on responsive web design, RWD, which is how websites adjust their layout and content to fit different screen sizes. Their goal was to determine if this affected the perceived usability, the perceived attractiveness, and the intuitiveness of the two websites. Groth and Haslwanter found that there were perceived differences in usability and user experience between desktop computers and smartphones in general. They also found that mobile devices that follow stricter approaches to RWD were perceived as easier and more intuitive to use; however, because mobile devices don't create emotion with the user, they are less recommended by users (Groth & Haslwanter, 2014).

Jong and Wa (2018) examined 3 different types of World Heritage sites in their study: 1) less-developed websites with no emphasis, 2) websites of World Heritage sites with touristic possibilities with emphasis on World Heritage, and 3) websites of tourist attractions with outstanding cultural or natural value with emphasis on tourism. Jong and Wa point out that functional complexity poses a threat to the exhaustiveness of a website's information. The sites examined were found to often be missing basic visitor information and information relating to

the UNESCO status of the World Heritage site. The sites looked professional and were attractive, but their content was not what the users were looking for (Jong & Wa, 2018).

### **Library and hospital websites.**

Azadbakht, Elena, and Blair (2017) and Johnson and Martin (2014) discuss university library websites and hospital websites, respectively. Though these are unrelated fields, they are both types of websites which users expect would be easy to navigate and user friendly. Both studies, however, show that that was not the case. Azadbakht et al. conducted a study of the University of Southern Mississippi Libraries website, looking specifically at navigation and whether users can find books and articles with ease. They found that it was difficult for undergraduates and some professors to navigate the libraries and find the sources, but easy for graduate students who use the libraries more regularly. Most tasks could be completed within a few clicks or page loads, but their research showed that overall, the users thought “Find Databases by Titles” to be misleading, it was difficult for the users to locate books because there was no equivalent to “Articles and Databases,” and the “Help & FAQ” option only led them to the wrong pages and was unhelpful. Azadbakht et al. (2017) conclude with a recommendation that other academic libraries consider campus population as a factor for usability.

Johnson and Martin (2014) found similar navigation issues in their study of the usability of hospital websites. Their study considered language credibility, visual credibility, and technical credibility. Through questionnaires and interviews conducted about hospital websites, Johnson and Martin observed that participants who ranged in age, gender, occupation, and computer proficiency felt that the hospital websites to score low in terms of usability. Specifically, navigation issues were a common problem among participants, along with language that was

difficult to understand and caused doubts about not just the websites' credibilities, but also the hospitals' as well (Johnson & Martin, 2014).

Though these sources all cover a variety of definitions of usability, methods for testing usability, and websites that have been evaluated, they all have one thing in common: each source expresses that though website usability has come a long way in recent years, there is still a large need for improvement in the usability of websites. Many websites lack basic accessibility factors and don't consider the variety of users and the users' needs. Furthermore, these sources show that there has been no prior research that focuses on the usability of grant websites.

### **Methodology**

This section will discuss the methodology of my research process to answer how national and local grant websites differ in terms of usability. The first two steps of the research process included selecting the websites for analysis and selecting the pages from each website for analysis. Following this, data was selected from each of the pages and analyzed according to the criteria set forth by Nielsen and Pernice (2010). I will now discuss each step in detail.

#### **Selecting the Websites**

I chose to analyze four websites: grants.gov, grantwatch.com, arc.gov, and cfwnc.org. When choosing these websites, I looked for similarities in the types of grants offered and the locations served. All four grant websites that I chose for my analysis offer grants for community development. I chose to analyze both national and local websites because I wanted to see if there is a difference in usability between the two types. I defined the national grant websites as those which offered grants to several states in the U.S. I defined the local grant websites as those which include Watauga County in the area they serve. Selecting two national and two local grant websites enabled me to make a more generalized analysis of grant websites, whereas selecting

only one national and one local grant website would limit the conclusions I could make about the usability of grant websites.

### **Selecting the Pages**

To narrow the scope of this research, I limited the pages I selected to analyze to those that contain information about grants available or information aimed towards grant applicants. I did not look at any of the websites' "About" pages or at any pages aimed towards grant providers. The only exception to this selection of pages was the inclusion of homepages.

As a result, the following pages were selected: seven pages for grants.gov ("Homepage," "Grants 101," "Grant Programs," "Grant Eligibility," "Search Grants," "How to Apply for Grants," and "Applicant Eligibility"), eight pages for grantwatch.com ("Homepage," "All Grants," "State Grants," "New Grants," "Federal Grants," "Local Grants," "Search for a Grant," and "Tour Our Archives"), five pages for arc.gov ("Homepage," "Grants and Funding," "Grants and Contracts," "General Information on Grants and Funding," and "Grantee Forms and Information"), and four pages for cfwnc.org ("Homepage," "Grants Overview," "Grant Programs," and "Nonprofit Funds"). Each of these pages meets the above criteria I set for page selection.

### **Collecting the Data**

To collect the data from each website page to ensure I would be able to access the same data at all points of my research, I collected screenshots of each page. These screenshots were captured on a laptop with a 15.6-inch screen. I took one screenshot of each page, zooming out to capture as much of the page as possible to show the layout and information presented while maintaining the reader's ability to clearly see the information on the pages. Parts of the computer screen that were not the web pages on the screenshots were cropped out.

For the sake of this project, any reference to “all pages” refers only to the pages I analyzed, not to all the pages on the website. Screenshots of the national grant websites were taken on 02/20/2019, and screenshots of the local grant websites were taken on 02/22/2019. All screenshots can be found in the Appendix section.

### **Selecting the Evaluation Criteria**

I chose to base my analysis of the websites on criteria set forth in Nielsen and Pernice’s (2010) book, “Eyetracking Web Usability.” When selecting the evaluation criteria for this study, it was important to use criteria from someone in the field who is widely known. As I was searching for literature to review, Jakob Nielsen’s name came up with several books on usability, and he was also referred to or cited in some of the other sources I discussed in my Literature Review section, such as in “Measuring the user experience: Collecting, analyzing, and presenting usability metrics” (Tullis and Albert, 2016) and “Measuring Perceived Website Usability” (Wagner et al., 2014). Nielsen is considered to be an authority on usability studies, so I felt that basing my research on criteria set forth by him would be most beneficial.

Nielsen and Pernice (2010) discuss four categories that a website developer should consider for website usability: page layout, navigation, fundamental web design elements, pictures, and advertisements. Because of the scope and time restrictions of this study, I limited my analysis to examining page layout and fundamental web design elements. My future research would include examining the other three categories for their impact on the usability of these websites. I will now discuss the evaluation criteria that Nielsen and Pernice include for page layout and functional web design features.



**Evaluation criteria for page layout.**

Nielsen and Pernice's (2010) definition of page layout includes considering white space, page design, factors drawing the user's attention, page organization, text size, emphasis, borders, color, information chunking, sections and headings, and content placement and visual indicators.

Nielsen and Pernice (2010) note that white space refers to the amount of text on the page versus space with no content or images. According to Nielsen and Pernice, a page should not be overfilled and should contain enough white space around content and between content to ensure the text is easily readable. Page design is defined as whether the inclusion of expected items for a website are present and if people are able to find things easily. Expected items on a website can vary according to the type of website, but all websites must include menus, home buttons, and a logo. Page design also considers if items on a page are in order of most importance and if the page appears cluttered (Nielsen & Pernice, 2010).

Factors drawing a user's attention are defined by Nielsen and Pernice (2010) as any element that tends to draw the user's eyes to it; generally, this focuses on factors drawing attention away from text, and an application or an image could especially affect this. This is not to be confused with emphasis, which refers only to the text that is being pointed out with bold, color, size, or underlining (Nielsen & Pernice, 2010).

Page organization considers factors such as location of navigation and content, size used to convey emphasis, and content's appearance in relation to the rest of the page (Nielsen & Pernice, 2010). Furthermore, they note that light pages look encouraging because they make text easier for users to read and navigate. They refer to light pages as those which have lighter backgrounds and avoiding a lot of dark on a page. Nielsen and Pernice discuss text size in general terms, saying text size should be large enough to be easily read; they also note that

bigger text signifies importance. Emphasis includes size, bold text, underlining, and colored text and background to connote importance. Though emphasis sounds similar to factors drawing the user's attention, emphasis refers only to the text that is being pointed out while factors drawing the user's attention refer to anything on the page that take attention away from the text (Nielsen & Pernice, 2010).

The inclusion of borders has similar effects to the use of white space, separating content and providing a visual barrier (Nielsen & Pernice, 2010). According to this source, borders should call attention to headings or text; however, while the use of borders can be beneficial, it can also be harmful because borders can add clutter to the page just as easily. It is proposed that color should be consistent across a website's pages and should not be used in a distracting way and background colors should contrast with text to make it visible and easy to read (Nielsen & Pernice, 2010). Information chunking is defined by Nielsen and Pernice as grouping information according to similarities and relevance of the content, and the chunking of text should be separated clearly with white space, and headings if necessary. They also note that having text in a homogenous format makes it more difficult to read (Nielsen & Pernice, 2010).

Sections and headings on websites should give white space and chunk sections of text together, sometimes acting as borders, while describing the text following them according to (Nielsen and Pernice, 2010). The headings used should be more noticeable than regular text, whether bolded or larger, but they should not be so different that they resemble promotions or aesthetic elements that can be ignored, nor should they be surrounded with a colored box. Finally, the researchers note that headings should have a small amount of white space between them and the relating section. Nielsen and Pernice state that content placement refers to the "elimination or at least demotion of less important items on a page to help users see more

important information on a page” and the appearance of content in relation to the rest of the page (p. 70-71). The placement of content and usable visual design is more important than page density in web design. Visual indicators, which refer to links, logos, and navigation items, should clearly indicate to the user their intended use and be easy to locate (Nielsen & Pernice, 2010).

### **Evaluation criteria for functional web design elements.**

Nielsen and Pernice (2010) define functional web design elements as the ones that are included on the homepage, if the logo functions as a link to the homepage, if field labels are included above the fields they relate to, and if the website’s format is consistent.

Nielsen and Pernice (2010) assert that the homepage should include a search bar and a logo or title at the top of the page. Contact and privacy policy should also be easy to find on the homepage. A website may also include a login option and a language selector option, though these are not required and appear less often. They point out that the logo should not only function as a link to the homepage, but it should also appear on every page and work properly. According to Nielsen and Pernice, a field label should appear above, or sometimes next to, the fields they relate to. They define a field label as text that informs the reader what information the user is expected to put into the field, noting that these labels should be short and not be confusing for the user. Finally, Nielsen and Pernice consider consistency to be one of the components of functional web design elements; specifically, format should be consistent across the website (Nielsen & Pernice, 2010).

### **Evaluating the Pages**

I ran each of the pages selected for analysis through Nielsen and Pernice’s (2010) criteria for page layout and functional web design elements. I noted how each page addressed, or did not address, the criteria. Following this, I looked for similarities and differences in the pages for each

criterion. At this point, I was able to compare the national grant websites to one another and the local grant websites to one another based on my analysis. Finally, I compared the national grant websites with the local grant websites.

### **Analysis**

This section will discuss the data collected from the national grant websites, grants.gov and grantwatch.com and the local grant websites, arc.gov and cfwnc.org.

#### **Page Layout in National Grant Websites**

##### **Grants.gov.**

##### ***White space.***

On the “Homepage” of grants.gov (see Figure 1), white space is used between navigation items and between links to videos/blogs, and its appearance is not cluttered. On the other hand, the “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7) pages all have issues with large blank spots on the left side of their pages and a lack of space between sections of text, making the text appear cluttered on these pages. The “Grants 101” (see Figure 2) and “Applicant Eligibility” (see Figure 7) pages use numbered lists to create white space in the text while “Grants Eligibility” (see Figure 4) uses bulleted lists to create white space in the text. The “Search Grants” page has an equal ratio of white space and text. The white space here separates the search criteria options on the left of the page and separates the items in the table. The “How to Apply for Grants” (see Figure 6) page has the largest amount of white space between items and text and does not appear cluttered.

***Page design.***

The design of the “Homepage” (see Figure 1) is confusing because there are two navigation bars, and it is unclear why the second one is included since the main navigation bar includes the same information. This design made the search option easy to locate in the upper right corner. On the other hand, the “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7) pages have simple designs with few distractions on the page. These pages include the content, the subnavigation on the left, and additional information on the right and require only short scrolling to navigate. The use of bulleted or numbered lists on “Grants 101” (see Figure 2), “Applicant Eligibility” (see Figure 7), and “Grants Eligibility” (see Figure 4) makes the design easier to follow, and the “Search Grants” page of grants.gov is set up like a database with an easy-to-follow table and both basic and specific search options. The “How to Apply for Grants” (see Figure 6) page has an easy design with information in arrows guiding the user from step to step and less important information placed below these steps.

***Factors drawing the user’s attention.***

A large picture covering most of the “Homepage” (see Figure 1) and links to videos/blogs at the bottom draw the user’s attention away from navigation on while the “Grants 101” (see Figure 2) page of grants.gov has a table to the right side of the page capture’s the viewer’s interest. The large pictures behind the titles of the “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and Applicant Eligibility” (see Figure 7) pages on do not distract the user because they are grayscale, but the colorful pictures beside the titles do. Nothing else pulls the user’s eyes to it on these pages. The arrows around content are effective attention-grabbers while the picture of a computer on the “How to Apply for Grants”

(see Figure 6) page are distracting. On the “Search Grants” (see Figure 5) page, nothing grabs the user’s attention in either a positive or a negative way.

### ***Page organization.***

The “Homepage” (see Figure 1) is organized simply overall and is mostly dark while all other pages have light backgrounds. The “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7) pages all contain headings and subheadings which organize the content. The content of these pages is in the center with the subnavigation of the left and related information on the right. The “Search Grants” (see Figure 5) page is organized with search options on the left and grant results on the right. The “How to Apply for Grants” (see Figure 6) page is arranged differently with the content at the top and related information below the content. All pages on grants.gov are priority driven.

### ***Text size.***

The text on the “Homepage” (see Figure 1) is easy to read in the navigation bars, on the picture, and on the links to videos/blogs. The text on the “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), “Applicant Eligibility” (see Figure 7), and “How to Apply for Grants” (see Figure 6) is also easy to read with the same size used for subnavigation, content, the table, and related information. The “Search Grants” (see Figure 5) page has text that is easy to read and is the same in both the search criteria and the grant results.

### ***Emphasis.***

The “Homepage” (see Figure 1) emphasizes the pictures and links to videos/blogs because these are larger than anything else on the page. There is also emphasis on the secondary navigation, which has larger text and is wider than the main navigation. The “Grants 101” (see Figure 2) page emphasizes the table, which takes up the entire right side and is as tall as the

content section. However, the “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7) pages on grants.gov all emphasize the links in the text by making them blue, and the “Grants 101” (see Figure 2), “Grant Eligibility” (see Figure 4), and Applicant Eligibility” (see Figure 7) pages emphasize the bulleted and numbered lists by making them blue as well. The emphasis of the “Search Grants” (see Figure 5) page is on the search criteria on the left of the page. This information takes up almost a third of the page, encouraging the user to customize their search. The emphasis on the “How to Apply for Grants” (see Figure 6) page is also beneficial because it is on the colored arrows surrounding the content, encouraging the user to focus on the content.

### ***Borders.***

The secondary navigation on the “Homepage” (see Figure 1) could be considered a border because it separates the picture from the links to videos/blogs. This border adds clutter to the page. There are no borders on the “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7) pages on grants.gov except the border around the secondary navigation, which is beneficial because it separates the navigation from the regular content. The “How to Apply for Grants” (see Figure 6) and “Search Grants” (see Figure 5) pages are the only pages that have borders dividing the content. “How to Apply for Grant” (see Figure 6) uses a border between the content arrows and the additional information section, creating a beneficial separation of what is and is not content. The “Search Grants” (see Figure 5) page uses a table with the borders between the text visible, making it easier for the user to scan through the grants.

***Color.***

Color is used consistently on the “Homepage” (see Figure 1), establishing a color scheme of blue, red, and black. Blue and black are reserved for the background only. Red is used in the logo and the “go” button for the search feature, likely to bring attention to these items. All text on the page is white, and the background for the links to videos/blogs is white. The “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), “Applicant Eligibility” (see Figure 7), “Search Grants” (see Figure 5), and “How to Apply for Grants” (see Figure 6) of grants.gov contain the same color scheme but employ it differently. The background of each page is white while the text is black. Blue is reserved for links in the text and the navigation. Red appears in the navigation to show which page is selected and in the pictures next to the page titles. This use of red may be essential because it draws the user’s attention to these parts of the pages. “Grants 101” (see Figure 2) of grants.gov also uses red in the table on the right side of the page.

***Information chunking.***

There is no text on the “Homepage” (see Figure 1) that can be chunked together, but the links to videos/blogs are chunked together effectively. However, the chunking of information is ineffective on “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7). These pages have information chunked under headings and are ineffective because there is not enough space separating the sections. The “Search Grants” (see Figure 5) page chunks together different options for searching for grants, which is effective because it allows the user to find the option they want quickly rather than scrolling through one long list of search criteria. The “How to Apply for Grants” (see Figure 6)



page is also set up differently from the other pages and chunks content together using arrows, which is effective because it guides the user visually.

### *Sections and headings.*

The “Homepage” (see Figure 1) establishes three sections: main navigation, secondary navigation, and links to videos/blogs. There are no headings in these sections, but the picture contains some text with the heading “Search on the Go.” The heading is larger and stands out against the regular text. The “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7) pages have sections that are separated by headings and subheadings. Both the headings and subheadings stand out against the regular text, but the headings and subheadings do not differ much in appearance. The “Search Grants” (see Figure 5) page uses different headings for its different sections. In the search criteria section, the headings are bold and larger than regular text. In the grant results section the headings are larger but aren’t bolded. “How to Apply for a Grant” (see Figure 6) also has headings that stand out against the text, but this page employs a size difference, bold, and blue text instead of black for the headings.

### *Content placement and visual indicators.*

On the “Homepage” (see Figure 1), there is no content to compare its appearance to the rest of the page. The secondary navigation is demoted to below the picture on the “Homepage” (see Figure 1), suggesting it is less important than the main navigation. The “Grants 101” (see Figure 2), “Grant Programs” (see Figure 3), “Grant Eligibility” (see Figure 4), and “Applicant Eligibility” (see Figure 7) pages have content placed in the middle of the page with the subnavigation on the left side and additional information on the right side. The additional information sections are as long as the content sections, making the page appear cluttered. These

pages all use headings as visual indicators. “Grant Programs” (see Figure 3) also places a yellow box around a note to indicate its importance. The “How to Apply for a Grant” (see Figure 6) page places the content above the additional information section, promoting its importance. This page uses the arrows around the content as visual indicators for the user. The “Search Grants” (see Figure 5) page gives the grant results the most space on the page, reserving a smaller column for the search criteria. This page does not have any visual indicators. Links, navigation, and the logo are visible on all pages of grants.gov.

### **Grantwatch.com.**

#### ***White space.***

The “Homepage” (see Figure 8) contains white space that provides space between content and different parts. There is enough white space on this page that it does not appear cluttered in any area. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages of grantwatch.com all contain the same amount of white space between their listed grants but contain minimal white space between the text within each grant option, creating a cluttered appearance. The “Search for a Grant” (see Figure 12) page has white space between the different search options, with an even ratio of text to white space.

#### ***Page design.***

The “Homepage” (see Figure 8) is designed with navigation and a rotation of content, making it easy to understand and navigate. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages have no distracting features. While the rest of the pages are easy to use and have no distracting features, the “Search for a Grant”

(see Figure 12) page is difficult to use. It contains three different areas for searching for grants, one of which pops up and blocks the second one. This difficult design decreases the amount of the page the user can see and forces the user to take an extra step to close the pop-up grant search option.

***Factors drawing the user's attention.***

The “Homepage” (see Figure 8) has a feature where content rotates on the homepage every few seconds. This movement draws the user’s attention. The accompanying box with information about a grant that changes also grabs the user’s attention. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages do not contain any distracting features, but the green buttons saying “view full grant” are attention-grabbers. The “Search for a Grant” (see Figure 12) page has a pop-up box containing a third option for searching for grants that covers most of the second option, which distracts the user from the other two search options.

***Page organization.***

The “Homepage” (see Figure 8) is organized with contact information, followed by navigation, then a rotation of content and grants. The page is easy to navigate and understand but is dark. Each of the “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages are designed with content placed in boxes in two columns. This is a priority-driven design that separates the grants clearly for the user. These pages are all light. The “Search for a Grant” (see Figure 12) page is organized differently from the other pages. This page contains three search options that appear differently and make the priority of the page

unclear. The first is a simple search bar to type in, the second is an option to find grants by type, and the third is an in-depth option to specify different search criteria. The page is light, except for the third option.

***Text size.***

The text on the “Homepage” (see Figure 8) is easy to read, including in the box with changing grant information. The text size on this page changes based on the importance of the content; text is largest for the rotating content. Similarly, the “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages have text that is easy to read except for the deadlines, which are too small. The text size throughout these pages is consistent. The “Search for a Grant” (see Figure 12) page also contains text that is easy to read, but the text size is not consistent throughout the three different search options.

***Emphasis.***

The emphasis on the “Homepage” (see Figure 12) of grantwatch.com is the different grants available and information about them with the rotating boxes of grant information and rotating content. There is little to no emphasis on the navigation, which has small text and has a background matching the rest of the page. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages emphasize the individual grants by placing them inside boxes. These pages also emphasize the buttons for viewing the full grant by having them be large and colored. The “Search for a Grant” (see Figure 12) page places emphasis on the third search option by having it pop up over the others and have a different background than the rest of the page.

***Borders.***

The “Homepage” (see Figure 8) has a different shade of blue background for the navigation, separating it from the content below it. The difference in colors and the placement of the navigation combined could be considered an attempt to create a border between them. There is also a border surrounding the rotating box of grant information. These borders do not clutter the page. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages has borders around each of the grants offered, separating them from each other. This does not clutter the pages. The “Search for a Grant” (see Figure 12) page is the only page that does not have borders.

***Color.***

Blue and green are established as the color scheme for the website on the “Homepage” (see Figure 8). The text is black for white backgrounds and white for blue backgrounds. Gray is used as a background color between white backgrounds as well in the rotating boxes for grant information to separate the deadlines from the other content. Green is used in the logo and in buttons for finding more information. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages continue the blue and green color scheme. The background of these pages is white. Gray is used as a background color between white backgrounds as well in the boxes for grant information to separate the deadlines from the other content. Green is used as the top border for the boxes and for the button to view the full grant. The “Search for a Grant” (see Figure 12) page contains the blue and green color scheme. The background of this page is white. Gray is used as a background color between white backgrounds

as well in the boxes for grant information to separate the deadlines from the other content under the second search option. Green is used as the top border for the boxes and for the button to view the full grant under the second search option. Blue is used in the search options and largely in the background of the third search option.

### ***Information chunking.***

Information is chunked together on the “Homepage” (see Figure 8) using a rotating method for separating content. This is effective because it keeps the user from scrolling to read it. It moves on its own but can be paused by hovering over it. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages chunk information together by placing information about each grant in its own box. The effectiveness of this is questionable because while it provides white space between each grant, it does not allow for enough white space inside the box. Because of this, the pages overall look like they have enough white space, but the content appears dense. The “Search for a Grant” (see Figure 12) page chunks information together in three different areas. This is not effective because it is repetitive, and one search option pops up and blocks the others.

### ***Sections and headings.***

The “Homepage” (see Figure 8) of grantwatch.com contains headings in the rotating content and the accompanying rotating grant information boxes. Both of these sections effectively set the headings apart from the regular text. The rotating content headings are larger than the text while the headings in the boxes are blue instead of black like the regular text in the boxes. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our

Archives” (see Figure 15) pages have headings for each grant option that stand out compared to the regular text. Each of the headings is blue while the regular text is black. On the other hand, the “Search for a Grant” (see Figure 12) page contains a heading for the first search option and for the second search option. The first heading is blue and larger than the regular text. The second heading is larger than the regular text; it is also black while the regular text is white, but this is due to the heading and regular text having different background colors.

***Content placement and visual indicators.***

Content on the “Homepage” (see Figure 8) is placed inside a rotating box. It uses dots as visual indicators that the user can control the movement of the content if desired. Similarly, the “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages place content in boxes in two columns. The large green boxes around the view full grant buttons serve as a visual indicator of where the user clicks next. On the “Search for a Grant” (see Figure 12) page, however, most of the content is placed under the second search option. The first and simplest search option takes up the least amount of room while the second takes up the most but gets blocked by the third option. The largest visual indicator on this page is the pop-up box for the third search option. Because this one pops up and covers the other options, this suggests it is the most important item on the page. Links, logos, and navigation are visible on all pages.

## **Page Layout in Local Grant Websites**

### **Arc.gov.**

#### ***White space.***

The “Homepage” (see Figure 16) of arc.gov has white space between each area of content and appears to have an even amount of white space and content. In the box discussing ARC’s initiative, there is extra leading, creating more white space on the page. The “Grants and Funding” (see Figure 17) page has more white space than text while “Grants and Contracts” (see Figure 18) and “Grantee Forms and Information” (see Figure 20) have almost an even amount of text and white space. Problematically, the “General Information on Grants and Funding” (see Figure 19) page does not have enough white space in comparison with the amount of text on the page, and the “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), and “General Information on Grants” (see Figure 19) pages all have blank space on the left side, under the navigation, that gives the pages the appearance of less text.

#### ***Page design.***

The “Homepage” (see Figure 16) has a simple design with pictures lining the banner along with the logo. There is little on the page after navigation, making the page easy to understand and navigate. “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), “General Information on Grants and Funding” (see Figure 19), and “Grantee Forms and Information” (see Figure 20) all follow the same page design with navigation on the left side and content taking up the remainder of the page. These pages are easy to navigate with headings and links easy to find.



***Factors drawing the user's attention.***

On the "Homepage" (see Figure 16), the pictures at the top of the page and the box discussing ARC's initiative draws the user's attention because of their color and size. The links on the "Grants and Funding" (see Figure 17) and "Grants and Contracts" (see Figure 18) pages attract attention because they are blue and show up against the black regular text. "General Information on Grants and Funding" (see Figure 19) page's bulleted section at the bottom of the page draw the user's attention because of the amount of white space compared to the text at the above, but nothing catches the user's interest on the "Grantee Forms and Information" (see Figure 20) page because the entire page consists of links and forms that are all blue.

***Page organization.***

The "Homepage" (see Figure 16) has two different navigation menus, but it separates them clearly by placing them on different sides of the page and titling one "Quick Links." The rest of the page is organized by grouping text in boxes, only some of which have backgrounds or borders. The "Grants and Funding" (see Figure 17) page is organized with text followed by accompanying links, and the "General Information on Grants and Funding" (see Figure 19) page is organized similarly with text followed by bulleted information. Both of these pages are priority driven in their organization. The "Grants and Contracts" (see Figure 18) page is organized with both text and links interchangeably, and the "Grantee Forms and Information" (see Figure 20) page is separated into two sections in a priority driven fashion. The first is guides and manuals, and the second is forms. All of these pages are light.

***Text size.***

Text size on the "Homepage" (see Figure 16) is readable. The text size in the content sections is consistent, and the text size of both navigation menus is consistent as well. Text size

is readable and consistently the same size in “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), “General Information on Grants and Funding” (see Figure 19), and “Grantee Forms and Information” (see Figure 20).

***Emphasis.***

Emphasis is difficult to pinpoint on the “Homepage” (see Figure 16), but is likely ARC’s initiative, which has large text and is in the center of the page. The emphasis of the “Grants and Funding” (see Figure 17) and “Grants and Contracts” (see Figure 18) pages is easier to locate. These pages emphasize the links, which are blue. There is no emphasis on the “General Information on Grants and Funding” (see Figure 19) or “Grantee Forms and Information” (see Figure 20) pages.

***Borders.***

Borders are used on the “Homepage” (see Figure 16) to separate the navigation items from one another. Borders are also used to underline headings. These do not clutter the page. The only borders on the “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), “General Information on Grants and Funding” (see Figure 19), and “Grantee Forms and Information” (see Figure 20) pages are between the navigation items. These borders do not clutter the page.

***Color.***

The “Homepage” (see Figure 16) establishes blue, white, and black as the color scheme. Blue is used in borders, background of boxes, and text for headings, links, and navigation. Blue is also used with green in ARC’s initiative box for text. White is used for the background, and black is for regular text. The “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), “General Information on Grants and Funding” (see Figure 19), and “Grantee Forms

and Information” (see Figure 20) pages all have white backgrounds, black regular text, blue first order headings, and blue links. However, “Grants and Contracts” (see Figure 18) and “General Information on Grants and Funding” (see Figure 19) use black for secondary headings as well, and “Grantee Forms and Information” (see Figure 20) uses blue for both first order headings and second order headings.

### ***Information chunking.***

All the pages chunk information together. This is effective on the “Homepage” (see Figure 16), “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), and “Grantee Forms and Information” (see Figure 20) pages. The “General Information on Grants and Funding” (see Figure 19) page does not effectively chunk together information because there is not enough white space to separate the different sections effectively.

### ***Sections and headings.***

The “Homepage” (see Figure 16) uses headings to separate different options for exploring the website. The “Grants and Funding” (see Figure 17) has one heading which is distinguishable from the regular text both by its size and color. “Grants and Contracts” (see Figure 18) and “General Information on Grants and Funding” (see Figure 19) both use first order headings and second order headings. The first order headings are distinguishable by their size and color while the second order headings are only distinguishable by their size. The “Grantee Forms and Information” (see Figure 20) page uses both first order headings and second order headings as well, but these are only distinguishable from other text by their size.

### ***Content placement and visual indicators.***

Content on the “Homepage” (see Figure 16) is located at the bottom, giving precedent to the navigation features while the “Grants and Funding” (see Figure 17), “Grants and Contracts”

(see Figure 18), “General Information on Grants and Funding” (see Figure 19), and “Grantee Forms and Information” (see Figure 20) pages all have content placed in the middle of the page, taking up the remaining space to the right of the navigation. The blue text on the “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), and “Grantee Forms and Information” (see Figure 20) pages are visual indicators of links to more information, but there are no visual indicators on the “General Information on Grants and Funding” (see Figure 19) page. Links, navigation, and the logo are visible on all pages.

### **Cfwnc.org.**

#### ***White space.***

The “Homepage” (see Figure 21) of cfwnc.org has more white space than text and is free of clutter, but the “Grants Overview” (see Figure 22), “Grant Programs” (see Figure 23), and “Nonprofit Funds” (see Figure 24) pages have almost an equal ratio of white space and text. Sections of text are separated on all three pages with extra white space between them. The pages also have white space between images. There is no clutter on these pages.

#### ***Page design.***

The “Homepage” (see Figure 21) presents the navigation at the top of the page, making it easy to locate, and follows it with a picture and a small amount of text so the user is not overwhelmed with options when viewing this page. The “Grants Overview” (see Figure 22) and “Nonprofit Funds” (see Figure 24) pages also follow a simple design with text that is not long or cluttered. The right side is reserved for navigation and pictures of recent projects. The simple design is continued on the “Grants Programs” (see Figure 23), allowing users to search for grants without cluttered pages filled with additional text or images.

***Factors drawing the user's attention.***

The images on the “Homepage” (see Figure 21), “Grants Overview” (see Figure 22), and “Nonprofit Funds” (see Figure 24) grab the user’s attention, especially the images on the right side of the pages, and the pie chart on “Grants Overview” (see Figure 22) is distracting from the text because of its size and colorfulness. There are no factors on the “Grants Programs” (see Figure 23) page that pull the user’s eyes to them.

***Page organization.***

The “Homepage” (see Figure 21) is organized with very little text and with images that grab the user’s attention. The navigation is easy to find on this page. In contrast, “Grants Overview” (see Figure 22) and “Nonprofit Funds” (see Figure 24) are organized with content on the left and taking up the majority of the page and navigation and related information on the right side. The “Grants Program” (see Figure 23) page offers two options for finding grants: using the search option or scrolling through the available grants. All the pages are light and are priority driven.

***Text size.***

The regular font of each page (see Figures 21-24) is large and very easy to read. Text size of the headings is almost too big and is distracting, especially for the first order headings.

***Emphasis.***

The emphasis of the “Homepage” (see Figure 21) is on the rotating pictures at the top that each have text and a link to learn more with them while “Grants Overview” (see Figure 22) and “Nonprofit Funds” (see Figure 24) place the emphasis on the text by making it large and giving it the most room with few distractions from it. Another emphasis of the “Grants Overview” (see Figure 22) would be the pie chart which is large and colorful, drawing attention. The emphasis of

the “Grant Programs” (see Figure 23) page is on the search option because it is given white space around it and color that makes the search button stand out against the rest of the page.

### ***Borders.***

There are no borders on the “Homepage” (see Figure 21), “Grants Overview” (see Figure 22), and “Nonprofit Funds” (see Figure 24) pages, and “Grant Programs” (see Figure 23) may have borders only if using different colored rows to differentiate between grants in the chart can be included.

### ***Color.***

The color scheme established by the “Homepage” (see Figure 21) is mainly green with some blue. The background is white, and the regular text and the navigation is black while the headings are green. “Grants Overview” (see Figure 22), “Nonprofit Funds” (see Figure 24), and “Grant Programs” (see Figure 23) follow the color scheme, but the backgrounds of these pages are all white with black text and green headings. The “Grants Overview” (see Figure 22) page has the most color out of these pages because of the addition of the colorful pie chart while “Grant Programs” (see Figure 23) has the least color, with no pictures present. This page uses gray and white to alternate between the grants listed.

### ***Information chunking.***

The “Homepage” (see Figure 21) chunks information together and separates different information with headings and pictures. This is effective because it creates white space and is easy to read. The “Grants Overview” (see Figure 22) and “Nonprofit Funds” (see Figure 24) pages both use headings effectively to separate sections. On the other hand, the “Grant Programs” (see Figure 23) page chunks information together using rows in a table. This is effective because it creates extra white space for the user and lessens the reading the user has to

do. The headings above the table do not scroll with the rest of the page for the users to reference when scrolling, lessening their effectiveness.

### ***Sections and headings.***

Headings are used on the “Homepage” (see Figure 21) to lead into the content and to separate the items on the right side of the page while the “Grants Overview” (see Figure 22) and “Nonprofit Funds” (see Figure 24) pages use headings solely to organize the content. All headings used are noticeable against the regular text and are consistently the same on each of the pages.

### ***Content placement and visual indicators.***

The “Homepage” (see Figure 21) orders the navigation before its pictures and content and gives it larger text size than the regular text, suggesting this is the most important item. On the “Grants Overview” (see Figure 22) and “Nonprofit Funds” (see Figure 24) pages, content is placed on the left and given the most room. The “Grant Programs” (see Figure 23) page places content in a table with links to more information about each grant. This is effective because it is easier for the user to read and to scroll. Content on all of the pages is minimal and easy to scan. Links, navigation, and the logo are visible on all pages.

## **Functional Web Design Elements in National Grant Websites**

### **Grants.gov.**

#### ***The homepage.***

Grants.gov organizes the “Homepage” (see Figure 1) by placing the search bar in the top right corner and the logo for the website in the upper left of the “Homepage” (see Figure 1), and the contact information and privacy policy are at the bottom of the “Homepage” (see Figure 1).

***Logo as a link.***

The website's logo appears on every page and functions as a link to the "Homepage" (see Figure 1) consistently.

***Field labels.***

Field labels are used on the "Homepage" (see Figure 1) for the search option and are beside all necessary parts of the "Search Grants" (see Figure 5) page. No other pages have or require field labels.

***Consistent format on website.***

The format of the website is consistent on most pages. The "Homepage" (see Figure 1) is different from all other pages, but the "Grants 101" (see Figure 2), "Grant Programs" (see Figure 3), "Grant Eligibility" (see Figure 4), and "Applicant Eligibility" (see Figure 7) pages follow the same format. However, the "Search Grants" (see Figure 5) page does not follow the format of the other pages or of the "Homepage" (see Figure 1). Furthermore, the "How to Apply for Grants" (see Figure 6) page contains the same sections as "Grants 101" (see Figure 2), "Grant Programs" (see Figure 3), "Grant Eligibility" (see Figure 4), and "Applicant Eligibility" (see Figure 7) pages, but it formats the sections differently.

***Grantwatch.com.******The homepage.***

Grantwatch.com organizes the "Homepage" (see Figure 8) by placing the search bar in the center of the page below the rotating content and the website's logo in the upper left corner of the "Homepage" (see Figure 8), contact information is located both in the top right corner and at the bottom of the "Homepage" (see Figure 8), and the privacy policy can be found at the bottom of the "Homepage" (see Figure 8).



***Logo as a link.***

The logo appears on every page and functions as a link to the “Homepage” (see Figure 8) consistently.

***Field labels.***

A field label is present for the search option on the “Homepage” (see Figure 8). The field labels are also present on the “Search for a Grant” (see Figure 12) page. No other pages have or require field labels.

***Consistent format on website.***

The format of the “Homepage” (see Figure 8) is different from the other pages but contains similarities such as the presence of the boxes containing grant information. The “All Grants” (see Figure 9), “State Grants” (see Figure 10), “New Grants” (see Figure 11), “Federal Grants” (see Figure 13), “Local Grants” (see Figure 14), and “Tour Our Archives” (see Figure 15) pages all share the same formatting. However, the “Search for a Grant” (see Figure 12) page does not follow the format of any of the other pages.

**Functional Web Design Elements in Local Grant Websites****Arc.gov.*****The homepage.***

Arc.gov org organizes the “Homepage” (see Figure 16) with the search bar in the upper right corner of the “Homepage” (see Figure 16), the logo is in the upper left corner of the “Homepage” (see Figure 16), and contact and privacy policy are at the bottom of the homepage.

***Logo as a link.***

The logo appears on every page and functions as a link to the “Homepage” (see Figure 16) consistently.

***Field labels.***

A field label is present beside the search option on the “Homepage” (see Figure 16), but no other pages have or require field labels.

***Consistent format on website.***

The format of the “Homepage” (see Figure 16) of the website is different from the other pages of the website. However, the “Grants and Funding” (see Figure 17), “Grants and Contracts” (see Figure 18), “General Information on Grants and Funding” (see Figure 19), and “Grantee Forms and Information” (see Figure 20) pages all share the same formatting with the navigation on the left side of the pages and the content taking up the remaining space.

***Cfwnc.org.******The homepage.***

Cfwnc.org organizes the “Homepage” (see Figure 21) with the search bar in the upper right corner of the “Homepage” (see Figure 21), the logo is located in the upper left corner of the “Homepage” (see Figure 21), and contact and privacy policy are both at the bottom of the “Homepage” (see Figure 21).

***Logo as a link.***

The logo appears on every page and functions as a link to the “Homepage” (see Figure 21) consistently.

***Field labels.***

The search option on the “Homepage” (see Figure 21) and on the “Grant Programs” (see Figure 23) page contain a field label, but no other pages have or require field labels.

***Consistent format on website.***

The “Homepage” (see Figure 21) is similar to the other pages in relation to the content’s location but is otherwise different from the other pages. The “Grants Overview” (see Figure 22) and “Nonprofit Funds” (see Figure 24) pages contain the same format, but the “Nonprofit Funds” (see Figure 24) page starts with a picture below the heading while the “Grants Overview” (see Figure 22) page does not. The “Grant Programs” (see Figure 23) page is not set up similar to any of the other pages.

**Conclusion**

In this study, I attempted to find out how national and local grant websites differ in terms of usability. I found that the local grant websites, arc.gov and cfwnc.org, had significantly higher usability, as discussed below.

Based on the grant websites that I analyzed, I divided all issues into two categories: small issues and larger issues. Small issues include those that were not problematic in the pages of a website while larger issues include those that were problematic throughout a website. I found that the national grant websites analyzed had larger issues with information chunking throughout the pages and smaller issues with page design, factors drawing the user’s attention, white space, emphasis, and content placement and visual indicators. The local websites analyzed had no large issues but had small issues with sections and headings, white space, and factors drawing the user’s attention throughout the pages.

The higher usability of the local grant websites could be due to the intended audience and to the amount of content. Because the national sites serve a wider audience, there is more content. The local grant websites have fewer pages overall and less content, so there are fewer opportunities for differences in usability within the websites. However, I would have to

interview the website creators to know the reasons for the differences in usability between the national and the local grant websites for sure.

Interestingly, neither the national grant websites nor the local grant websites were problematic in terms of the functional web design elements. All elements were present and were easy to find on all the websites. The only issue that arose repeatedly was with the consistent format criterion. However, format differed only for the pages for searching grants and the homepages, so this irregularity can be ignored because of the different functions these pages serve from the others.

Though it was not discussed directly in my analysis section as it is outside the scope of this project, I did notice that a few pages on some of these websites included internal or external links to information about grant providers. Grants.gov's "Grant Programs" page, for example, includes external links in its content. The "Local Grants," "State Grants," and "Federal Grants" pages on grantwatch.com provide internal links to more information about the individual grants listed and the organizations providing those grants. The "Grant Programs" page on cfwnc.org also provides internal links to more information about the grant and the grant provider. Arc.gov is the only website that did not have external links or internal links to information about the grant providers on the pages I analyzed.

Due to the time restrictions surrounding this study, I limited the scope of this project to examining only Nielsen and Pernice's (2010) page layout and functional web design elements categories. I also limited the pages I analyzed to only those aimed towards grant applicants, with the exception of the homepages. In the future, I will examine more pages of the websites I chose and include Nielsen and Pernice's other categories of website usability (navigation, pictures, and advertisements).

The results of this study are limited because they are based solely on my own interpretation of the websites in relation to the criteria. As a next step in this research project, I will present the pages I analyzed from each website to a group of participants and ask them to analyze the pages using the same criteria. I will then compare my own findings with theirs, looking for similarities that would support my findings and differences that would disprove my findings. By having others analyze the pages, I could ensure the study would be less susceptible to being subjective.

Additionally, having participants will allow me to look at the accessibility of these websites. Though I found this to be an issue in several sources I discussed, such as those by Youngblood (2012) and Aleixo et al. (2012), I did not check the websites' pages for accessibility because I based my analysis solely on Nielsen and Pernice's criteria (2010), which did not consider accessibility. However, I do think it is important to note that though I found the text size to be easy to read overall on all four websites, I believe the majority of the text would not be easily readable for those with visual impairments. Further testing with a group that includes some people with visual impairments would be required to explore this.

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Appendix

Figures from National Grant Websites



Figure 1. Grants.gov “Homepage” from <https://www.grants.gov/web/grants/home.html>

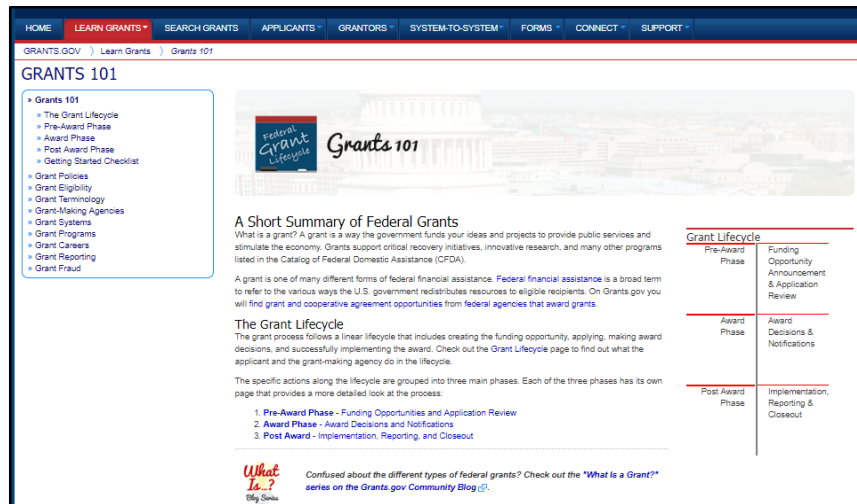


Figure 2. Grants.gov “Grants 101” page from <https://www.grants.gov/web/grants/learn-grants/grants-101.html>

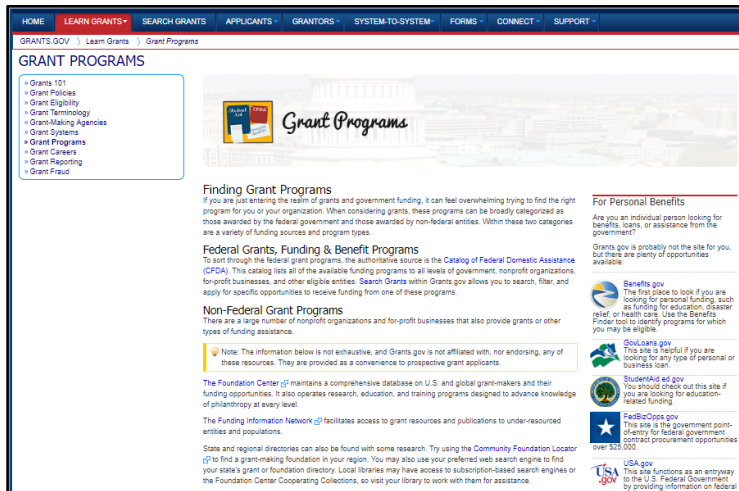


Figure 3. Grants.gov “Grant Programs” page from <https://www.grants.gov/web/grants/learn-grants/grant-programs.html>



Figure 4. Grants.gov “Grant Eligibility” page from <https://www.grants.gov/web/grants/learn-grants/grant-eligibility.html>

The screenshot shows the Grants.gov search interface. On the left, there are filters for 'BASIC SEARCH CRITERIA' (Keyword: community development), 'OPPORTUNITY STATUS' (Forecasted, Posted, Closed, Archived), 'FUNDING INSTRUMENT TYPE' (All Funding Instruments, Cooperative Agreement, Grant, Other, Procurement Contract), and 'ELIGIBILITY' (All Eligibilities, City or township governments, County governments). The main area displays a table of 1551 matching results, sorted by Relevance (Descending). The table columns are Opportunity Number, Opportunity Title, Agency, Opportunity Status, Posted Date, and Close Date. The first few rows are:

Opportunity Number	Opportunity Title	Agency	Opportunity Status	Posted Date	Close Date
RFA294-2010-113	Community Infrastructure Development Program	USAID-WES	Posted	04/16/2010	
HHS-2019-ACL-NIDILRR-DPCP-0331	Disability and Rehabilitation Research Projects (DRRP) Program: Community Living and Participation (Development)	HHS-ACL	Posted	01/23/2019	03/25/2019
HHS-2019-ACF-OCS-EE-1580	Community Economic Development Focus on Social Enterprises	HHS-ACF-OCS	Forecasted	12/27/2018	
HHS-2017-ACF-OCS-EE-1213	Community Economic Development Projects	HHS-ACF-OCS	Forecasted	09/09/2016	
RFA-294-12-000006	Palestinian Community Infrastructure Development	USAID	Posted	03/02/2012	
NIJ-2019-15287	Artificial Intelligence Research and Development to Support Community Supervision, FY 2019	USDOJ-OJP-NIJ	Posted	02/15/2019	05/13/2019
FR-6200-N-23	Community Development Block Grant Program for Indian Tribes and Alaska Native Villages	HUD	Posted	02/19/2019	03/20/2019
72051418APS00001	Annual Program Statement (APS) for Colombia's Ethnic Communities "Strengthening Ethnic Communities for Inclusive Peace"	USAID-COL	Posted	08/31/2018	08/29/2019
FR-6200-N-06	HUD's FY 2018 and FY 2019 Community Compass	HUD	Posted	12/17/2018	03/14/2019

Figure 5. Grants.gov “Search Grants” page from <https://www.grants.gov/web/grants/search-grants.html>

The screenshot shows the 'How to Apply for Grants: Getting Started' page. It features six steps: Learn, Check, Search, Register, Apply, and Track. Each step has an icon and a brief description. Below the steps, there is a section for 'Save Time & Apply Using Workspace' with a 'Click Here to Learn More' link. To the right, there is a 'Search for Opportunity Package' section with a text input field and a 'Search for Opportunity Package »' button.

Figure 6. Grants.gov “How to Apply for Grants” page from <https://www.grants.gov/web/grants/applicants/apply-for-grants.html>

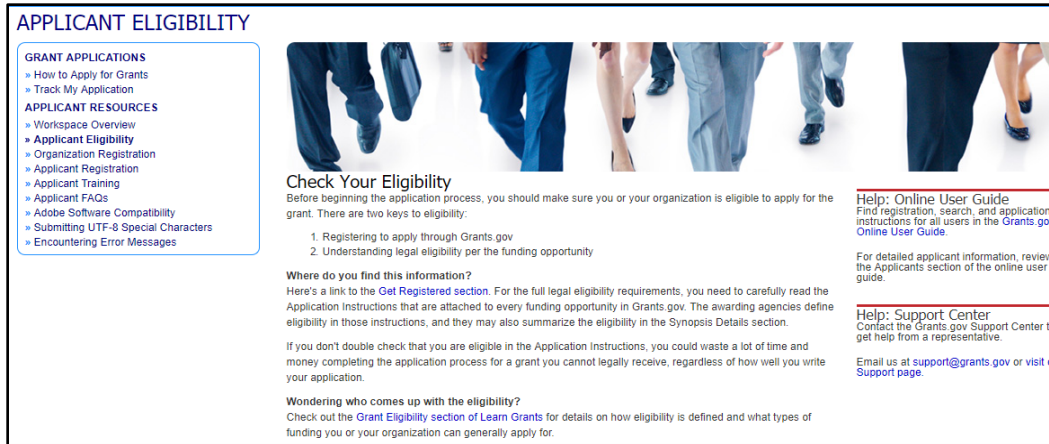


Figure 7. Grants.gov “Applicant Eligibility” page from <https://www.grants.gov/web/grants/applicants/applicant-eligibility.html>

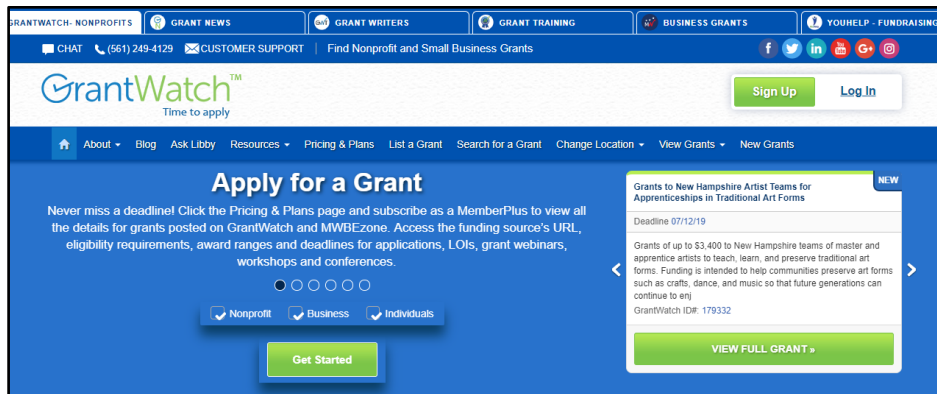


Figure 8. Grant Watch “Homepage” from <https://www.grantwatch.com/>



Figure 9. Grant Watch “All Grants” page from <https://www.grantwatch.com/all-grants.php>

**Find State grants for your nonprofit or organization:**  
 State grants, state government funding and/or fee for service contracts may be available to support or supplement your organization's education, social welfare, science and other proposed program.

Number of Grants: 80

<p><b>Grants to Montana Nonprofits, For-Profits, and Individuals to Improve Non-Public Water System...</b></p> <p>Deadline Ongoing</p> <p>Grants of up to \$5,000 to Montana nonprofits, for-profits, and individuals to upgrade small water systems to meet government regulations. Projects must promote efficient use of natural resources, such as water, land, energy, and air. This program is intended to support water projects funded by nongovernment entities such a...</p> <p>GrantWatch ID#: 176076</p> <p><a href="#">VIEW FULL GRANT »</a></p>	<p><b>Grants to North Carolina Nonprofits and Agencies for Conservation Easement Transaction Costs</b></p> <p>Deadline Ongoing</p> <p>Grants of up to \$25,000 to North Carolina nonprofit organizations and government agencies to cover the transaction costs of receiving donated land in a permanent conservation or fee simple agreement. The donated land must be a gift, and it must be accepted by the organization applying for this opportunity. The donation...</p> <p>GrantWatch ID#: 174345</p> <p><a href="#">VIEW FULL GRANT »</a></p>
<p><b>Grants to California Governmental and Private Marinas to Install or Maintain Pumpout Systems</b></p> <p>Deadline Ongoing</p> <p>Grants to California government agencies and private</p>	<p><b>Grants to California Government Agencies and Businesses for Pumpout Stations in Boating Faci...</b></p> <p>Deadline Ongoing</p> <p>Grants to California government agencies and private</p>

Figure 10. Grant Watch “State Grants” page from <https://www.grantwatch.com/state-grants.php>

**Search Our Newest Grants:**

We are updating our database daily. Make sure you have the latest information for your nonprofit or small business by searching our newest grants.

Newest Grants: 600

Grants posted within the last seven days. Page 1 of 60

<p><b>In-Kind Donations of Surplus Property to USA Nonprofits and Local Governments</b> <span style="float: right;">NEW</span></p> <p>Deadline Ongoing</p> <p>In-kind donations to USA and territories nonprofit organizations and local government agencies that are interested in receiving surplus property no longer needed by the federal government. This program distributes property of all types, with the exception of federal gov</p> <p>GrantWatch ID#: 143078</p> <p><a href="#">VIEW FULL GRANT »</a></p>	<p><b>Grants to USA Native American Organizations for Organizational Support and Professional Deve...</b> <span style="float: right;">NEW</span></p> <p>Deadline 06/07/19</p> <p>Grants to USA Native American-led grassroots organizations for project and organizational support and assistance. Funding may cover specific projects, general operating costs, and capacity building efforts, such as consultant fees and staff training. Funding is intended</p> <p>GrantWatch ID#: 145813</p> <p><a href="#">VIEW FULL GRANT »</a></p>
<p><b>Grants to USA Nonprofits, Agencies, and IHEs for Economic Development in Economically Distre...</b> <span style="float: right;">NEW</span></p> <p>Deadline Ongoing</p> <p>Grants to USA nonprofits, government agencies, IHEs, tribes, and district organizations to support economic development, attract private investments, and create jobs in economically distressed regions throughout the country. Grants and cooperative agreements made u</p>	<p><b>Grants to Canada Professional Songwriters to Attend Seminars and Workshops for Professional</b> <span style="float: right;">NEW</span></p> <p>Deadline Ongoing</p> <p>Grants of up to \$750 to Canada professional songwriters to cover the cost of attending international or domestic songwriting seminars and workshops. The purpose of this program is to help songwriters who are in the business of writing songs for other people to perform.</p>

Figure 11. Grant Watch “New Grants” page from <https://www.grantwatch.com/new-grants.php>

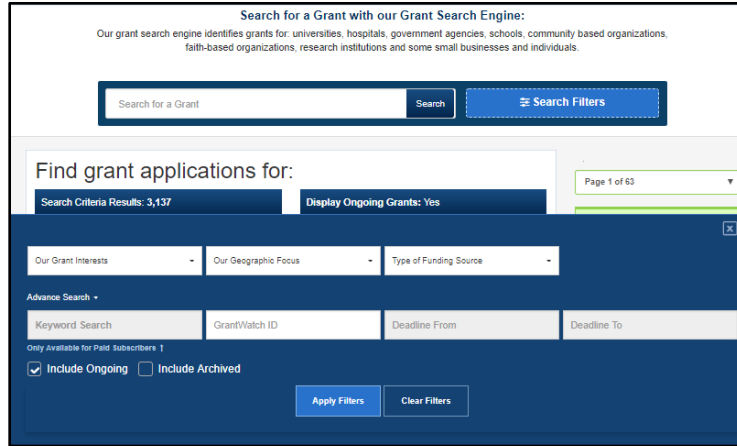


Figure 12. Grant Watch “Search for a Grant” page from <https://www.grantwatch.com/grant-search.php?search=advanced>



Figure 13. Grant Watch “Federal Grants” page from <https://www.grantwatch.com/federal-grants.php>

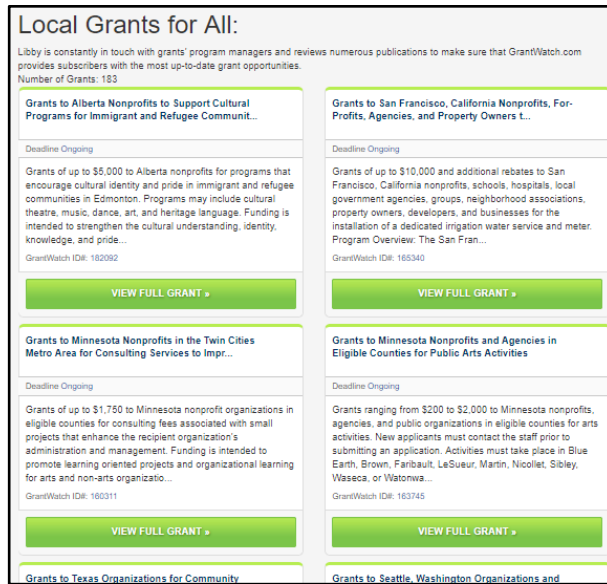


Figure 14. Grant Watch “Local Grants” page from <https://www.grantwatch.com/local-grants.php>

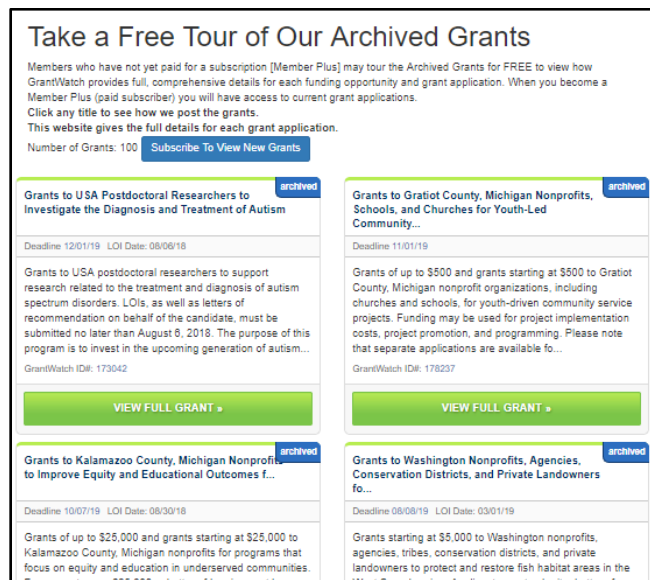


Figure 15. Grant Watch “Tour Our Archives” page from <https://www.grantwatch.com/archived-grants.php>



Figures from Local Grant Websites



Figure 16. ARC “Homepage” from <https://www.arc.gov/>



Figure 17. ARC “Grants and Funding” page from <https://www.arc.gov/funding/GrantsandFunding.asp>

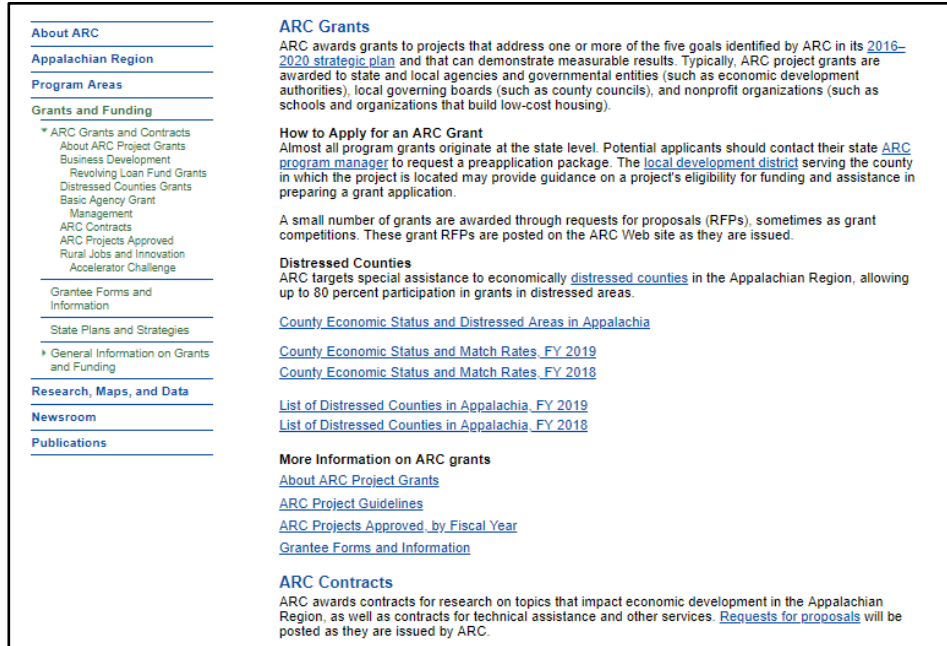


Figure 18. ARC “Grants and Contracts” page from <https://www.arc.gov/funding/ARCGrantsandContracts.asp>

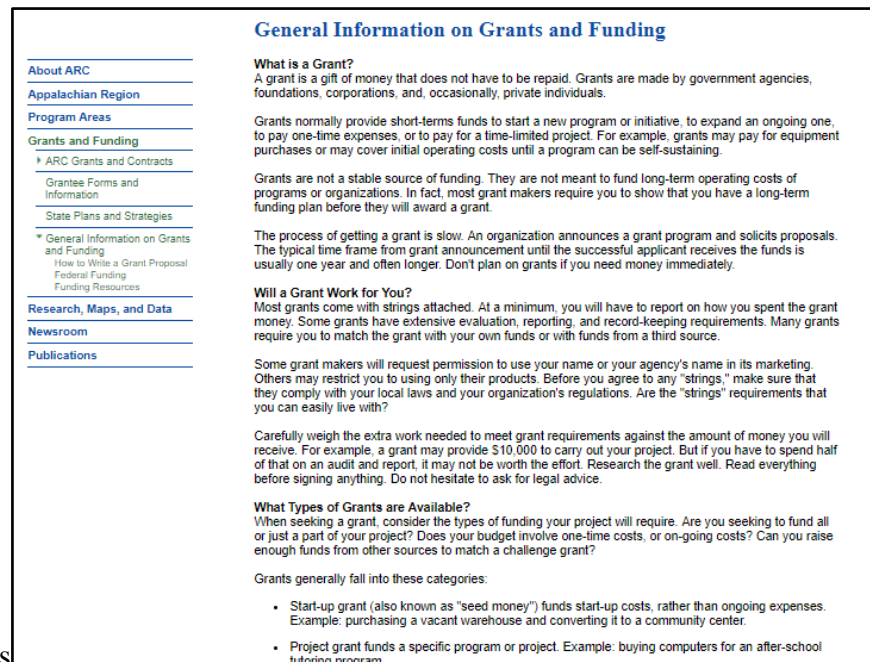


Figure 19. ARC “General Information on Grants and Funding” page from <https://www.arc.gov/funding/ARCGrantsandContracts.asp>

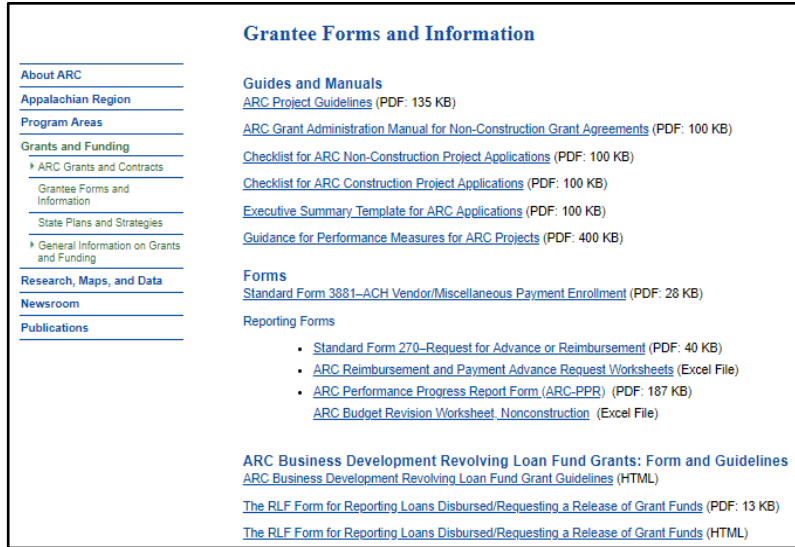


Figure 20. ARC “Grantee Forms and Information” page from

<https://www.arc.gov/funding/Forms.asp>

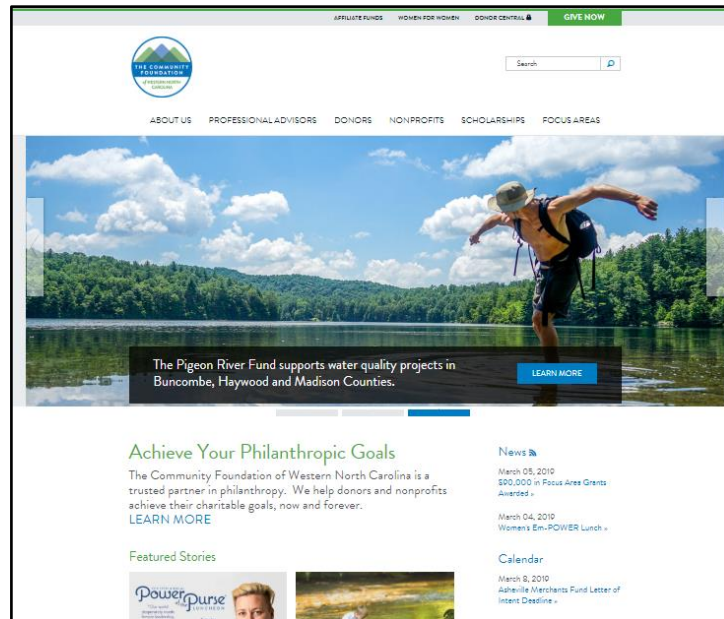


Figure 21. CFWNC “Homepage” from <https://www.cfwnc.org/default.aspx>

**Grants**

The Community Foundation makes grants and works with fundholders to support promising projects across Western North Carolina. Grants are made to nonprofit 501(c)(3) organizations and public agencies serving the following 18 counties: Avery, Buncombe, Burke, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania and Yancey.

Through a careful review process, the Foundation's staff and board work together to award grants that strengthen the nonprofit sector. In simple terms, CFWNC grants are an investment in the future of our region.

**Sources of our Grant Funds**

As a community foundation, we serve many constituencies and fund a wide range of initiatives, organizations and projects. From July 1, 2017 to June 30, 2018, The Community Foundation distributed \$18.1 million, money enabling good work in many communities.

13.3% 2% 1.2% 10.4%

**Grants Overview**  
 Communicating Your Grant  
 Grant Programs  
 Nonprofit Resources  
 Nonprofit Funds  
 Pigeon River Fund

The Asheville Area Arts Council (AAAC) launched an Arts & Wellness program for area veterans, some of whom are dealing with post-traumatic stress or other issues stemming from their military service. A collaborative of arts organizations, teaching artists and therapists is offering veterans hands-on workshops to support healing and recovery.

Figure 22. CFWNC “Grants Overview” page from <https://www.cfwnc.org/Nonprofits/GrantsOverview.aspx>

**Grant Programs**

Keyword Search (name or description):

**SEARCH** Show All

# A B C D E F G H I J K L M N O P Q R S T U V W X Y Z All

GRANT	REGION SERVED	MAXIMUM APPLICATION AMOUNT	CYCLES	DEADLINE
<b>Asheville Merchants Fund</b> To strengthen communities through economic growth that enhances the quality of life.	Buncombe County	up to \$50,000 over 2 years	1/every 2 years	Letter of Intent due March 8, 2019
<b>Biltmore Lake Charitable Fund</b> To improve the quality of life by supporting education, economic development, health care and other projects that promote community development.	Enka-Candler communities in Buncombe County	\$2,500 to \$15,000	1/year	April 1
<b>Black Mountain-Swannanoa Valley Endowment Fund</b>	Black Mountain and the Swannanoa Valley	\$2,500 to \$10,000	1/year	March 1

Figure 23. CFWNC “Grant Programs” page from <https://www.cfwnc.org/Nonprofits/GrantPrograms.aspx>

## Nonprofit Funds

Grants Overview  
Communicating Your Grant  
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Nonprofit Resources  
Nonprofit Funds  
Pigeon River Fund

Nonprofit fundholder Southern Appalachian Highlands Conservancy partners with CFWNC in many different ways. [Watch a video](#) about the ways CFWNC works with regional nonprofits.

### What is a Nonprofit Fund?

A nonprofit fund is an endowed fund created by a nonprofit organization. More than 130 nonprofits in Western North Carolina have chosen to secure all or part of their endowment with The Community Foundation. An initial gift of \$25,000 can establish a nonprofit fund that provides annual support to a nonprofit and allows the principal to grow in perpetuity.

Placing endowment funds at The Community Foundation ensures the long-term stewardship and objective fiscal management of a nonprofit's funds. It also frees nonprofit staff from the burdens of endowment management and reporting, so they can focus on fulfilling their mission.

Endowment services include:

- Reinvestment or distribution of fund earnings
- Tax reporting and documentation
- Annual audit of all funds

CFWNC works with more than 130 nonprofits to manage and administer their investments. [Learn more about how we work with Green River Preserve.](#)

Figure 24. CFWNC “Nonprofit Funds” page from <https://www.cfwnc.org/Nonprofits/NonprofitFunds.aspx>