Green Neighbor Challenge
#GreenNeighbor #WouldYouBeMine?

The Green Neighbor Challenge is a social media campaign and web-based lookup tool designed to facilitate the mass adoption of clean energy and agitate a shift culturally, politically, and economically towards the solutions we already have in hand.

Project Steward | Andrew Butts
2nd Year MS-Science, Technology, & Environmental Policy
The Humphrey School of Public Affairs | AndrewDButts@gmail.com

Project Support | Aaron Hanson
Energy Transition Lab at the Institute on the Environment | Hans4732@umn.edu

Project Advisors | Greg Lindsay & Audrey Dorelian
The Humphrey School Professors | Linds301@umn.edu & Dorelien@umn.edu

Green Neighbors | Village of Support
Rolf Nordstrom | Great Plains Institute
Lissa Pawlisch + Team | Clean Energy Resource Team
Megan Voorhees + Fred Rose | Acara Changemakers Lab
Daniel Card | Tactical Communications Dept Professor
Barb Jacobs + Ellen Anderson | Energy Transition Lab
Matt Grimley, Liz Arnold, Jake Herbers, and Nick Atherton | MS-STEP
Sean Quinn | Institute on the Environment
And counting...
About the Author/Team Description

Hi! My name is Andrew. I’m a bit of a misfit. Though I currently study Science, Technology, and Environmental Policy (STEP), I previously majored in Operations Management and Communication Arts. I’m a curious person, with quite the non-fiction habit, and ever since I encountered Donella Meadow’s work, I’ve preferred the term systems thinker.

At SC Johnson I performed analyses, educated supply planners, managed a team of “superusers,” and facilitated continuous improvement projects. As an independent creative I’ve written, I’ve filmed, I’ve edited, I’ve premiered, I’ve published, I’ve designed, I’ve animated, and I’ve made board games. As a camp staffer, I had a different job every summer for six summers, from counselor, to commissary, to commissioner.

I am continually drawn to learning and doing things I know very little about. At the same time, I am continually trying to unite my many interests. Dabbling about is both a source of inspiration and how I’ve come to know so many wonderful, supportive people. While I don’t formally have a “team” at this point, I know I have a whole village at my back.

The Green Neighbor Challenge came about because it reflected these many qualities, and it was reflected to me by my community. If it succeeds, it’ll succeed because I surrounded it with the right people. If it fails, it’ll be because it was a project worth failing for.

Executive Summary

The response of our elected officials to the demands of public health and climate change has been counter-productive at worst, and insufficient at best. According to the Lancet, more than 1 in 7 premature deaths are the result of pollution, and according to the IPCC, we as a species have 12 years to cut carbon emissions in half to avoid unprecedented catastrophe. Our planet, and our health, are in our hands. We have the power to choose a cleaner future. The Green Neighbor Challenge is a campaign and tool to do so. So let us re-extend the boundary of caring. So let us make lasting change. So let us give each other reason to hope again.

Problem Statement

Our energy habits are poisoning the planet, the costs to our health are astronomical, and despite 20-40% of households being willing to pay for clean energy, only 2% have opted to. The structure of the market has produced this result, and no actor yet exists to address it.

Our energy habits are killing us. Since the revamp of the Clean Air Act in 1990, air pollution deaths in the US have fallen by over half.1 In 2011, the EPA estimated that the economic benefits of the Clean Air Act exceeded the costs by a factor of 30.2 Just last year, the groundbreaking Lancet Commission on Pollution and Health revealed that despite the fact

1 https://www.sciencedaily.com/releases/2018/10/181019120726.htm
we are ahead of most developed countries, ambient air pollution still killed around 100,000 Americans in 2015—More than traffic accidents, opioids, homicides combined. Further, the calculated cost to our health and welfare topped $486 billion—15% of all healthcare costs or $1495 per person. This is without totaling the costs to our planet.

Clean energy costs have plummeted. The typical household can now source 100% clean energy for less than $10/month added to their utility bill. So for less than 1/10th of the cost to our health and wallets, consumers can virtually eliminate their largest source of air pollution. However, less than 2% of households have despite, demonstrably, 20%-40% being willing to pay. This is the result of unawareness and indifference. To understand where those come from, we need to understand how good policy intentions went awry.

Policy structured the market. Utility Green Pricing Programs (GPPs) are a seamless way for residential and commercial energy consumers to purchase a claim to renewable energy generation directly from their utility. The first GPP emerged in 1996, in New Hampshire’s newly deregulated market. At the time, many states were in the process of passing “Renewable Portfolio Standards” (RPS) into law, requiring their regulated utilities to invest in renewable generation, so over the next several years thirteen states would add a “Mandatory Utility Green Power Option” (MUGPO) to their RPS bills. To protect consumers, utilities were not allowed to profit off these new programs; they were required to be revenue neutral. This left little incentive for utilities to market these programs, or even make understanding their terms and costs easy for consumers.

Lack of Awareness. Although academics have long been interested in consumers’ willingness to pay for renewables, almost no research exists about whether consumers are actually aware of, or understand GPPs before they conduct their testing. A 2011 NREL (National Renewable Energy Laboratory) indicated that 14% of customers, when prompted, claimed to be aware of the ability to purchase renewable energy. However 7% also claimed to purchase green energy, despite utility data revealing that only 1% do, suggesting 14% is likely a substantial overstatement.

Indifference. The same NREL report notes “electricity is such a low involvement category...consumers do not deliberate this decision extensively (if at all) or experience any consequences of their decision.” Even among customers aware of their ability to purchase renewable energy, why would they unilaterally go out of their way to spend potentially

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3 Calculated from US specific data, located in the appendix, in reference to Table 6. https://www.thelancet.com/cms/10.1016/S0140-6736(17)32345-0/attachment/9772f0b1-2a7a-4bd9-a5d6-8ba6d1dabb9b/mmc1.pdf
4 Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death, WONDER Online Database, 2017 data.
6 https://www.nrel.gov/docs/fy19osti/72204.pdf
7 https://www.nrel.gov/analysis/assets/pdfs/utility-green-power-ranking.pdf
8 https://www.sciencedirect.com/science/article/pii/S0928765515000536
9 https://www.epa.gov/greenpower/history-voluntary-markets
hours researching options and reading convoluted term sheets only to then throw $5-15 a month into the economy’s dark void for a small benefit distributed across all of humanity?

Despite or Because Enrollment? GPPs have become commonplace among large utilities as the proliferation of “Renewable Energy Certificate” (REC) markets made reconciling renewable generation and consumption administratively simple—and offering a GPP was a good way to appease vocal politicians and customers. Over 850 regulated utilities offer GPPs as well as many “competitive suppliers” in the 7 states with “deregulated markets” where electricity suppliers compete for customers. These programs are designed to reach residential and commercial customers (non-industrial), who together account for 74% of electricity’s emissions. The question then is, “how do we get that to 0?”

Solution Description

The Green Neighbor Challenge is a national social media campaign (kick-started by what we hope to be dozens of like-minded organizations and news outlets) and a web-based lookup tool (which compresses what could be several hours of research into a 3-minute sign-up process). Traditionally viewed as a tragedy of the commons, the Green Neighbor challenge publically rewards (with social capital) the private choice of users to subscribe to green pricing programs, using word-of-mouth marketing powered by trust (rather than institutional credibility). This is the first time a national database for green pricing will have been built, and the first time a national campaign will have been attempted.

If that reads like a bunch of gobbledygook, let me explain it a different way:

Many people start with the unfortunately common conception of humans as narrow-minded and selfish. We instead ask: Why did Wikipedia get built? Why do most of the worlds servers run on open-source systems? Why did the Ice Bucket Challenge raise $115 million?

We reject the narrative of humans as selfish. Instead, we are natural cooperators. We respond to storytelling. We respond in groups that reflect a common social identity. And we are inexorably drawn to spectacle. The Green Neighbor Challenge hopes to make the most of these three sources of influence through the scaling power of technology and the subtle trappings of behavioral economics.

If the two primary barriers to GPP adoption are awareness and indifference, this is how the The Green Neighbor Challenge intends to address both:

- Storytelling: The work of Doug Cloud on “communicating controversial science” highlights four key principles: take a broad view of “argument, pivot towards shared

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11 https://www.nrel.gov/docs/fy09osti/44094.pdf
values, make your science “present”, and seek identification with your audience.\textsuperscript{15} When we talk about climate, we walk through a political minefield, appealing to distant fears, inevitably waxing towards “facts” and moralisms. When I tell you about the terror I felt as a child waking up to asthma attacks and the very real costs to the health of our loved ones and wallets that pollution has today, we connect in a much more personal way where we can talk about choices and hopes.

The NREL report on consumer attitudes emphasized as much in 2011: “One strategy to grow renewable energy usage... would be to better promote the health and economic benefits, since this would widen the target audience, and it is easier to reposition a product to be relevant to consumers than it is to convince them of its relevance.” This is important, because \textit{our neighbors are everyone with a utility bill}.

- **Social Identity:** At the Speaking Science Conference, Dr. Amanda Stanley said, “when you ask someone to change their mind, you ask them to change who they are.” Beliefs aren’t rooted in fact, but rooted in identity... even for those who construct an identity around “facts.” We are social creatures. Our identities are reflective of those who we keep as company, even when we keep organizations as company. “Environmentalists” are not only the first and most obvious identity to reach, but they tend to be well connected to non-profits that reflect their values.

Rather than centralizing the campaign around whatever organizational container houses the Green Neighbor Challenge our reach will be far greater if we organize a good ground game at the grassroots. That means reaching out, building relationships, providing materials, and supporting a wide-range of organizations to mobilize their membership around the Green Energy Challenge simultaneously. This will allow a plurality of stories to develop and propagate across social networks in ways that no “direct marketing” campaign ever could.

- **Technology:** The Green Neighbor Challenge will be largely facilitated through massively popular and massively concentrated social media platforms. Technology itself has enabled the rapid collection of national data and will enable a single central tool to be built from that data. If initial user indifference can be overcome, social media will then allow the Green Neighbor Challenge to follow the path of least resistance, and allow individual messaging to evolve across networks until the point where diminishing returns meet increasing resistance.

The eventual magnitude of such an effort is impossible to judge. Like any intervention in a complex adaptive system, we aim to inject as many virtuous qualities before we let it run its course. A decent analogy for how this campaign will operate is a forest fire. At small scales, it is fickle; susceptible to fire breaks. At large

\textsuperscript{15} Cloud, D. (2016). Communicating climate change to religious and conservative audiences: The case of Katharine Hayhoe and Andrew Farley. Reflections: Public Rhetoric, Civic Writing, and Service Learning, 16(1), 57-74
scales it takes on a momentum of its own, becoming able to jump, go around, or simply suck the moisture out of obstacle. But like a forest fire, it’s highly unlikely to double-back upon itself. While many well-intentioned advisors have suggested the idea of a localized or regional pilot, the national scope is a critical asset upfront because networks gain their most emergent properties out of loose connections. It’s not the 95% of people I know who live here that are unpredictable; it’s the 5% I know who moved across the country, like an ember carried by the wind across the river.

- Behavioral Economics: The Green Neighbor Challenge is not an app. It’s more like an event, or resource. Neighbors don’t create accounts, we simply help them change the nature of their relationship with their utility. Personally identifying information isn’t collected unless a neighbor opts to share their email or follow one of our social media accounts. This is done because it’s ethical, easier, transparent, and makes us more trustworthy (and shareable). But also because if there is a phase 2 or 3, we should only require the help of our most enthusiastic neighbors to roll those out.

While we draw inspiration from the Ice Bucket Challenge, this design has the potential for a much larger and persistent effect. When a neighbor signs up for a Green Pricing Program, they are signing up for a small increase in existing recurring payments. Increases so small that the first one can be easily offset by a combination of the “warm glow effect” and the social rewards, while the remainder are likely to be forgotten as neighbors slip back into the same indifference they’ve always felt about their utility. Though we are loss averse, these small losses occur at the edge of our marginal utility, where we don’t even realize we’re giving something up.

This consistency from the industry perspective is far more bankable than temporary renewable credits or the faddish purchase of unbundled REC’s by businesses looking for a new marketing claim to slap on a product. From rough calculations, moving green pricing subscriptions up from 2% to 4% would inject $168MM per year into green generation. This cash flow can be leveraged into capital investments many factors larger and amortized over their lifetime.14

- Spectacle: It seems these days the easiest way to make the news is to 1) get a large group of people doing anything and 2) have already written the coverage yourself. When a large number of people begin signing up for GPPs, we intend to have the press packet ready. When a large number of people begin sending letters to their public utilities commission and state representatives demanding a GPP be added, or enrollment be expanded, we’ll also have the press packet ready. We intend to provide neighbors form letters if they encounter an issue while signing up, and we also intend to prepare a response for a variety of contingencies. Some of this is speculative, but if successful, this will help take the conversation beyond social media

14 Slide 13. https://docs.google.com/presentation/d/1Bj35i7j2KvqfJFuX8BJJFvIfeplwXaKT6AVb9TyX8/edit?usp=sharing
to reach neighbors who prefer to get their information from the paper or local newscaster.

**Social, Environmental & Economic Impact**

The environmental impacts of the Green Neighbor Challenge are clear: 28% of US carbon emissions come from electricity. As transportation (28%) and heating (8%) move towards electrification, over half of our current carbon footprint depends on green generation for decarbonization. With green generation currently sitting at 17%, and only a quarter of that represented by voluntary procurement programs, the Green Neighbor Challenge has the ability to make a dent in a big way. If we can take subscriptions from 2% enrollment to 4% or 10% or 20%, we will meaningfully disrupt US emissions in a way felt by the world.

Likewise, the social benefits are also clear: At the scale of change we’re hoping to achieve, thousands of lives can be saved. Thousands more will see the severity of their illness reduced. The harmful effects of sulphur and mercury can be abated in our lakes, rivers, and waterways. Our public health can improve even as our healthcare costs drop. Clean energy is the epitome of preventative care. And in an age where “climate grief” has become an accepted clinical term, giving people a new source of agency over their future stands to benefit our mental health too.

The economic benefits are also clear: As both the EPA and the Lancet highlight, our health directly impacts our broader economy. Ambient air pollution has reduced our GDP by an estimated 5.5%. In terms of the cost, wind and solar are already the lowest cost generation in many areas for base and peak energy, respectively; what prevents an immediate transition are the mutual challenges of upfront capital (for new infrastructure) and sunk costs (of old infrastructure). In this way, the green energy transition is inevitable, but with 12 years to act, the Green Neighbor Challenge aims to shove an already rolling boulder off the metaphorical cliff. Every year, every month, and every life matters.

**Potential Future Phases**

Building a mass movement around green pricing is the crown jewel of this project, but that doesn’t mean there aren’t additional opportunities to extend the impacts of the Green Neighbor Challenge while we have people’s attention. These additional phases lack the simplicity and “one-size-fits-all” attribute of GPPs, but their impact among a much smaller base of users can still prove substantial. Having these additional future phases in mind will allow us to specifically solicit email addresses from our most enthusiastic neighbors, which should be not only sufficient, but more appropriate given the limitations of these programs. The three opportunities we currently know of that warrant more investigation are:

1. **Matchmaking farmers/land-owners to renewable energy developers:** The difficulty of this addition would be low, however, the proportion of neighbors with 5 acres or

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16 http://dx.doi.org/10.1016/S0140-6736(17)32345-0
more that they’d be interested in converting is likely also small. This very direct referral system however, could be lucrative enough in itself to include before the initial rollout. More discussions will be had with developers to determine whether this makes sense as a phase 1 or phase 2 addition (if at all).

2. Energy Efficiency Programs: In contrast to GPPs which change the source of electricity, energy efficiency (EE) programs seek to help consumers reduce their energy consumption. Regulated utilities are often required (or incentivised) to offer these, though many also make economic sense on their own. They are highly non-standard across states, though resources like DSIRE and state energy offices often aggregate information, making the design of a national comparison tool potentially feasible. They will however require neighbors to be somewhat motivated since “step-by-step” instructions would be impossible. Although, most health and environmental benefits of EE are negligible after subscribing to a GPP, many programs still generate direct financial savings, which only become greater while paying a premium for green energy. The timing of this effort could have interesting side-effects of either reducing the demand for green generation among our neighbors, or, if infrastructure has had time to be built, actually reduce aggregate demand for electricity, accelerating the retirement of fuel-based generation (which carries a higher marginal cost.)

3. Distributed & (REC-friendly) Community Solar: Some utilities have distributed solar incentive programs that assist and subsidize consumers in setting up solar arrays on their rooftops. So not only do these programs require a home, but also a substantial upfront investment that may take well over a decade to generate a return on investment. Distributed solar does however immediately begin offsetting your own energy costs, and for utilities with “net metering” systems in place, solar owners receive a credit for any unused energy put back onto the grid.

Community Solar operates in a similar way, however rather than requiring a home, a Community Solar “subscriber” purchases an equity share of a solar farm located elsewhere, which still generates credits on your bill. While community solar arrangements are often easier and more financially efficient than distributed solar, few community solar projects allow subscribers to retain the Renewable Energy Certificates generated by the project, meaning that although community solar subscribers are boosting the supply of green energy, the “greenness” of their investment is being sold to another party (including utilities or GPP customers) to improve the return on investment. NREL notes substantial confusion around this, so any effort to match neighbors to projects will require proper vetting.

Pilot Plan

Just as the Green Neighbor Challenge is an attempt to accelerate the inevitable, a $5000 Acara Fellowship will help do the same. Not only that, but it will provide the proof-of-concept that demands further investment, not only from grants, but from the renewable energy
developers and contractors that stand to benefit most. 12 years is not a long period of time, and the Green Neighbor Challenge is only a start, so I will go out swinging with whatever resources and at whatever scale I am able.

The data and maps will be taken care of. I can pull together a research party of friends and activists to research the remaining data I need and do the mapping myself. I’ve already begun building a mock-prototype of the web-tool using an interactive slideshow. So my first purchase will be $200 in $5 gift cards (40 user tests), followed by $100 in gift cards for two of Daniel Card’s students (tactical communications) to help me craft a protocol for testing the campaign messaging (i.e. pollution vs climate; clean vs green, etc) and then another $200 in gift cards for Mariah, who is an intern with the UMN Usability Lab to assist us with actually conducting both the tactical communications protocol and a user-experience test of the mock-prototype. Ideally, we’ll split the tests between downtown Minneapolis and the rural/conservative town of Lindstrom in Late-April/Early-May. This will inform us as to whether the message resonates with a range of people, and whether the design of the tool is confusing to use.

Next, I’d spend $600 on branding graphics by Sean Quinn, who is the resident graphic artist for the Institute on the Environment and reserve up to $500 for registering either as an LLC or 501c3. I need to do more research before I decide. I plan to get a better handle on the financial, flexibility, and perceptual trade-offs between the two organizational types. More fundraising would likely be required to register a 501c3.

With the remaining $3400, I’d put up to $3000 towards the best website we are able to have developed and put $400 towards high-volume, low-latency web-hosting. With a lesser award, I’d find a way to build a very simple Wordpress installation myself. With $3000, I would find a freelancer (probably through Sean Quinn) to build something undoubtedly more functional and appealing. Ideally though, I’ll actually put that $3000 together with a $3000 IonE mini-grant and a $1000 U-Spatial Map Award to hire a team of five interns through Software for Good’s Giving Program, who would work through the summer under the mentorship and guidance of SFG’s staff. Having spoken to Eddie Glenn, he believes The Green Neighbor Challenge is a project well-suited to the typical intern cohort.

With a demo-friendly website and consumer testing to back it up, we would then be able to approach renewable energy developers and contractors to solicit donations to hire the type of staff prepared to take this challenge to ever greater scales. Further, we may be able to vet “preferred developers” for the landowner referral functionality mentioned before, increasing our revenue stream further.

Financial Plan

This range of possibilities lends itself a range of financial plans. $5000 can lend itself to a minimum viable product without ongoing support. However, with potentially $168 million dollars changing hands we can also imagine a much larger operation employing upwards of nine people, as well as a middle-ground. This is a rough outline of our ideal case. The three projections are available side by side in the appendix.
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<th>Ideal Case</th>
<th>Revenues</th>
<th>Expenses</th>
<th>Notes</th>
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**The Competition**

As mentioned above, this would be the first national campaign around GPPs. The Green Neighbor Challenge exists to drive subscriptions to existing utility “products.” So our direct competitors are utilities themselves and consumer indifference.

With the exception of landowners looking for a referral to a developer, the choices of our neighbors are not a revenue stream. We see ourselves as a public service announcement that can run on whatever share of the positive externalities we can retrieve from industry.

Like any good public service however, there is a silicon-valley-type that figures it’s best to “disrupt” the market with a private solution. Arcadia Power is that silicon-valley-type.

Founded in 2014, Arcadia power considers itself a “digital utility” that now operates in all 50 states. This past August, it received yet another round of venture capital to the tune of $25 million. It claims to “give everyone a simple, free way to choose renewable energy,” but this past April it also managed to have it’s Green-E certification revoked (the body which certifies the appropriate use of REC’s and green energy claims). The reasons for this are unclear, as the Green-E news post announcing the revocation has been mysteriously deleted, and
Acadia itself explains this change with a confusing series of platitudes and self-aggrandizement.\(^7\)

On their, “How it works” page, every single grouping of words includes either the word “save” or the concept of “saving” money. Which is a curious business model for venture capitalists to fund when the product you’re selling for “free” actually costs more. When you sign up with Arcadia however, they actually take over management of your relationship with your utility, and from that point forward all your energy choices and billing are moderated through them.

While there are various sources who purport Arcadia’s main business relies on the bulk purchase of REC’s at low rates and discounted power purchase agreements (PPAs) which they take a cut of, many customers on forums actually report their utility bills actually increasing around 15%\(^8\). Undoubtedly, many customers do report savings, and to its credit, Arcadia’s app helps switch users in deregulated markets to lower cost providers of green energy, however again it is likely taking a cut of those savings that would’ve otherwise gone to the consumer.

It also offers “premium services,” allowing consumers to go above their base plan of 50% renewables, and sells “community solar” to customers in $100 blocks. Rather than granting their customers any sort of equity in their “investment,” they instead seem to simply guarantee the gradual refunding of $120 over the 120 months—an extraordinarily low rate of return which seems to be all cut and no savings. Another customer notes online that their credit cards are billed 18 days earlier than their utility required, and when questioned, Arcadia claimed 18 days were necessary to “to receive payment, process it, and send it to the utility before the due date.” Although “Bill” suspects they sit on everyone’s payments, collecting passive income, he doesn’t fault them for being “for profit.”

Despite millions in venture capital and fantastically transparent practices (sarcasm), in four years Arcadia has attracted “over 175,000 accounts.” Comparatively, taking GPP subscriptions from 2% to 4% would convert 885,000 neighbors to cleaner energy, without the massive invasion of privacy, nor questionable practices around every turn. And although GPPs grant no form of equity, when the cost of power to your regulated utility drops, so will your bill, because it’s legally required to.

**Assumptions and Risks**

I’ve done my best to highlight my assumptions and risks throughout this venture plan. My biggest assumption is assuming The Green Neighbor Challenge is actually going to work. Fortunately, the biggest risk has passed, and that would’ve been never giving it a chance. We have 12 years to do something drastic. I’ve spent more time and more money on a project where the only thing that was at stake was a documentary that no one asked for. If I can just convince you, dear reader, to sign up for a green pricing program, I will have already accomplished more. Won’t You Be My Green Neighbor?

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\(^7\) https://blog.arcadiapower.com/arcadia-powers-wind-energy-certifications/
\(^8\) https://floridasolardesigngroup.com/should-i-buy-power-from-arcadia-power/
Green Energy Challenge

What’s your zip code?

Utilities in your Area

- Wisconsin Electric
- Madison Gas & Electric
- Wisconsin Power
We Recommend

Windsource for Residences

Fast Facts:
100% Wind
A+ Design Rating
Typical Costs: $2-5/month

Sign Me Up!

How to Sign Up

1. Log Into Your Account
2. Sign up with the Online Application
3. Choose how much you want
4. For questions regarding Windsource:
   Call: 1-800-895-4999
   Email: windsource@xcelenergy.com
5. Read the Fine Print

Brag To/Tag Your Friends!
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<th>Acara Grant Plans</th>
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<tr>
<td>Student Research Assistant</td>
<td>$15,000</td>
<td>$16,000</td>
<td>500 LLC or 501c3</td>
</tr>
<tr>
<td>Student Research Assistant</td>
<td>$15,000</td>
<td>Financial Serv.</td>
<td>Web Development</td>
</tr>
<tr>
<td>Tuition/Loan Reimbursement</td>
<td>$115,000</td>
<td>Hosting/Misc</td>
<td>$3,000 TBD</td>
</tr>
<tr>
<td>Fringe &amp; Tax</td>
<td>$88,750</td>
<td>Grants</td>
<td>$1K (GIS), $3K (IonE), $5K (Acara), $25K (MN Cup)</td>
</tr>
<tr>
<td>Contract Work</td>
<td>$30,000</td>
<td>Developer Donat</td>
<td>Web Hosting</td>
</tr>
<tr>
<td>Office/Equip/Supplies/Hosting</td>
<td>$30,000</td>
<td>$200,000</td>
<td>$400 For high volume traffic</td>
</tr>
<tr>
<td>Grants</td>
<td>$84,000</td>
<td>$50,000</td>
<td>$212,500</td>
</tr>
<tr>
<td>Developer Donations</td>
<td>$400,000</td>
<td>$8 @ $50K</td>
<td>$284,000</td>
</tr>
<tr>
<td>Landowner Referrals</td>
<td>$250,000</td>
<td>500 @ $500</td>
<td>Reserves/Buffer</td>
</tr>
<tr>
<td></td>
<td>$734,000</td>
<td>$618,750</td>
<td>$71,500</td>
</tr>
<tr>
<td>Reserves/Buffer</td>
<td>$115,250</td>
<td></td>
<td></td>
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</tbody>
</table>
Andrew D. Butts
Email: AndrewDButts@gmail.com / Phone: (262) 705-4525 / Address: 986 15th Avenue SE #14 Minneapolis, MN 55414

Analysis - Communications - Policy

**Education**

Science, Technology & Environmental Policy (MS)
University of Minnesota
Twin Cities - May 2019

Operations Management/Communication Arts: Film (BBA)
University of Wisconsin
Madison - May 2012

**GRE Scores:**
Verbal: 97th Percentile
Quantitative: 88th Percentile
Writing: 80th Percentile

**Software & Skills**

**Analysis**
Cost-Benefit, Optimization, Simulation, Regression, Qualitative, Visualization
Stata + Tableau + NVivo + SAP + Arena

**Media**
Videography, Editing, Post-Prod, Animation, Publication Design, Copyediting, Web Apps
Adobe Creative Suite + Wordpress + Java

**Creative Projects**

**The Human Curriculum**
A Mini-Series Spec Script (In Progress)

**Poverty**
A Board Game about Income Inequality

**Isthmus of Misfits**
Documentary about Madison's Comedians

**Experience**

Supply Chain Analyst
S.C. Johnson
Leading Superuser Team in System Implementation
Developing Educational Curricula for Planning
Designing Decision Driven Analyses
Facilitating Kaizen and Publishing Newsletters
Sturtevant, WI - 2 Years

Graduate Research Assistant
Institute on the Environment
Qualitative Coding and Analysis of Utility Interviews
Analyzing Cities & Islands for Climate Change Readiness
Visualizing Data Trends and Comparisons
St. Paul, MN - 7 Months

Board President
Key & Scepter Society, 501(c)3
Strategy, Donor Development, Scholarships
Cultivating Professional Development
Serving the UW-Madison Community
Madison, WI - 5 Years

Freelance Filmmaker
Videography/Editing/Animation
Weddings/Sports/Products/Promos/Infographics
Kenosha, WI - 6 Years

Camp Staff
Ed Bryant/R.S. Lyle Scout Reservations
Counselor to Commissioner, Everything In-Between
Serving Youth, Staff, and Leaders
Mauston/Elcho, WI - 7 Summers

**Activities**

Boy Scouts / Order of the Arrow
Eagle Scout, Vigil Honor, Camp Staff

Phi Kappa Sigma/Alumni Assoc.
Alumnus of the Year, Lifetime Member

**A Bit About Andrew...**

**Professional goal**
I want to help solve the problems of tomorrow by showing people new ways of seeing problems today.

**Interests**

- Traveling
- Photography
- Reading
- Writing