

The logo for Consumers Energy, featuring the company name in a bold, blue, sans-serif font. The text is enclosed within a green, swoosh-like graphic element that curves around the top and right sides of the text.

*Count on Us*

# Consumers Energy

## Survey Report

---

Katrina Lanahan, Michael Grisafe, Robert Wang, Wei Wang, Yu-Ting Lu

March 12, 2014

## Executive Summary

Our School of Information team is conducting an “Evaluation of Systems and Services” on the Consumers Energy website, primarily focusing on residential customers. This report includes results from our survey investigation.

### Methods

We recruited our users via a small ad in the monthly Consumers Energy’s electronic newsletter sent to 600,000 email recipients; 130,000 opened our newsletter and 53 responded and finished the survey. In addition, we also obtained 724 user comments from the “Feedback” link of Consumers Energy website. The findings from the survey and comments were analyzed in tandem and are included in this report’s findings and recommendations.

### Key Findings

- Customers visit the site to: read information, pay bills and look up contact information.
- Many respondents go online to pay bills and shop (~80%), but only 60% of them pay their Consumers Energy bill online.
- Users feel frustrated looking for content on the website.
- Users have trouble navigating, logging in, and finding buttons.
- Users want flexibility and customization in payment options.
- Technical difficulties with the site aggravated users.

### Recommendations

- Site content should be clear, concise and tailored to the needs of users.
- Make Consumers Energy online bill payment more user-friendly.
- Provide clearly visible, consistent navigation.
- Eliminate duplicate links.
- Allow users to easily switch between one-time payment and auto-pay options.
- Improve software or hosting technology for the website for enhanced site performance.

## Introduction

Consumers Energy is the primary public utility company in western and northern Michigan, providing energy to more than 6 million of Michigan's nearly 10 million residents (Census, 2010). The Consumers Energy website ([www.consumersenergy.com](http://www.consumersenergy.com)) is the main electronic resource for customers, offering a centralized location for company information, educational resources, bill payment, and power outage reporting. In addition to providing these services, the Consumers Energy website is a critical brand touch point for the company.

Customer complaints related to the website have increased in recent years, with customers voicing discontent over difficult and non-responsive transactions. In response, Consumers Energy has launched a complete website redesign, which began in January 2014 and will continue for approximately 18-24 months (Customer Experience Design, 2013). The first goal for this redesign is to make sure the website is responsive for all devices. Second, Consumers Energy wants to create relevant and meaningful content, guided by personas, user scenarios, and site analytics. Third, the website redesign seeks to keep customers coming back with a memorable and enjoyable experience. Finally, Consumers Energy wants its website to increase the operational efficiencies of the overall organization.

In this study, we were interested in how the website can be redesigned to better support the needs of current and potential Consumers Energy users. A survey offers the opportunity to reach a broad spectrum of consumers and poll them about their characteristics, attitudes, and behavior patterns related to site use. Discovering each of these aspects of the Consumers Energy website client base will allow the company to better address its goals for redesign.

## Methods

### 1. Target population:

We recruited current and potential adult, residential Consumers Energy website users. Business customers were excluded at the request of our client.

Lacking customer demographic data, our stakeholder suggested approximating our population from Michigan census data. The U.S. Census for Michigan in 2010 indicates that 62.5% of individuals are 18-64 years of age and 14.6% are 65 years of age and older (U.S. Census Bureau, 2010). Males and females are approximately evenly split in their distribution. The majority of Michigan's population has a high school education or higher (88.7%) and about a quarter have a bachelor's degree or higher (25.5%).

We wanted survey respondents who closely matched this demographic.

## **2. Recruiting Methods:**

Consumers Energy sends a monthly electronic newsletter to all customers who have opted into receiving it by providing their email address when signing up for service by phone or online. Approximately 600,000 people were sent this newsletter. We requested that our client place an ad in this electronic newsletter, which was sent out February 3, 2014. A screenshot of the ad placement can be seen in the Appendix F. Approximately, 130,000 people opened our newsletter, of which only 53 responded and finished the survey, yielding a 0.038% response rate.

No compensation was offered to participants for participation in this study.

## **3. Summary of Participants Recruited:**

- Respondents disproportionately self-identified in the “60 years of age or above” category.
- 54% were male, 44% were female.
- 90% have visited Consumers Energy; most access it once per month.

Our survey respondents did not closely match Census data for Michigan. The skew in our results can be potentially attributed to the survey-takers being part of a self-selected group of those who have time to take our survey. A more complete discussion of this potential source of bias is included in our discussion section.

## **4. Supplemental Data and Methods**

Due to the limited applicability of our current survey data primarily to retired individuals 60 years of age and older, we expanded the scope of our analysis to data obtained by Consumers Energy in the “Feedback” section of their webpage. By clicking on a “Feedback” button, located on the sidebar of the Consumers Energy website, users can provide unrestricted text comments and submit them directly to Consumers Energy.

To analyze this unstructured data, our team read through 724 user comments collected from October 1, 2013 through December 30, 2012. We then developed a thematic codebook as a group (Appendix E) and used these codes on the data. As we coded, we reorganized our coding structure as new themes emerged. These themes were then used to generate additional findings and recommendations.

# Findings and Recommendations

## Summary Results

Our survey shows that visitors usually go to the site to read information about products or services, pay bills, and contact the company. Although most of them are very comfortable making online payments on other sites, only 60% of them pay Consumers Energy bills online. They complained that information was hard to find and navigating the site is frustrating. They want flexible and customized payment options and frequently requested that Consumers Energy fix its technical difficulties (site down, long loading time, etc.) to improve their user experience.

## Key Findings

### Findings and Recommendations from Survey

#### Finding #1: High use of Consumers Energy website

Our findings show that 90% of respondents have visited the Consumers Energy website, using it for online bill payments, creating personal accounts, or browsing it for energy information.

In addition, the study indicates that nearly 40% of population accesses the website once a month. The majority of visitors use desktop or laptop computers to access the website, rather than tablets or smartphones.

Question: How often do you access Consumer Energy on the...						
Answer Options	1: Never	2	3	4	5: All of the time	Response Count
Desktop or laptop computer	0	8	2	6	21	37
Tablet (e.g. iPad, Galaxy Tablet, Nexus)	13	1	2	0	4	20
Smartphone (e.g. Android, iPhone)	13	2	2	2	1	20
<b>Answered question</b>						<b>39</b>
<b>Skipped question</b>						<b>14</b>



Figure 1 Survey Result

The main three reasons visitors come to the site are to read information on products or services (65%), pay bills (59%), and look up contact information (41%) for the company. This means that visitors are using the website both as a transactional resource (for paying their bills or switching service) and as an information resource.

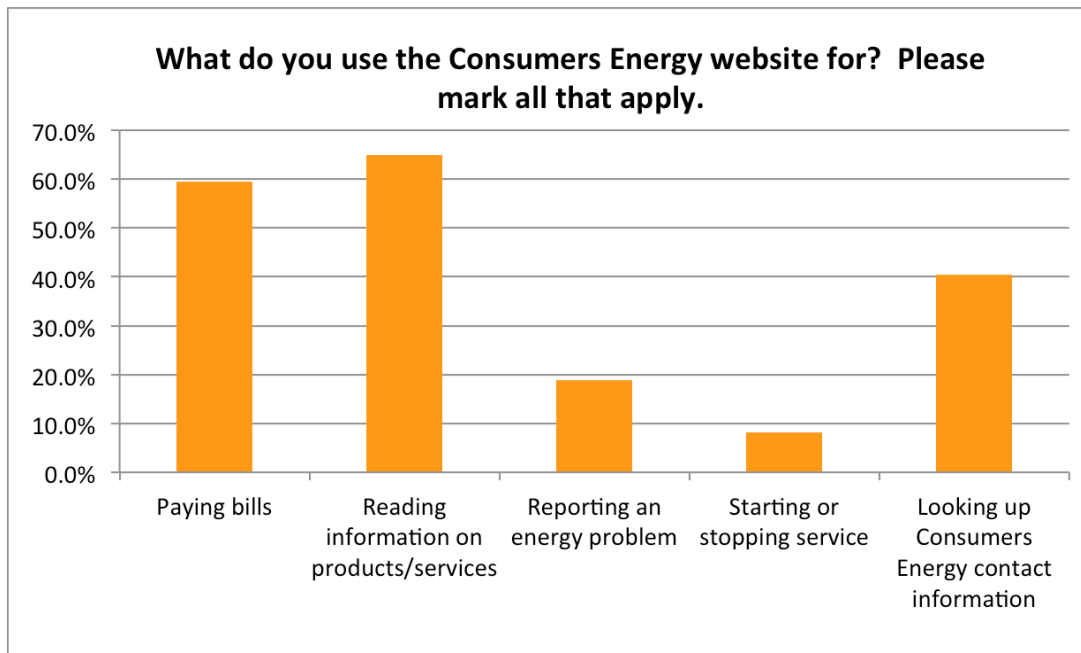


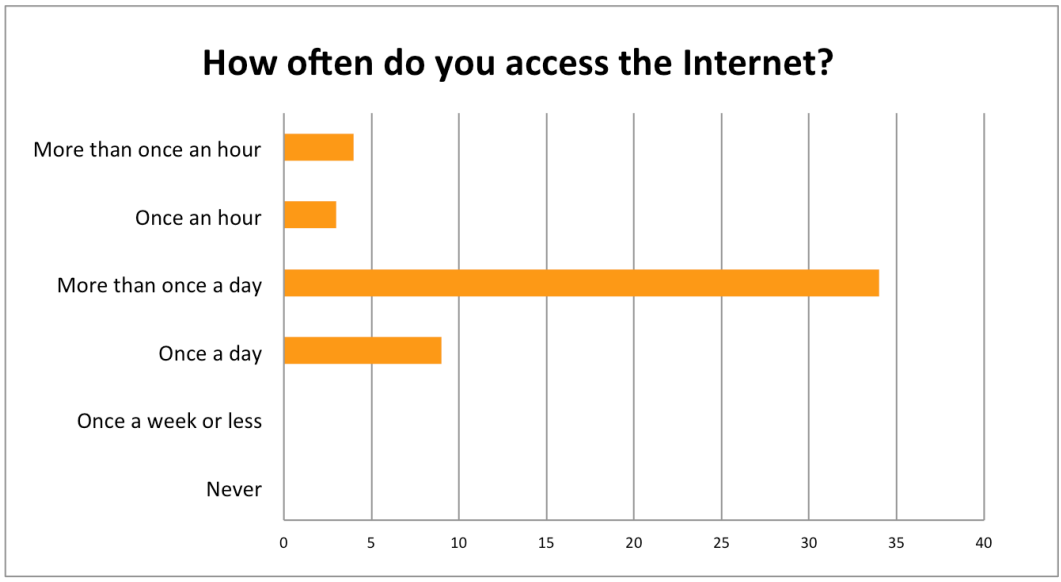
Figure 2 Survey Result

### Recommendation #1

Consumers Energy should place a significant effort into developing clear, quality content on their website tailored to the needs of their user base. This includes providing high quality articles and resources for individuals visiting the site for information. Transactional areas related to bill payment and service changes should be more user-friendly.

### Finding #2: Online bill pay use is less than expected

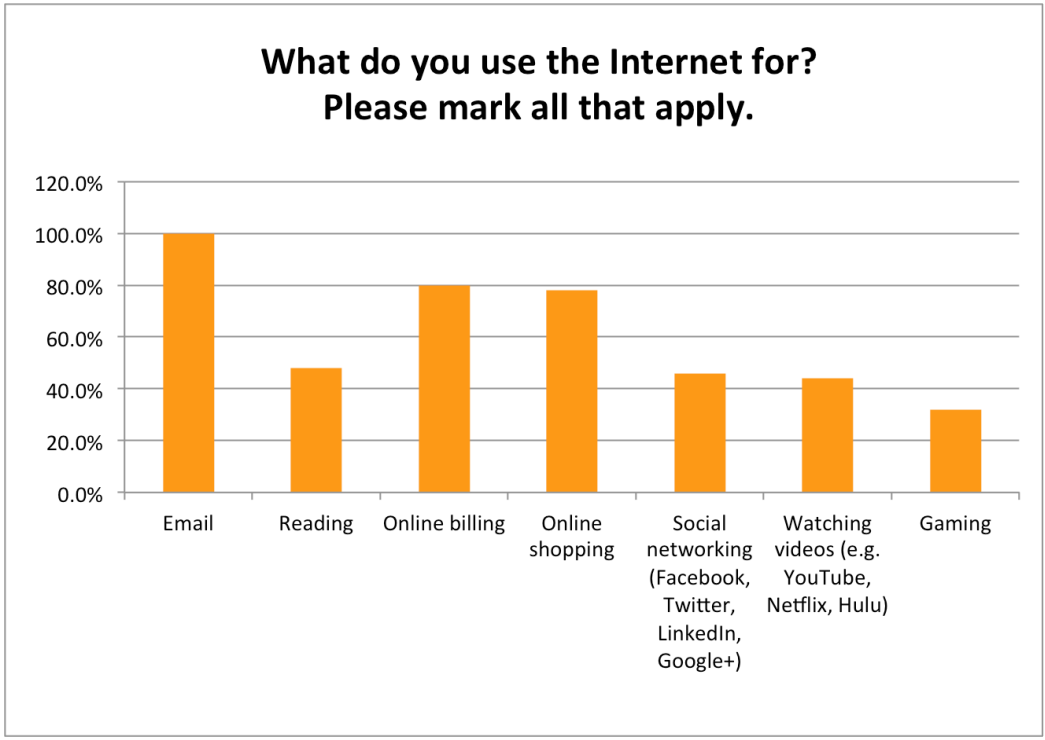
From our survey, 86% of users accessed the Internet more than once a day, showing relatively high usage in this population.



*Figure 3 Survey Result*

Our survey also shows that 63% of this population is very comfortable with using the Internet (score of 5). Only 15% of people responded with a score of 3 or lower on the scale of ranging from “1: not at all comfortable” using the Internet to “5: very comfortable.”

In addition, everyone in the population surveyed use the Internet for email (100%), and the majority used online-bill-pay (81%) and online-shopping (78%). However, this same sample population reported that only 60% of them pay their Consumers Energy bill online.



*Figure 4 Survey Result*

## Recommendation #2

Online bill payment is utilized less in this technology-savvy population than would be expected from their general Internet activity profile, indicating a potential need to make Consumers Energy online bill payment more user-friendly. However, further investigation into this discrepancy is necessary, including qualitative research with current clients who visit the website, but do not use this feature. The lower rates of bill pay in this population may also be elucidated by the findings from our qualitative analysis of free-response user feedback presented later in the report (see Findings 5, 6, & 7).

## Finding #3: Site frustrations include trouble finding information and links and slow page load

Of those surveyed that had difficulty using the website, 76% reported that they could not find the information they were looking for, 41% reported that they could not find the link or button they were looking for, and 24% reported that the website loaded too slowly.

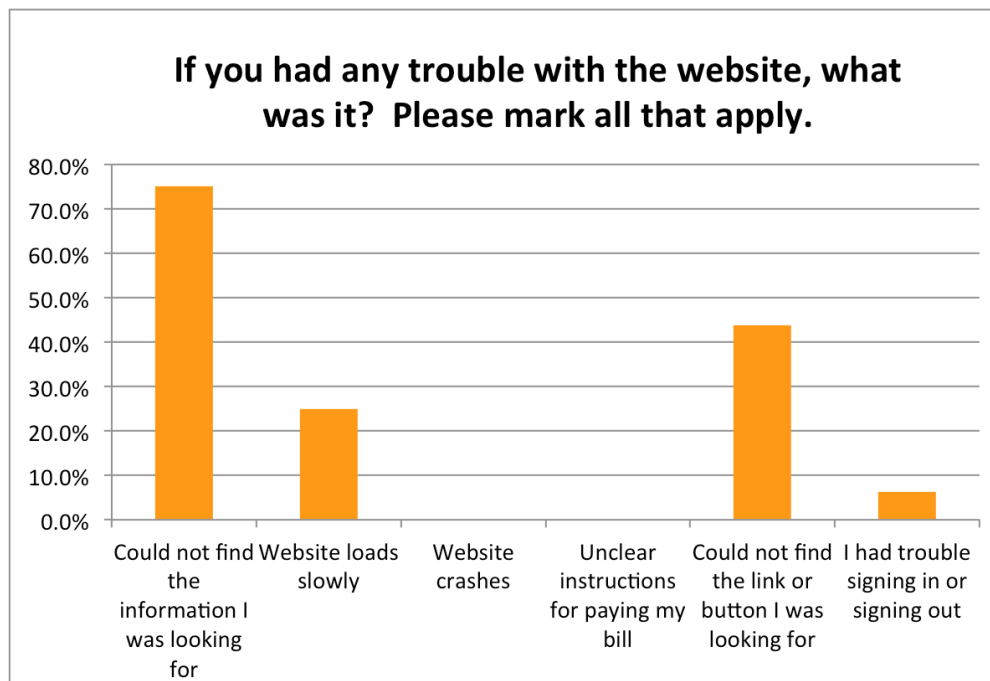


Figure 5 Survey Result

## Recommendation #3

Provide clearly visible, consistent navigation. Place links to frequently used pages more prominently on the website so that they are not overlooked. Eliminate extraneous and duplicative content and maximize use of white space on screen to help users focus on key links. To address



the slow load times, consider using improved hosting technology and stress testing the site to identify potential problems pre-release.

### **Findings and Recommendations from User Feedback Comments**

724 comments were gathered from consumers submitting free-form responses in the feedback section of the Consumers Energy website between October through December 2013. The three most common categories derived from thematic coding were “interface design,” “service” problems and “technical difficulties,” respectively. Each of these categories was further broken down into subcategories listed in Appendix E.

#### **Finding #4: Users have trouble navigating, logging in, and finding buttons.**

335 comments were related to interface design, including 66 comments about navigation, 21 comments about log in trouble and 18 comments about the visibility of buttons. Users commented that it was difficult to find the eBill section, make changes to their profile or update the latest information on it. Also, users wanted to view their accounts or the history of usage in order to compare it with the usage months or years ago, but were not able to complete this task on the site. Making same day payments was also confusing. Login frustrations include not knowing account numbers or passwords. Customers said that the visibility of buttons for paying bills and contacting Consumers Energy was not clear and straightforward and that they were therefore less likely to pay their bills online.

#### **Example comments:**

- *“I would like to see the previous years electric bill to compare energy usage to see if I have improved my energy use.”*
- *“Contact phone number (other than emergency) should be posted for easy access”*
- *“Why do you make it so hard to view all of my accounts? I get stuck on the Bristol account and do not find a way to view my other accounts. Under My accounts why do you not give me the choice to view the one that I want?”*
- *“Would like to see Same day or next payment processing. Also want to be able to view 15 to 18 months of usage history.”*
- *“After clicking on view / make payment. Where is the make payment icon? I have had this trouble before. Think I will revert back to paper bill.”*

#### **Recommendation #4**

We recommend eliminating duplicate links and providing clear, consistent, and easily visible navigation for users on website (as discussed in Recommendation #3). This is especially true for the eBill sections, which showed some of the fiercest criticisms. Users also need an easy way to retrieve login information, as shown by a number of complaints regarding password retrieval. Buttons should be made more visible by separating them from surrounding text and images, so that users can clearly identify them.

#### **Finding #5: Users want flexibility and customization in payment options.**

201 comments were coded as “service” problems; the most frequently mentioned topics were 30 comments about payment options and 25 comments about wanting a paper bill option included with eBill Pay. Users found that it was difficult to change settings to auto-payment or revert to monthly bill pay. Many users were upset that payment by credit card required a \$6.75 fee, which was seen as “outrageous.” A significant number of users commented that they would like to receive a paper statement while using the online bill pay feature. Currently, these options are mutually exclusive.

#### **Example comments:**

- *“If I pay using auto payment I will no longer get paper statements. Do not like this feature. I do not have internet at home so this attempt was wasted. Now I will need to seek out another way to pay today.”*
- *“I tried again. Still can not accomplish creating automatic withdrawal.”*

#### **Recommendation #5**

We recommended easy switching between one-time payment and auto-pay options, without having to re-enter payment information. Users should be given the option of receiving a paper statement even if they enroll in autopay. This would satisfy the large number of users which stated that they would use the online bill pay if they could also have a paper statement. We also recommend eliminating the \$6.75 fee for credit card users, because this is currently a barrier for many in signing-up for online bill payments.

#### **Finding #6: Technical difficulties with site aggravated users**

There were 56 comments related to technical difficulties. Among these, 22 were comments related to the site being down, 6 were comments about PDF failure and 6 were comments about non-functional features. The site being down is a serious problem for viewing the bills, paying the bills and printing the bills. When users tried to click on the buttons, such as bill payment, bill

printing, or login, the site always was no response or showing “unavailable.” On the other hand, when people wanted to scroll down to submit their payment, it seems the website did not work and made the users confused because they couldn’t scroll down the page in order to pay the bill. Many people wanted to print their history of paying bills, but were met with PDF display failures. Those problems frustrated people and the “error” message which frequently occurred irritated users.

### **Example comments:**

- *“how and the HELL DO YOU SUBMIT the bill the page does NOT go down”*
- *“Still getting an error message, and to try again later. This is getting to be as bad as healthcare.gov!”*
- *“Why is your PDF Transporter’ unable to process my past bills??I’ve had this problem before ...what can I/you do to fix it so I can get copies of my bills!!”*
- *“None of the PDF files on the site work for my address. When clicked, I get “The requested resource does not exist.” and a 404 error of the page.”*
- *“This site is NOT allowing me to pay my bill. It will not scroll down past the first line of step 3 to approve payment. I need this corrected ASAP please. I only pay online.”*

### **Recommendation #6**

We recommend improving the software or hosting technology for the website in order to speed page load times and ensure that site features perform well. Stress testing the site may also help prevent potential bugs and crashes before the version is released to the public and ensure the functionality of the website.

## **Discussion**

### **1. Limitations**

The survey used in our analysis was included in a link on an electronic email newsletter sent to approximately 600,000 Consumers Energy customers (Appendix F). Our stakeholder anticipated that this sample would approximate the general demographics of Consumers Energy customers, which in turn mirror U.S. Census data for Michigan’s eighteen and over population. However, our actual survey results display a distinct skew toward older members of the population, with 60% (n= 32) of respondents reporting their age as “60 or older.” This is dramatically different from the U.S. Census data for Michigan, which shows persons 65 years of age and older comprising 14.6% of the state’s population

(U.S. Census Bureau, 2010). In addition, 38% of those surveyed (n=20) responded that they were retired.

These two findings together suggest that there was a strong bias in our sample toward retired individuals in their 60s, and limits our generalizations and recommendations from this survey to this group.

The skew in this sample is likely the result of self-selection bias due to the survey's passive opt-in design which required users to actively choose to take the survey from a hyperlinked button on the electronic newsletter. This may have led to more polarized views, with responses from users who are more passionate about communicating their opinions or have more free time to respond, such as retirees. Conversely, the survey may have neglected individuals with opinions which are not as strong or who have less time for an internet survey.

Our sample was also likely biased toward individuals who are more familiar or comfortable with using the Internet, because it was only provided as an option to those who had previously submitted an email address. This may be a less critical issue if this web savvy population captures the needs and wants of potential future website users.

The response rate from this survey was relatively low. From the approximately 600,000 individuals to whom the e-newsletter was emailed to, only 130,000 opened their email, and of those who did, only 53 responded to our survey. This makes our response rate 0.038%, which is unusable for any statistical analysis because of non-responder bias.

## **2. Ideal Sampling and Survey Redesign**

From the limitations of our current survey and lessons learned, we have created a new, deployable survey located in Appendix D. A comprehensive description of redesigned survey elements is also included in Appendix C.

To avoid the sampling bias noted in our current survey, it would be ideal to employ stratified sampling for this new survey and directly email it to a representative proportion of individuals randomly sampled within age bands. Instead of a link within a newsletter, the survey could be directly embedded in the email for submission to eliminate extra steps for users.

To capture potential users of the Consumers Energy website (who currently do not use the website), the same survey would be included with a paper bill in the monthly statement. Inside the mailer would be a paid envelope to send the response back in as a way to encourage participation. A monetary incentive in the form of the potential to win a

discount on energy bills or gift cards could be used to increase response rates in both paper and electronic survey deployment.

After collecting data from electronic and paper surveys, chi-square tests would be run to ascertain if there are significant differences between paper and electronic survey groups. If there are not, data from both groups would be combined to increase the power for further statistical analysis.

### **3. Supplementation of Survey Data**

Due to the limited applicability of our survey data to retired individuals 60 years of age and older, we expanded the scope of our analysis to data obtained by Consumers Energy in the “Feedback” section of their webpage. By clicking on a “Feedback” button, located on the sidebar of the Consumers Energy website, users can provide unrestricted text comments and submit them directly to Consumers Energy. Although this sampling method shares some of the problems of self-selection bias discussed earlier and is limited to current users of the website, it has the advantage of allowing users to immediately comment on any of the aspects of the current site or the service they receive. Because of its convenience, it also potentially expands the scope beyond retirees and individuals with more free time.

## **Conclusion**

In the survey we reached a larger group of customers and polled about their behaviors, attitudes and characteristics when using the website. We worked as a group to categorize all the data gathered from the survey, and identifying key issues within the websites and giving Consumers Energy a collective voice of recommendations. Based on the findings, we recommend that Consumers Energy improve its navigation, provide more payment options, improve its site technologies and make online payment more user-friendly.

## References

1. Customer Experience Design. (2013). The digital state of Consumers Energy. Jackson.
2. Goodman, E., Kuniavsky, M., & Moed, A. (2012). Surveys. In H. Scherer & M. Dunkerley (Eds.), *Observing the user experience* (2nd ed., pp. 327–383). Waltham: Morgan Kaufmann.
3. U.S. Census Bureau. (2010). State & County QuickFacts: Michigan. Retrieved from <http://quickfacts.census.gov/qfd/states/26000.html>

# Appendices

## Appendix A Deployed Survey

### Introduction

Thank you for taking this survey! It takes about five minutes and the responses you provide will help us improve the Consumers Energy website. All information you provide us will be used anonymously. Click "Next" to get started.

### Demographic Information

1. What is your gender?
  - Male
  - Female
2. Which category below includes your age?
  - 19 or younger
  - 20-29
  - 30-39
  - 40-49
  - 50-59
  - 60 or older
  - Prefer not to answer
3. What is the highest level of education you have completed?
  - Less than high school
  - Some college
  - Associate's degree
  - Bachelor's degree
  - Master's degree (e.g. MA, MS, MBA, MPH)
  - Professional degree (e.g. MD, DDS, JD)
  - Doctorate degree (e.g. PhD, EdD)
  - Prefer not to answer
4. How many people currently live in your household?
  - 1 (Yourself)
  - 2-3
  - 4+
  - Prefer not to answer

5. What is your occupation? Leave this question blank if you prefer not to answer.
- *(This is a fill-in box)*
6. How often do you access the Internet?
- Never
  - Once a week or less
  - Once a day
  - More than once a day
  - Once an hour
  - More than once an hour

<Skip Logic: An answer of "Never" skips the individual to the "Final Message" at the end of the survey.>

### Technographic Information

7. How comfortable are you using the Internet?
- 1: Not at all comfortable
  - 2
  - 3
  - 4
  - 5: Very comfortable
8. What do you use the Internet for? Please mark all that apply.
- Email
  - Reading
  - Online billing
  - Online shopping
  - Social networking (Facebook, Twitter, LinkedIn, Google+)
  - Watching videos (e.g. YouTube, Netflix, Hulu)
  - Gaming
  - Other (please specify) <An empty fill-in box follows this selection>
9. Have you ever visited the Consumers Energy website?
- Yes
  - No

<Skip Logic: An answer of "No" skips the individual to question 17.>



10. How often do you access the Consumer's Energy website?

- Never
- Once a month
- Once a week
- Several times a week
- Once a day
- More than once a day

<Skip Logic: An answer of "Never" skips the individual to question 17.>

11. How often do you access the Consumers Energy website on a...

- <Scale shown on top: 1: Never, 2, 3, 4, 5: All of the time>
  - Desktop or laptop computer
  - Tablet (e.g. iPad, Galaxy Tablet, Nexus)
  - Smartphone (e.g. Android, iPhone)

12. What do you use the Consumers Energy website for? Please mark all that apply.

- Paying bills
- Reading information on products/services
- Reporting an energy problem
- Starting or stopping service
- Looking up Consumers Energy contact information
- Other (please specify) <An empty fill-in box follows this section>

13. How easy or hard is it for you to use the Consumers Energy website?

- 1: Very Hard
- 2
- 3
- 4
- 5: Very Easy

14. If you had any trouble with the website, what was it? Please mark all that apply.

- Could not find the information I was looking for
- Website loads slowly
- Website crashes
- Unclear instructions for paying my bill
- Could not find the link or button I was looking for
- I had trouble signing in or signing out
- Other (please specify) <An empty fill-in box follows this>

15. How likely would you be to do the following?

- <Scale shown on top: 1: Very Unlikely, 2, 3, 4, 5: Very Likely>
  - “Like” Consumers Energy on Facebook
  - “Follow” Consumers Energy on Twitter
  - Subscribe to Consumers Energy Blog
  - Watch a YouTube-style video on the Consumers Energy Website
  - Use an online chat feature to connect with a Consumers Energy representative

16. We value your feedback! As our final question, how could your experience with the Consumer’s Energy website be improved?

- <An empty fill-in box follows this>

<Skip Logic: After answering the user is skipped to “Final Message”.>

17. Why don’t you use the Consumers Energy website? Please mark all that apply.

- I didn’t know about the website
- I can’t find what I need on the website
- The website has technical difficulties
- What I am looking for is not on the website
- Other (please specify) <An empty fill-in box follows this>

18. We value your feedback! As a final question, could you take a moment and elaborate on why you prefer not to use the Consumers Energy website in the space below?

- <An empty fill-in box follows this>

<Skip Logic: After answering the user is skipped to “Final Message”.>

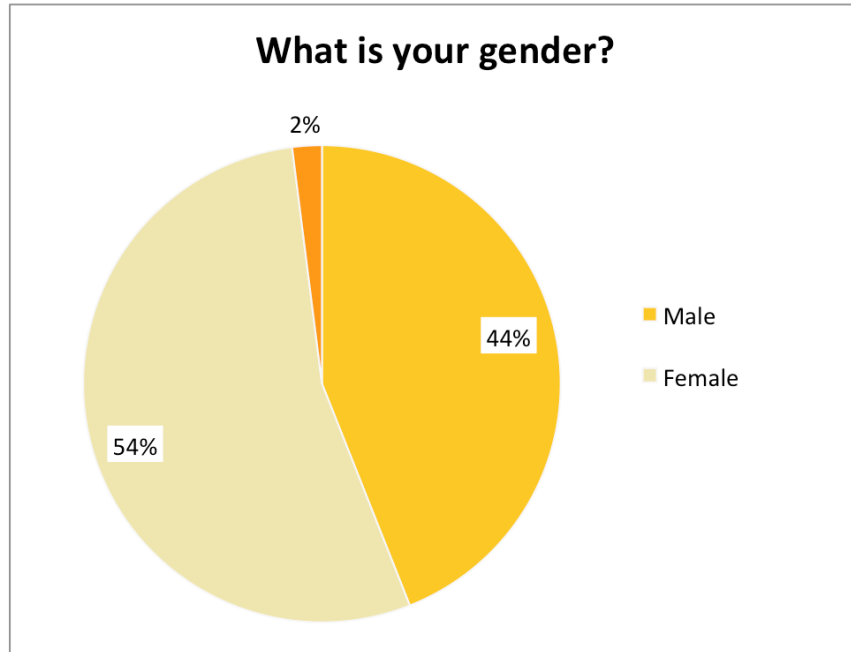


Thank you for taking this survey! Your responses will be used to improve the Consumers Energy website.

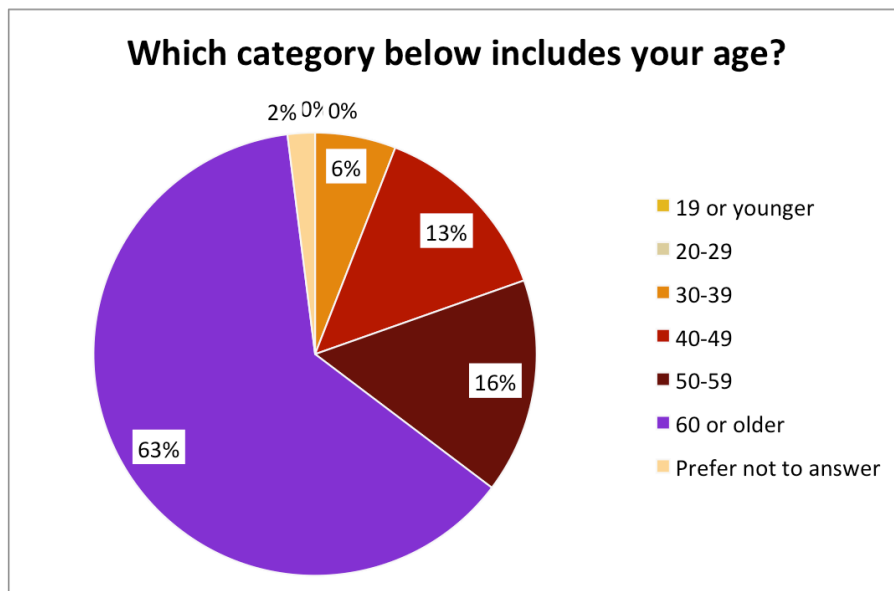
## Appendix B Survey Results

Survey Response (Feb 24)

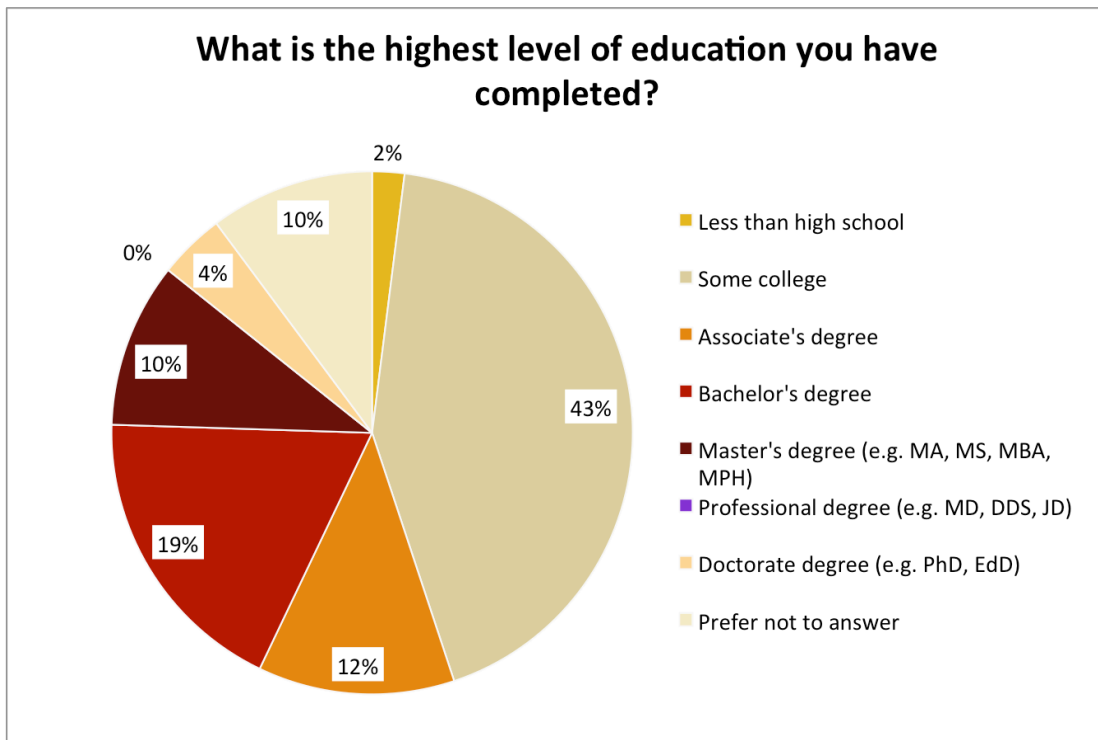
1.



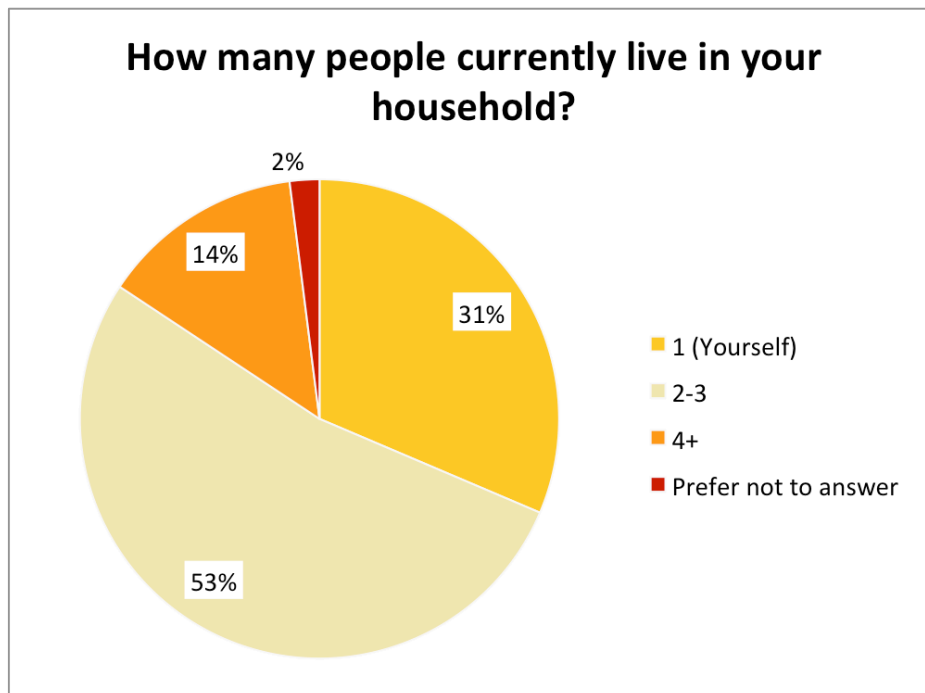
2.



3.



4.



5. What is your occupation? Leave this question blank if you prefer not to answer.

<32 answered. 23 skipped.>

Responses listed below:

retired  
2/11/2014 12:20 PM

Retired  
2/10/2014 2:14 AM

retired  
2/6/2014 8:56 AM

Retired  
2/4/2014 2:57 PM

Retired  
2/4/2014 12:01 PM

retail  
2/4/2014 12:00 PM

retail-part time  
2/4/2014 11:28 AM

retired  
2/4/2014 10:01 AM

Retired Active  
2/4/2014 9:58 AM

retired  
2/4/2014 1:47 AM

Retired  
2/4/2014 12:49 AM

retired.  
2/3/2014 10:57 PM

retired  
2/3/2014 9:37 PM

Beekeeping  
2/3/2014 8:57 PM

retired Professor of Physics  
2/3/2014 7:21 PM

cashier  
2/3/2014 7:19 PM

Retired Court Worker  
2/3/2014 7:04 PM

retired  
2/3/2014 5:27 PM

Retired engineer  
2/3/2014 4:41 PM

retired  
2/3/2014 4:19 PM

Retired  
2/3/2014 3:11 PM

Vendor  
2/3/2014 2:37 PM

Retired  
2/3/2014 2:37 PM

Petroleum Engineer  
2/3/2014 2:29 PM

I installed Window Film on your offices  
2/3/2014 1:53 PM

retired  
2/3/2014 1:48 PM

Case Administrator  
2/3/2014 1:38 PM

retires  
2/3/2014 1:30 PM

Field Supervisor  
2/3/2014 1:16 PM

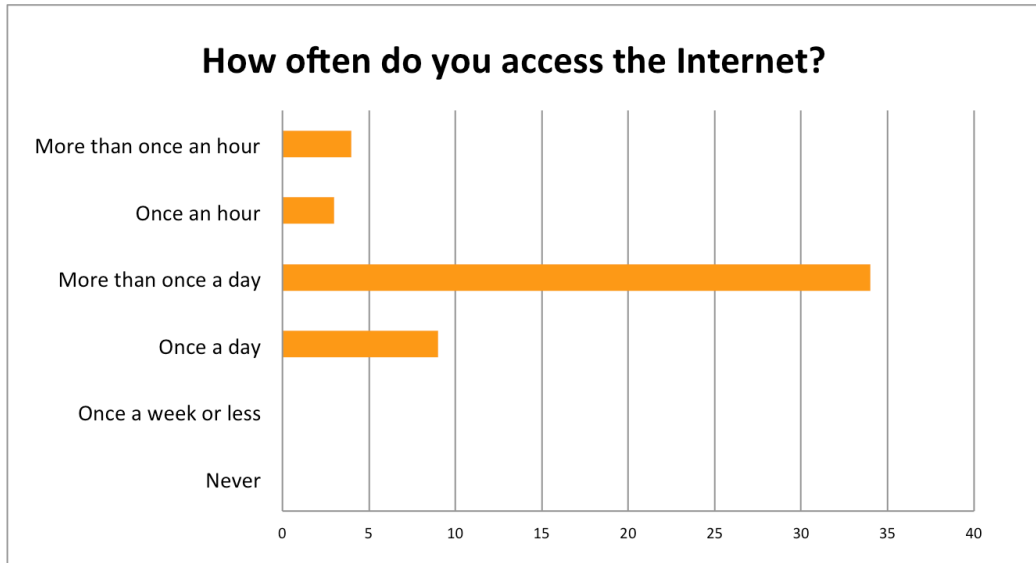
I own an outdoor adventure company and am a tour guide during the summer. In the winter I am a Senior Systems Administrator. And scattered throughout the year I do event and wedding photography super part time.

2/3/2014 1:10 PM

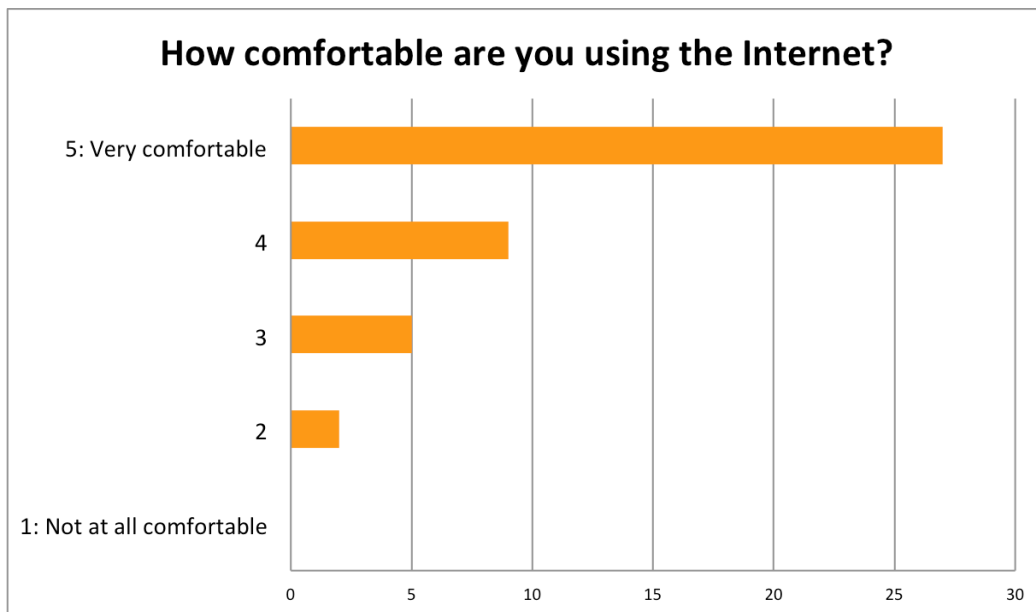
Speech pathologist  
2/3/2014 1:02 PM

CIS  
2/3/2014 12:50 PM

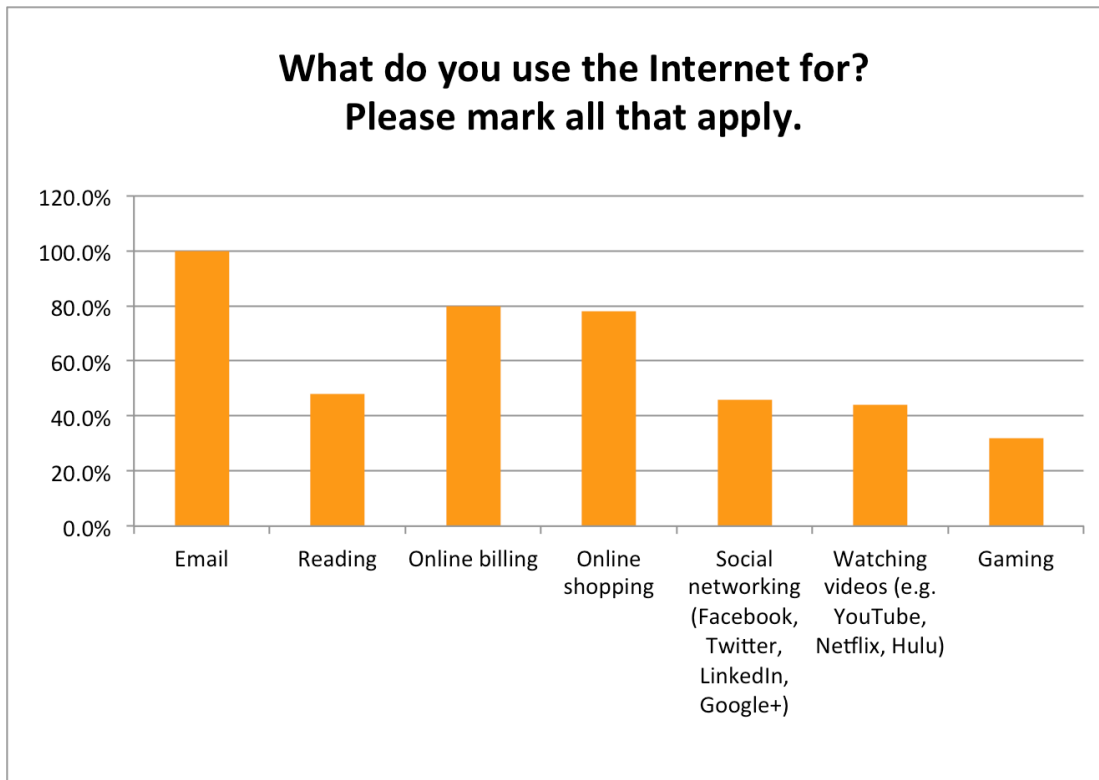
6.



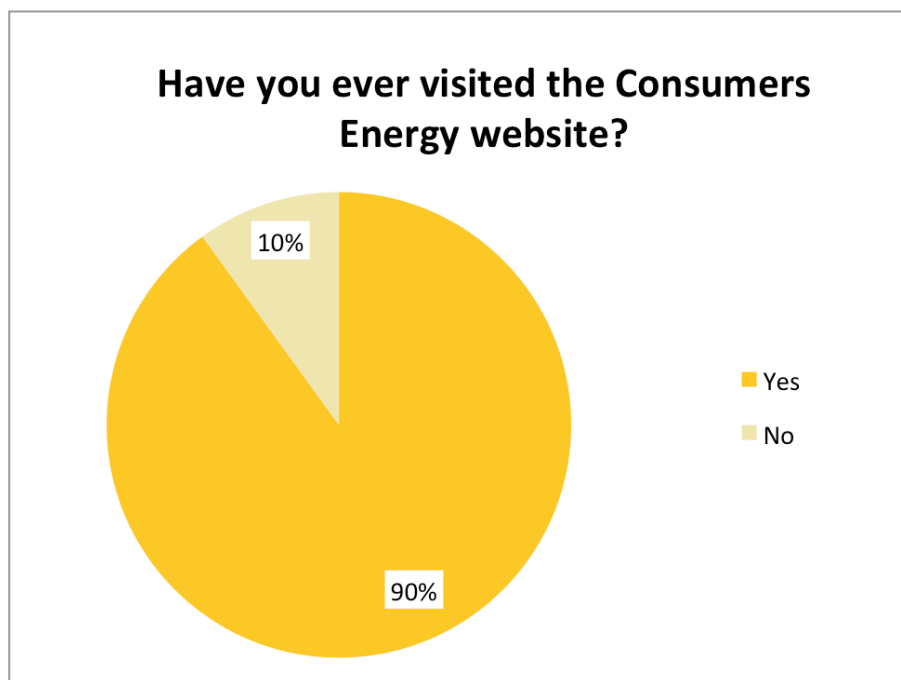
7.



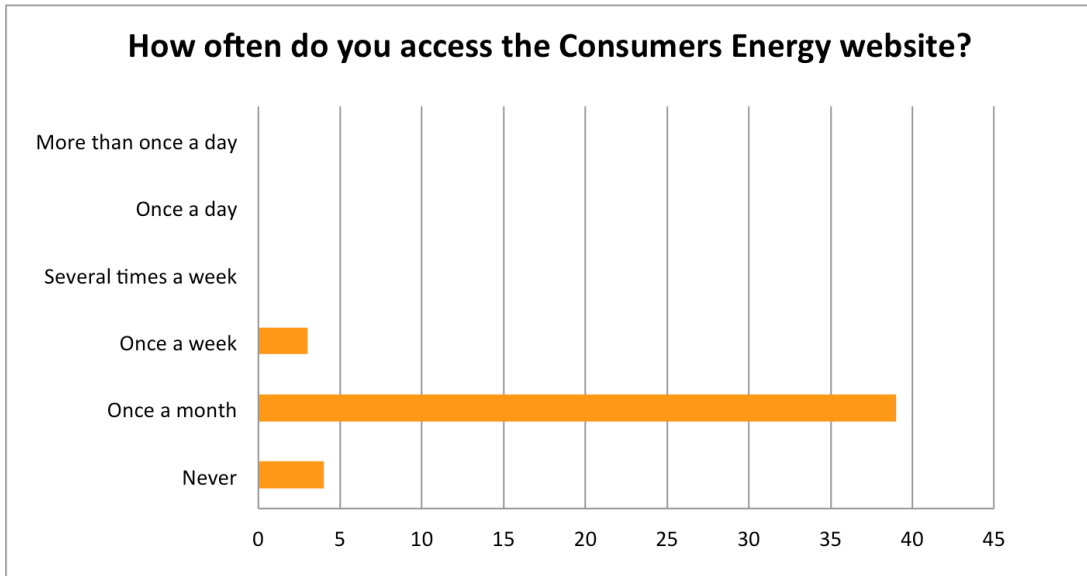
8.



9.



10.



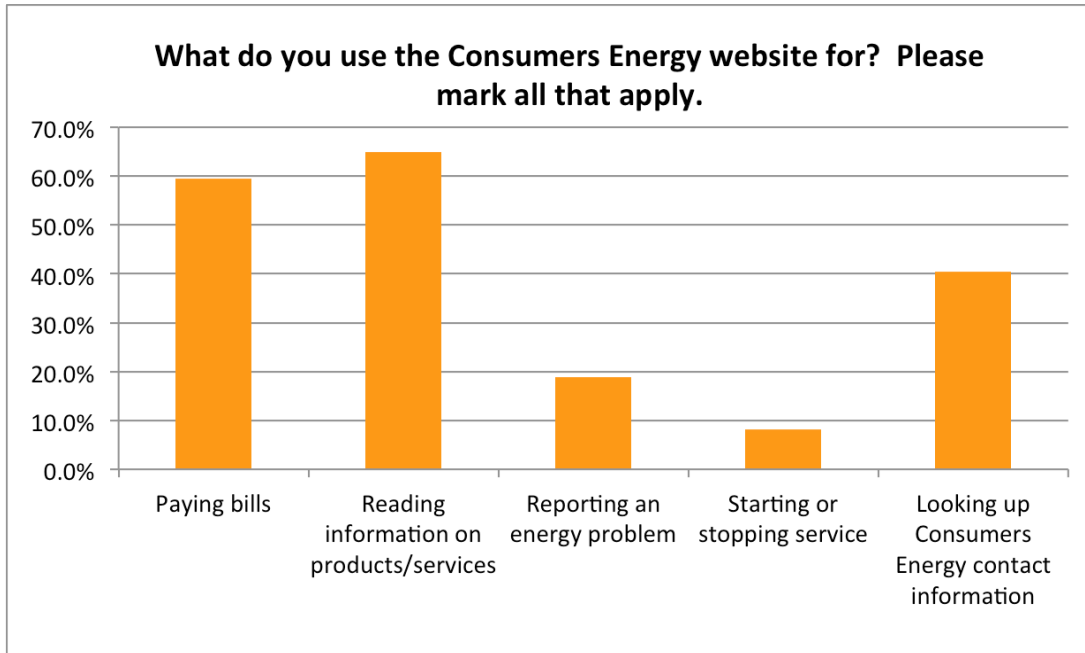
11.

Question: How often do you access Consumer Energy on the...						
Answer Options	1: Never	2	3	4	5: All of the time	Response Count
Desktop or laptop computer	0	8	2	6	21	37
Tablet (e.g. iPad, Galaxy Tablet, Nexus)	13	1	2	0	4	20
Smartphone (e.g. Android, iPhone)	13	2	2	2	1	20
<b>Answered question</b>						<b>39</b>
<b>Skipped question</b>						<b>14</b>

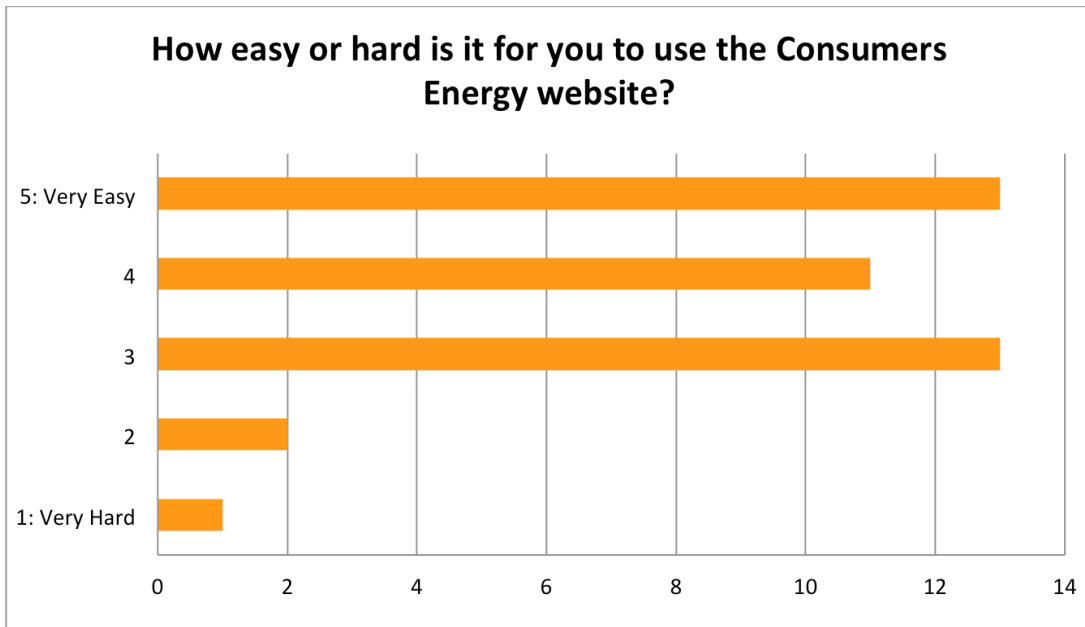




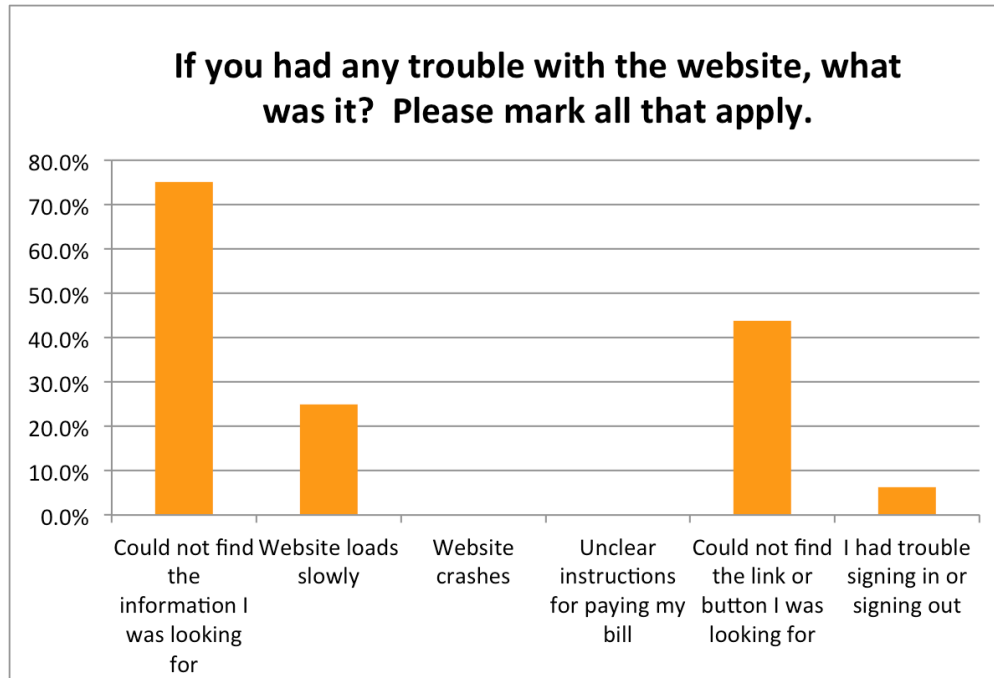
12.



13.



14.



15.

How likely would you be to do the following...						
Answer Options	1: Very Unlikely	2	3	4	5: Very Likely	Response Count
"Like" Consumers Energy on Facebook	23	7	2	2	3	37
"Follow" Consumers Energy on Twitter	33	2	0	0	1	36
Subscribe to the Consumers Energy Blog	23	5	6	0	1	35
Watch a YouTube-style video on the Consumers Energy Website	20	6	7	1	1	35
Use an online chat feature to connect with a Consumers Energy representative	14	5	9	4	6	38
<b><i>answered question</i></b>						<b>39</b>
<b><i>skipped question</i></b>						<b>14</b>

Low High

## 16. We value your feedback! As our final question, how could your experience with the Consumers energy website be improved?

Respondent answers:

no estimated readings would be nice as it makes it impossible to track energy usage and figure a buget during the heating season.

3/1/2014 10:20 AM

Provide a onsite energy audit!

2/10/2014 2:24 AM

Make sign in more secure; have area where customers can see when they will get their energy outage credited to their account; fix call in overloads during outage reporting...can't get thru., give us better rebates for outages AND AUTOMATIC CREDITS TO OUR ACCOUNTS, WE SHOULDNT HAVE TO ASK FOR IT AND THEN HAVE TO FILL OUT A FORM AND GET APPROVED!! It should be automatic and immediate credit or shortly thereafter, not months later!

2/6/2014 1:55 PM

To have the option to pay my bill online with a credit card.

2/4/2014 8:22 PM

Provide a confirmation number for payment at the end of the transaction. Thank you.

2/4/2014 4:02 PM

None at this time

2/4/2014 3:02 PM

good

2/4/2014 2:26 PM

just the bill loading. Other than that it is easy to use.

2/4/2014 12:04 PM

Modernise. It is horribly outdated and obsolete. Reminds me of a poorly done geocities do-it-yourself free website circa 1996.

Make it clear, concise, and to the point.

2/4/2014 11:57 AM

Follow #14 suggestions.

2/4/2014 10:10 AM

details of Appliance Service costs/benefits

2/4/2014 10:05 AM

none

2/4/2014 2:10 AM

Appreciate very much the energy usage graphs that you send along with the email announcing my bill.

2/3/2014 7:26 PM

I think it works fine the way it is

2/3/2014 7:07 PM

Make it a littler easier to get around the site & find what information you are looking for.

2/3/2014 5:32 PM

Simpler navigation, frequent updates and elimination of links to outdated services.

2/3/2014 2:14 PM

I've already talked to your people and nothing has changed.

2/3/2014 1:57 PM

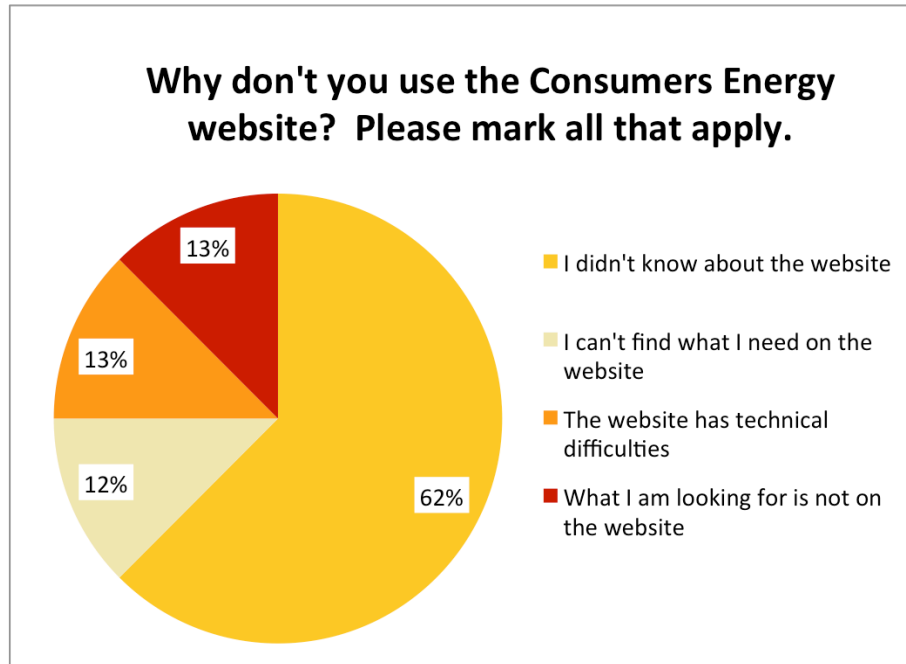
non

2/3/2014 1:52 PM

show a more detailed explanation of how to read your own meter; when adjusting bills after getting an actual reading vs estimated reading - show the detail of how it was adjusted --I can see the new bill but cannot see where it was when it was wrong and it is confusing.

2/3/2014 1:22 PM

17.



**18. We value your feedback! As our final question, how could your experience with Consumer's Energy website be improved?**

Respondent answers:

Now that we know about it we will visit it on a regular basis. We get online billing and e-mails from Consumers Energy.

2/4/2014 12:53 AM

Had a meter replaced, and lost power last week, could it be the meter?

2/3/2014 11:00 PM

I haven't found it until now.

2/3/2014 9:39 PM

not user friendly, needs to be optimized for mobile devices, would be nice to compare past energy bills on a single page rather than opening multiple PDF files

2/3/2014 9:01 PM

did not know about it.

2/3/2014 7:20 PM

I use it to print out my e-statements. I've taken the test, I glance at news issues. That's all I'm interested in

2/3/2014 1:42 PM

Never heard of it...

2/3/2014 1:17 PM

Keep it simple w/ easy options of pay in full each month or auto text the customer the bill amount with a pay in full option or pay a portion. I don't use it because it's horrible and confusing

2/3/2014 1:06 PM

more info

2/3/2014 12:52 PM

## **Appendix C Redesigned Survey Description**

We have provided a redesigned version of our survey. This survey has been redesigned to meet industry best practices and incorporate feedback from our stakeholder and instructor. Changes to key elements along with justifications follow.

### **1. Predictive questions eliminated and replaced by questions on current behavior.**

Past behavior has been shown to be a much better predictor of individuals' future behavior than survey questions which ask individuals to predict their future behavior (Goodman, Kuniavsky, & Moed, 2012). Accordingly, the survey question which previously asked how likely users would be to connect with the Consumers Energy website through social media, now asks them if they have connected to companies through various social media venues in the past.

### **2. Convoluted or complicated questions reworded/restructured.**

Several of the questions have been reworded to make them more understandable to the user. For instance, instead of asking users how often they visit the Consumers Energy website on their desktop, laptop, tablet, or smartphone individually, we not simply ask users to check all the devices they use to access the website.

### **3. Demographic questions moved to final portion of survey**

In order to avoid priming subjects based on internalized beliefs of age, gender, or education, and to retain survey-takers' interest, we have followed the suggestions of user experience researchers Goodman, Kuniavsky, and Moed (2012) and moved demographic questions to the end of the survey.

### **4. Additional opportunities for data collection added**

Several new questions have been added related to technology use. We have also added a question to determine if the respondent is the primary energy bill payer to better understand the importance of their answers to transactional questions. Question 22, which asks about household size, has been further broken down from its previous version to include a separate choice for two or three members of a household, rather than a single response of "two to three." This was done to facilitate Consumers Energy's understanding of the client household as a single individual, couple, or family unit.

## **5. Client requested addendums**

Our stakeholder requested questions related to the content, design, ease of use, and overall appeal of the Consumers Energy website based on the format of a previously conducted survey. This has been included in question 12 of this redesigned survey. Additional possibilities for client issues have also been added to question 13.

The redesigned survey follows in Appendix D.

## Appendix D Redesigned Survey

### Introduction

Thank you for taking this survey! It takes about five minutes and the responses you provide will help us improve the Consumers Energy website. All information you provide us will be used anonymously. By participating, you will have a chance to win <insert incentive here>.

Click "Next" to get started.

### Eligibility Information

1. Are you a Consumers Energy Customer?
  - Yes
  - No
  - I don't know
  
2. How often do you access the Internet?
  - Never
  - Once a week or less
  - Once a day
  - More than once a day
  - Once an hour
  - More than once an hour

<Skip Logic: An answer of "Never" skips the individual to question 18.>

### Technographic Characteristics/Behavior

3. How comfortable are you using the Internet?
  - 1: Not at all comfortable
  - 2
  - 3
  - 4
  - 5: Very comfortable
  
4. How do you access the Internet? Please mark all that apply.
  - Desktop or laptop computer
  - Tablet (e.g. iPad, Galaxy Tablet, Nexus)
  - Smartphone (e.g. Android, iPhone)
  - Other <A blank fill-in box follows>

5. What browser do you use to access the Internet? Please mark all that apply.
- Internet Explorer
  - Chrome
  - Firefox
  - Safari
  - Opera
  - I don't know
  - Other (please specify) <An empty fill-in box follows this selection>
6. What do you use the Internet for? Please mark all that apply.
- Email
  - Reading
  - Paying bills
  - Shopping
  - Social networking (Facebook, Twitter, LinkedIn, Google+)
  - Watching videos (e.g. YouTube, Netflix, Hulu)
  - Gaming
  - Other (please specify) <An empty fill-in box follows this selection>
7. Do you ever do any of the following? Please check all that apply.
- "Like" companies on Facebook
  - "Follow" companies on Twitter
  - Subscribe to company blogs
  - Watch videos on company websites
  - Use an online chat feature to connect with a customer service representative

### **Consumers Energy Website Specific Behavior**

8. Have you ever visited the Consumers Energy website?
- Yes
  - No

<Skip Logic: An answer of "Never" skips the individual to question 16.>

9. How often do you access the Consumer's Energy website?
- Never
  - Once a month
  - Once a week
  - Several times a week
  - Once a day
  - More than once a day

<Skip Logic: An answer of "Never" skips the individual to question 16.>



10. How did you first learn about the Consumers Energy website?
- Brochure included in paper billing statement
  - Email sent from Consumers Energy
  - Consumers Energy e-newsletter
  - Searching for Consumers Energy online
  - From a friend or family member
  - Other (please specify) <An empty fill-in box follows this section>
11. What do you use the Consumers Energy website for? Please mark all that apply.
- Making payments
  - Viewing or managing my account
  - Starting or stopping service
  - Finding or reporting outage information
  - Researching products or services
  - Contacting Consumers Energy
  - Other (please specify) <An empty fill-in box follows this section>

**Consumers Attitudes**

12. Please rate how you feel about the following aspects of the Consumers Energy website:

- <Scale on top: Very bad: 1, 2, 3, 4, Very good: 5>
  - Content (Information and Resources)
  - Design (Look and Feel)
  - Ease of use
  - Overall Rating

13. If you have had any trouble with the website, what was it? Please mark all that apply.

- Could not find the information I was looking for
- Website loads slowly
- Website crashes
- Unclear instructions for paying my bill
- Could not find the link or button I was looking for
- Had trouble signing in or signing out
- Website doesn't work on my tablet
- Website doesn't work on my smartphone
- I have not had any trouble with the website
- Other (please specify) <An empty fill-in box follows this>

14. How likely are you to recommend the Consumer Energy website to a friend?

- 1: Very Unlikely
- 2
- 3
- 4
- 5: Very Likely

15. We value your feedback! How could your experience with the Consumer's Energy website be improved?

<An empty fill-in box follows this>

<Skip Logic: After answering the user is skipped to question 18>

### **Consumers Behavior**

<Continued from skip logic originating from question 8 & 9>

16. Why don't you use the Consumers Energy website? Please mark all that apply.

- I didn't know about the website
- I can't find what I need on the website
- The website has technical difficulties
- What I am looking for is not on the website
- Other (please specify) <An empty fill-in box follows this>

17. We value your feedback! Could you take a moment and elaborate on why you do not use the Consumers Energy website in the space below?

<An empty fill-in box follows this>

### **Demographic Information**

18. Are you the member of your household responsible for paying your Consumers Energy bill each month?

- Yes
- Sometimes
- No
- Prefer not to answer

19. What is your gender?

- Male
- Female
- Prefer not to answer

20. Which category below includes your age?

- 19 or younger
- 20-29
- 30-39
- 40-49
- 50-59
- 60 or older
- Prefer not to answer

21. What is the highest level of education you have completed?

- Less than high school
- Some college
- Associate's degree
- Bachelor's degree
- Master's degree (e.g. MA, MS, MBA, MPH)
- Professional degree (e.g. MD, DDS, JD)
- Doctorate degree (e.g. PhD, EdD)
- Prefer not to answer

22. How many people currently live in your household?

- 1 (Yourself)
- 2
- 3
- 4+
- Prefer not to answer

23. What is your occupation? Leave this question blank if you prefer not to answer.

- <This is a fill-in box>

.....

<Final Message>

Thank you for taking this survey! Your responses will be used to improve the Consumers Energy website.

## **Appendix E. Codebook Categories Used for Unstructured Data Collected by Consumers Energy October 2013- December 2013**

### **1. Technical Difficulties**

1. Loading time
2. Cross browser compatibility
3. System maintenance
4. Site down
5. Validation errors <this refers to users complaining that they inputted the requested information and the system will not allow them to submit or insists that they are missing data they have provided.>
6. Non-functional feature
7. PDF Failures

### **2. Service**

1. Bank account
2. Excessive fee
3. Credit card
4. Poor customer service <general customer service-related complaints>
5. Billed incorrectly online
6. Want paper bill option
7. General question
8. General complaint
9. Payment options (want to pay more than the due amount but the system doesn't allow; want to make payments earlier)
10. Meter reporting problems

### **3. Interface Design**

1. Visibility of buttons
2. Navigation
3. Log in trouble
4. Reviewing bill
5. Issue with tablet or smartphone
6. Aesthetics
7. Missing needed option
8. Non-functional buttons/input area

9. Info/ graphics (want to compare with the usage same time last year but the information is not provided)

10. Lack of feedback

**4. Problematic Instructions**

**5. User forget passwords**

**6. Positive Feedback**

# Appendix F. Screenshot of Consumers Energy Survey Link in Electronic Newsletter



The screenshot shows the top section of an email newsletter. At the top left is the Consumers Energy logo with the tagline "Count on Us". To the right is the main header "Energy Solutions" in large white text on a blue background, with the subtitle "News, Tips and Resources for You" below it. A small photo of a worker in a yellow hard hat is on the far right. Below the header is a navigation bar with links: eLibrary | Easy-to-Use Calculators | Money-Saving Tips | Energy Efficiency Rebates | Billing/Payment | Safety | FAQs.

The main content area features three articles and two call-to-action boxes. The first article is "Beat the Freeze with Energy-Saving Tips, Tools", which includes a photo of a man using a handheld device and a "READ MORE >>" button. The second article is "4 Surprising Energy Users in Your Home", featuring a photo of a house and another "READ MORE >>" button. The third article is "Moving our Feet to Give Others Heat", with a photo of two women in winter gear and a "READ MORE >>" button. On the right side, there are two blue boxes: one titled "Use our Website? Help make it better!" with a "Take Survey" button, and another titled "TOOLS YOU CAN USE" with a house and wrench icon.



## Energy Solutions

News, Tips and Resources for You



[eLibrary](#) | [Easy-to-Use Calculators](#) | [Money-Saving Tips](#) | [Energy Efficiency Rebates](#) | [Billing/Payment](#) | [Safety](#) | [FAQs](#)

### Beat the Freeze with Energy-Saving Tips, Tools



With the coldest Michigan winter in the past 20 years, we know you are concerned about higher energy bills. Check out these tips, tools and programs.

[READ MORE >>](#)

### 4 Surprising Energy Users in Your Home



What are your best bets for energy savings? The answer may surprise you.

[READ MORE >>](#)

### Use our Website? Help make it better!

We're planning the new ConsumersEnergy.com. Your feedback will help design the best experience.

[Take Survey](#)

### Moving our Feet to Give Others Heat



Consumers Energy is sponsoring Walk for Warmth events around the state and encouraging employees and others to participate. Our goal for combined companywide contributions is \$115,000.

[READ MORE >>](#)

TOOLS YOU CAN USE

