

# **Housing Sustainability Index**

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Project Proposal

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## 0.0 Executive Summary

We propose to create an online tracking system for rental properties around Bellingham that will be periodically updated with utility data such as electricity, water, and natural gas bills. The Sustainability Housing Index will take into consideration how close the property is to services such as bus lines, grocery stores, parks and other social amenities. This information would be accessible through an online database, updated by tenants each month since they have complete access to those bills. We want to build a history of consumption with the goal of eventually providing the opportunity to trace those consumption habits while helping current tenants reduce their consumption.

We also want to make sure that landlords and other rental companies can participate in this type of program to help create a healthier and more sustainable Bellingham. We think that it would be good advertising for the companies and could potentially leverage other rental companies into implementing a *Sustainability score* (S-score) on their websites.

## 1.0 Statement of Need

There are a number of reasons why this sort of service is needed for the rental community living in Bellingham. First off, as a college town a large percentage of the community rents either homes or apartments. The most important thing that would come from the S-score is that it will teach renters sustainable actions. Being able to trace their own monthly consumption habits and rates will allow renters to compare their consumption habits to others and to understand how to either lower their bills or raise them. Over time, on the website, there will be a build up of renter history and the consumption rates for their apartment. This will allow for future renters to look up different apartments and houses as well as to look at their own S-score. The current rent price will also be listed on the website as well as the square footage of the space and contact information from the rental agency renting that property.

## 2.0 Project Description

We want to connect renters -especially student renters who attend school in Bellingham- with online resources that allow them to check the sustainability of their dwelling and to submit

information about their personal utility use. We will involve different rental companies around Bellingham, such as Painless Properties and Apex Properties. Under the *Sustainability Score* (S-Score) section of the website, renters can upload their information and landlords can then use this section of the website to see where their rental units fall in relation to other units around the area.

### 2.1 Description

Renters and landlords alike will know and understand what sustainability looks like. Renters will be able to upload information on a website that allows them to track their dwellings sustainability under part of the website. The next group of renters that moves in will have access to this part of the website and will be able to see the information uploaded by the previous tenants. The hope is that from this information, renters will lower their usage of resources, which will directly lower the amount of money that they are paying for their utility bills. Landlords will also be able to look at the information on this website and make decisions regarding their dwellings.

### 2.2 Implementation

Individuals will have access to an online interface that will allow them to access the sustainability scores of dwellings in Bellingham that have participated in the Sustainability Housing Index. It will also allow them to do a search in order to see how sustainable their dwelling might or might not be. On the website, there will also be different information concerning renters usage habits and patterns of electricity and water.

### 2.3 Sustainability Score

Part of the online interface will be titled *Sustainability Score*. There will be two separate S-Scores that are given for a dwelling. The first score that will be given is based off of consumption rates. The more water, electricity, and natural gas that are used the lower the score will be (1 is bad 10 is good). The second part of the score is the community score. The community S-Score is determined by the location of the dwelling. This aspect of the S-Score looks at the proximity to: WTA bus lines, restaurants, grocery stores, parks, recreational

facilities, etc. The community part of the S-Score will be determined by a checklist looking at the distance the aforementioned sites are from the dwelling.

### 3.0 Proposed Budget

Our proposed budget includes the creation of an online interface. This will be a startup interface creation. We plan on partnering with the Computer Science Capstone class where the students have to do a project in order to graduate. These students would help create the website as part of their Capstone project. Having students create the website will allow the project to be maintained by computer science students throughout their time at Western. If we were to start the site as soon as possible, creation of the interface would be the most time consuming aspect. It is very possible that the project could be completed in two to three months.

There will also be website maintenance fees. These fees include things such as bandwidth, hosting, purchasing a domain name, and different amenities and features. A domain name costs around \$10/year. To host a website it's about \$30/year. And for other website fees we estimate another \$10/year.

Incentives will be given for participation which will also have associated costs. We hope to receive small donations of gift cards from local businesses in return for the advertising that they were the company to offer it. If we don't receive any donations we will budget \$60/year for gift card drawings once every three months. All participants that are provide information during this period will be entered to win the drawing.

In order to generate revenue for our project we will use web advertisements. These advertisements will pay for the site maintenance and any student staff necessary. Assuming that we get at least 25-50 users a day, the site could generate ~\$30/month in web advertising income. The total net profit from this project could be ~\$250/year.

### 4.0 Stakeholders

Stakeholders are important to our project because the purpose of the project is to benefit them. We have two main stakeholder groups: rental companies and landlords and renters in Bellingham. The Housing Sustainability Index focuses on helping renters better understand the

different aspects of a dwelling before moving in. It also helps rental companies or landlords demonstrate how environmentally sustainable a building is overall.

#### 4.1 Rental Companies/Landlords

Rental companies and landlords are important stakeholders to our project because we will work very closely with them. In order to better inform potential renters about a dwelling they landlords will give them their S-Score. This score informs renters of unique features about the dwelling as well as the amount of resources it takes to properly run the dwelling. The Renter will know if the dwelling is inefficient before they move in. If a dwelling is efficient, than the rental company or landlord will be able to have a competitive advantage. Having a better S-Score than the competition will bring more potential renters. This sense of transparency is a valuable commodity especially for renters in a college town. A low S-Score will also shame rental companies or landlords into investing more into their properties because they are being held responsible. Many college towns suffer from landlords who have dwellings that are barely livable. The Sustainability Score system will hold them accountable for their buildings and try to make the community a better place.

We have met with a few landlords and rental companies, including Painless Properties. Painless Properties and Sonrise Property Management were supportive of our project but didn't know how to further our project besides wanting our S-Score on their webpage. Bob Dillman, a local landlord, took an interest in our project to the point where he helped develop our project. He was interested in making a site that informs renters and felt that Bellingham would be the perfect place to do so.

#### 4.2 Renters

Renters are also important stakeholders in our project because they are who we are trying to help. The aim of our project is to inform renters about the dwelling before they more in so that they can better understand the dwelling and its consumption of utilities. Renters might be more inclined to rent a cheaper dwelling when they don't know it has high utility consumption versus a dwelling that has higher rent but lower consumption which makes it cheaper overall. Our team wants to inform renters as best as possible in order to allow for them to make the best possible

choice. The rental companies and landlords that have efficient and sustainable buildings should be rewarded rather than passed over because of a higher rent, even though renters will save more money on utility bills.

There are two categories of renters that are involved in our stakeholder group: student renters and general Bellingham renters. The lines of these groups tends to blur at times but we are focusing mainly on students since students tend to be ill informed when it comes to renting. Most students end up living in the first place that they can find in their price range and have little to no information on it, mainly because they don't know what questions to ask. Having an S-Score next to each property on a rental company's website, or by checking our website, would allow for easier access to this important information.

## 5.0 Project RENT

Stefanie Neale, Project Coordinator of Project RENT, was also supportive of our project. She felt that our project was needed in Bellingham and helped get us in contact with interested community members. Stefanie would like to team up Project RENT with our project to better inform renters in Bellingham, mainly students, on how to be more energy efficient.

Project RENT was started by Stefanie to work with the City of Bellingham to win the Georgetown Energy Prize. Winning the Georgetown Energy Prize would give the City of Bellingham a \$5 million grant. This grant is based on reduced energy consumption and becoming a more energy efficient city overall when compared to other cities competing. Currently, Bellingham is in 5th place out of 50 cities. Project RENT works with Western Washington University students to learn better habits about using less energy in their rentals. Many students feel as though they cannot be more energy efficient because they are renting. They don't have much money to do temporary energy efficiency upgrades so Project RENT meets with the students and teaches them better habits. Project RENT offers a free LED lightbulb and low flow shower head by participating, which further reduces energy usage.

## 6.0 Bellingham Energy Prize

The Bellingham Energy Prize focuses on making Bellingham more energy efficient. If Bellingham wins by being the most energy efficient city, they receive a \$5 million grant. Our project, like Project RENT, hopes to help Bellingham to this goal by reducing energy usage and increasing energy efficiency.

The Bellingham Energy Prize Wattzon website allows the users to link their PSE account to their website (as shown below). This allows the Bellingham Energy Prize access to their electricity consumption, which estimates their yearly total. Natural gas usage has to be manual input. The Sustainability Housing Index hopes to use this same strategy for linking Puget Sound Energy electricity consumption and do the same for Cascade Natural Gas consumption to automate the process of tracking residents consumption rates. The resident would input their account information into our site. This would give us access only to the consumption of that utility; we will have measure in place to only allow access to consumption data compiled by the computer and nothing else. This way residents can opt in to automate the process or still be able to manually enter their usage data. Our website would use bar graphs to depict usage rates and how they have changed for that dwelling day-by-day, week-by-week, and month-by-month.

**BELLINGHAM ENERGY PRIZE!**

**Link My Utilities** Securely linking your utilities to your account gives us a clearer idea of how we can help you save.

Do you receive a utility bill for natural gas?

Yes No

Select your electricity utility

Puget Sound Energy Inc  
Other or I don't know

Link Your Utility Account ⓘ  
Puget Sound Energy Inc

JohnDoe  
Utility password

Forgot your Puget Sound Energy Inc username or password?  
Please visit the [Puget Sound Energy Inc website](#)

[Skip this step](#) ▼

Summary

Natural gas bill	No ▶
Electricity Utility	Puget Sound Energy Inc ▶

Confirm and save

POWERED BY **WoltzOn**

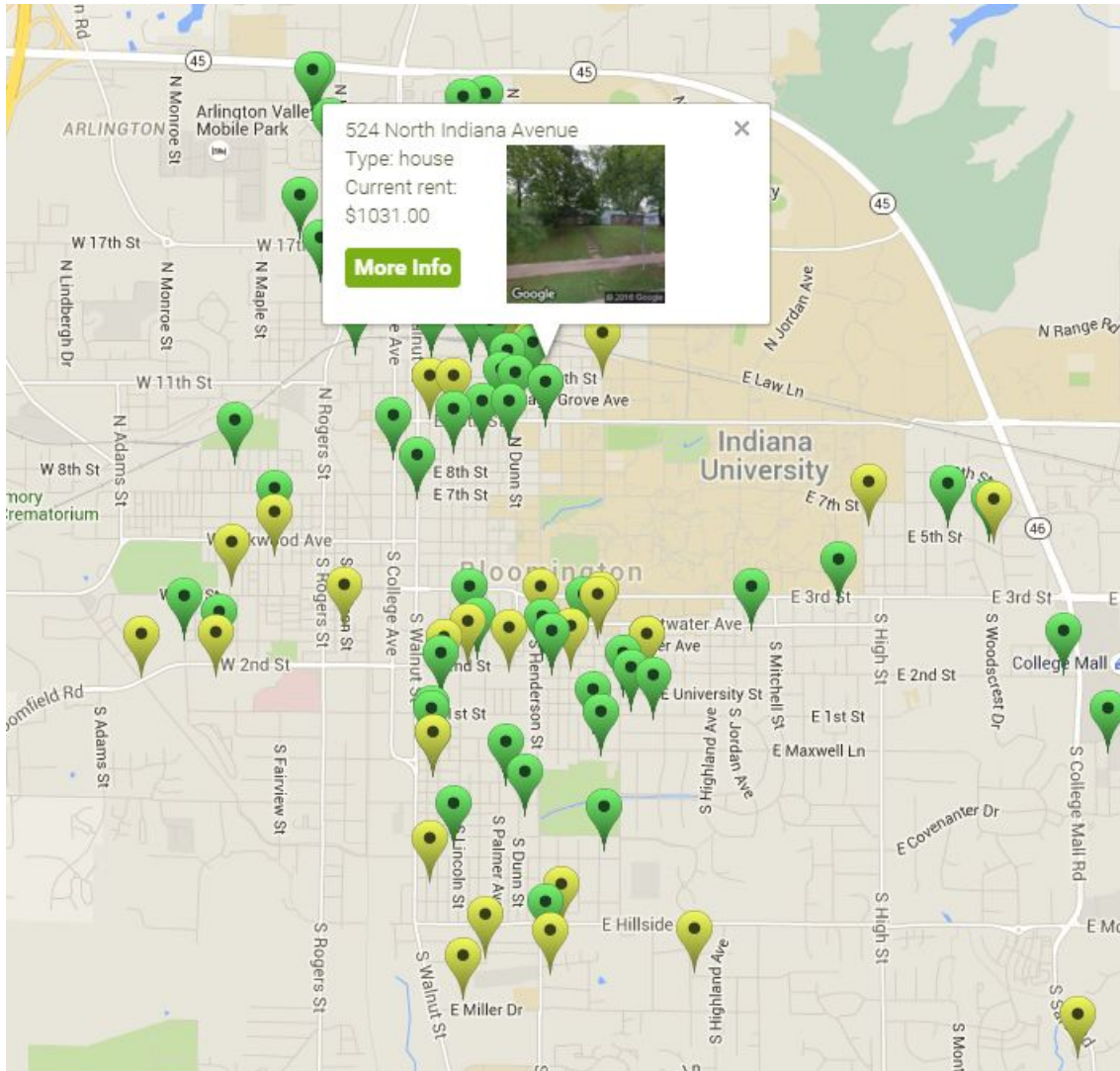
## 6.0 Rent Rocket

Rent Rocket is a website out of Bloomington, IN run by the city government. Currently the site informs renters of rent price, electric bills, electricity bills, and other features of properties. Each property is given a score through Enerscore, which uses building permits, building dates, heating system, etc. to determine the score. Rent Rocket is looking to add Bellingham as the next city for their website. This partnership would be the first step in furthering the information that Bellingham renters have available to them.

At this point in time, Rent Rocket is having financial issues. The site is run by the City of Bloomington government, who lost their IT specialist. This has led to the site being only partially functional.



If Rent Rocket is not able to partner with our project than they can still help us create a similar, but functioning, site. Since Rent Rocket has already gone through the process of data collection and web development, they are a great resource to further our project. Whether Rent Rocket partners with us or helps us develop our own website specifically for Bellingham, they will be a useful resource in progressing with this idea.



524 North Indiana Avenue  
3 Bed / 3 Occupants • 1 Bath • 875 sq ft house

Map Photos StreetView

Smart Living Features	
Recycling	Yes

Amenities	
A/C	No
Laundry	No
Parking	offstreet

Edit This Page	
Utility Data	<a href="#">Upload</a>
Property Details	<a href="#">Update</a>

Costs	
Current Rent	\$1031.00
Electricity	\$55.00 <a href="#">Separate</a>
Natural Gas	\$57.00 <a href="#">Separate</a>
<b>Total</b>	<b>\$1143.00</b> (\$381.00 per BR)

<b>enerscore</b>	<b>Total</b>	\$1479.65
	<b>Electrical</b>	8072 kwh
	<b>Heating</b>	592 therms
	<b>Cooling</b>	88 kwh

Contact	
Agent	Parker Management
Phone	
Email	
Website	<a href="http://parkermgt.com/?s=524+n+indiana&amp;search=Go">http://parkermgt.com/?s=524+n+indiana&amp;search=Go</a>

The first picture above is a snapshot of Rent Rocket’s site in Bloomington, IN. The green pegs show lowest utility consumption and the yellow pegs demonstrate moderate consumption levels. To request more information about a dwelling, all you have to do is click on the peg and “more info” and the second picture would appear. This gives the individual more information about the house including annual averages of electricity and natural gas. Our site would look similar to this but include the two different S-scores, the consumption rates and social amenities score on the “more info” section for a certain dwelling. It would list the consumption of water, natural gas, and electricity. It would also include nearby amenities such as parks, stores, restaurants, and WTA bus lines.

### 7.0 Conclusion

We are proposing to create a website to inform the rental community of Bellingham. The site will log and save consumption of utilities, save money, and make for a more sustainable Bellingham. Rental companies and landlords support our idea of a *Sustainability Score*

(S-Score), they are also supportive of the competitive advantage that it will give to more sustainable units. Our project will allow for better transparency in between rental companies and landlords and the renters. We have the support of renters and rental companies alike along with many individuals in the community that want our project to become reality. Our project could help many renters in the community find the right rental unit for them while promoting the sustainability of that unit.

### 8.0 Sources

(B. Dillman, personal communication, January 11, 2016).

(S. Neal, personal communication, February 10, 2016).

(S. Lindell, Sonrise Property Management, February 17, 2016).

Painless Properties Office

Jacqueline Bauer, Rent Rocket, February 18, 2016

<http://www.energytrans.org/project-rent.html>

<http://www.rentrocket.org/>