TAMING BIGFOOT SEATTLE
Guide to Using the Application
and Reporting Accurate Data

This guide is intended to aid in the completion of the data input for the Taming Bigfoot Seattle competition. It includes the units of measure plus some hints to help team participants accurately record data on the Taming Bigfoot Data Web site or the mobile phone app, Taming Bigfoot.

General Information
Create a Username and Password to use the app. Add your name and team name. Indicate the number of people living in your household.

HOME SECTOR

ENERGY
Various home energy sources are used in Seattle. Most participants just use one or two, but you must record all that apply. For all energy usage report the whole house usage. The app will look at the number of people in the household and calculate the amount attributable to the competitor.

Electricity
Unit: **kWh** (kilowatt hour). Read your electric meter at the start of your first reporting period and again at the end of that period. The end reading will be the start reading for your second reporting period. Subtract the first reading from the second and the result will be the kWh used. For assistance reading your electric meter go here. **Seattle electric meters are being replaced with digital meters. If possible, read your old meter before City Light staff replace it.** If you have solar panels, congratulations – you are using a renewable energy source. While this competition applauds that resource, the calculator recognizes the carbon in grid electricity, including the contribution of your solar panels. Therefore, it is necessary for you to record and report electricity that is consumed in the household.

Natural Gas
Unit: **CCF** (100 cubic feet). Read your gas meter at the start of your first reporting period and again at the end of that period. The end reading will be the start reading for your second reporting period. Subtract the first reading from the second; the result will be the CCF used. Read the dials in the top row and ignore the dials below. Read the dials left to right. If the hand is between two numbers, always select the lower number. When the hand is between "9" and "0," then "9" is considered the lower number. For help, see reading your meter gas meter. If you live in a multi-family unit without a separate gas meter, monitor the building's gas meter and divide the building usage by the number of units in the building for an estimate of your household's usage. If you are not able to access the building's meter, you may leave this field blank.

Heating Oil
Unit: **Gallon**. The simplest method is to record the heating oil tank level on the first and last day. Tank readings are probably in percentages and must be multiplied by storage tank size (in gallons) to calculate usage.

Propane
Unit: **Gallon**. Same to Heating Oil (above).

Wood
Unit: **Cubic feet**. A cord is the most common unit of measure for wood and commonly referred to as a pile of stacked logs 8 feet long by 4 feet wide by 4 feet high. However, it is difficult to estimate wood usage by fractional cord so cubic feet (cu. ft.) is used here. One cord is 128 cubic feet. A reminder that this is for measuring use of wood to add heat inside a household – not any recreational outdoor use.

Wood Pellets
Unit: **Pound**. Use the same container to measure pellets throughout the competition. Calculate the pounds by weighing the container both empty and full and determine the difference.

WATER
For water report the whole house usage. The app will look at the number of people in the household and calculate the value attributable to the competitor.
Unit: **CCF**. Participants connected to municipal water providers are billed according to the number of water *units* they use, or sometimes shown as CCF (100 cubic feet). Reading your water meter might be tricky. Contact your water supplier to find out where your meter is if you don't already know.

The meter will have five or six digits. If it has five digits, record the first three digits and don't worry about the last two digits. For example; the reading might be 76123, record only 761. If it has six digits record the first four digits and don't worry about the last two digits. For assistance reading your water meter go [here](#).

Read your water meter at the start of your first reporting period and again at the end of that period. Subtract the first reading from the second and the result will be the CCF used. The end reading will be the start reading for your second reporting period. If you live in a multi-family unit without a separate water meter, monitor the building's water meter and divide the building usage by the number of units in the building for an estimate of your household's usage. Alternatively, if you know the number of residents in the building divide the number of people in your household by the total number of residents in the building and multiply the result by the building's CCF usage. If you are unable to access the meter, you may leave this field blank.

A **Yes/No** response is entered for assessing the impact of wastewater treatment. "Yes" means there is a connection to the municipal sewer system. The amount of wastewater produced will be assumed to be a fraction of the water input drawn, using average values for the community.

A reminder that the energy use attributed to water is in the conveyance – treating it and pumping it - both potable water and wastewater.

NON-RECYCLED GARBAGE
Unit: **Pound**. This is strictly for what you place in your garbage can or take to the transfer station for landfill. It does not include recycling or yard/food waste collection. Please refer to your bill for the size of your garbage can. The 32-gallon can, when full, contains an average of 25 pounds. If you recycle as much as you can and put food waste into a yard waste container, then the average weight of a full can drops to 18 pounds. The mini-can service level is a 20-gallon can. The average is 15 pounds when full and 9 pounds when offset by avid recycling and food waste diversion.
However, we encourage you to weigh your own garbage for accuracy.

TRANSPORTATION SECTOR

TRANSPORTATION (Both Personal and Business travel)

Gasoline, Diesel, and Biodiesel
Unit: **Gallon**. This category covers all vehicles (cars, trucks, motorcycles, boats, ATVs, *even lawn maintenance equipment*) for which you buy the fuel (either gasoline, diesel, or biodiesel) or you have knowledge of how much fuel was purchased. Monitoring fuel usage directly is a more accurate means of quantifying emissions than monitoring miles traveled because fuel economy varies significantly between seemingly identical vehicles (make, model, year, etc.) due to factors such as tire inflation, engine condition, and driving style. ***During the competition it will be most accurate to measure fuel use by filling up at the beginnings and ends of the recording periods.*** For shared travel it will be important to keep track of the actual proportion of transportation associated with the individual participant. If two participants share a vehicle, each participant should record the share of fuel used in proportion to the miles each participant traveled.

PUBLIC/SHARED TRANSPORTATION
Unit: **Mile**. This category refers to ride sharing when the vehicle is not owned by you or when actual fuel use cannot be monitored. In these cases, monitoring mileage traveled becomes the next best method of estimating emissions.

Carpooling (Applies only if you are a passenger in the carpool.)
Unit: **Mile**. When you record the number of miles travelled and the number of people in the carpool, the app will calculate the miles attributable to you. If you provide an estimated mpg for the vehicle the app will adjust the carbon in proportion to the mpg reported and the app assumed 25 mpg. If your use of carpools varies during any month report each separately; the app will add up the rides for the reporting month.

Business vans/shuttle - Same as carpooling.

Buses, Urban Light Rail, and Trains
Unit: **Mile**. For bus and train transportation the number of passengers changes frequently, so we use the total fuel used for each service in a year divided by the total passenger-miles traveled. You only need to calculate the total number of miles traveled.

Ferry
Similar to bus, WSDOT has provided a carbon usage per passenger-mile and therefore you only need to calculate the total miles traveled. Measure the distance of your trip on a map or google it.

Airplane
Unit: **Mile**. Airplane travel can dramatically increase one's carbon footprint. There are dozens of variables that influence the emissions so an average value is assumed and for simplicity you just calculate the miles traveled.

Offsets
Although the app includes an item to track offsets, the Seattle Taming Bigfoot competition does not include offsets. The Seattle version of the app will not accept entries in this field. Offsets, such as investments in renewable energy facilities, are very important. Tree planting can help offset carbon emissions. However, some offset programs give you an opportunity to offset your carbon emissions by supporting tree-planting projects with contracts that end in 30 years, while carbon dioxide emissions can affect the climate for 1,000 years. We encourage use of valid offsets but restrict the competition to efforts to reduce carbon emissions.

FOOD AND SHOPPING SECTOR

FOOD

Meat
Unit: **Number of 4 oz. servings of:**
   a)   beef and lamb   b. pork and turkey   c) chicken and fish

Local Source
Unit: **percentage** (*e.g.*, input 50, not 0.5, for 50%) of total dollar amount paid for food that was purchased originating from local sources, which for our purposes is within Washington, Oregon, or British Columbia. Take your grocery receipt, subtract everything that is not something to eat. What is left is your total food bill. Figure out which things are local (OR, WA, BC) and calculate the local amount as a percent of your total food bill. If you are not able to determine whether a grocery item is local or not local, exclude it from your percentage calculation.

% local = _____$ of groceries that are local_____   times 100   _____
           ($ of local groceries + $ of non-local groceries)

Organic fruits and vegetables
Unit: **percentage** (*e.g.*, input 50, not 0.5, for 50%) of purchased fruits and vegetables that are grown organically. Using the receipt, add up everything that is produce. Figure out which produce is organic, and calculate or estimate organic produce as a percent of the all produce you purchased. If you are not able to determine whether a produce item is organic or not organic, exclude it from your percentage calculation.

% organic = _____$ of organic produce_____   times 100   _____
            ($ of organic produce + $ of non-organic produce)

SHOPPING
It is very difficult to quantify carbon footprint contributions from shopping behavior because there is so much variation in the manufacture of similar products themselves and the energy used to make, package, and transport them to point of purchase. Online shopping has become more popular, but your savings in transportation is less than the increased carbon footprint in packaging materials. Two categories were selected to be tracked in the competition.

Clothing
Unit: **Dollars** spent on clothing that is new-to-you.

Paper reading material
Unit: **Dollars spent** on newspapers, magazines, and books in paper (not electronic) form.