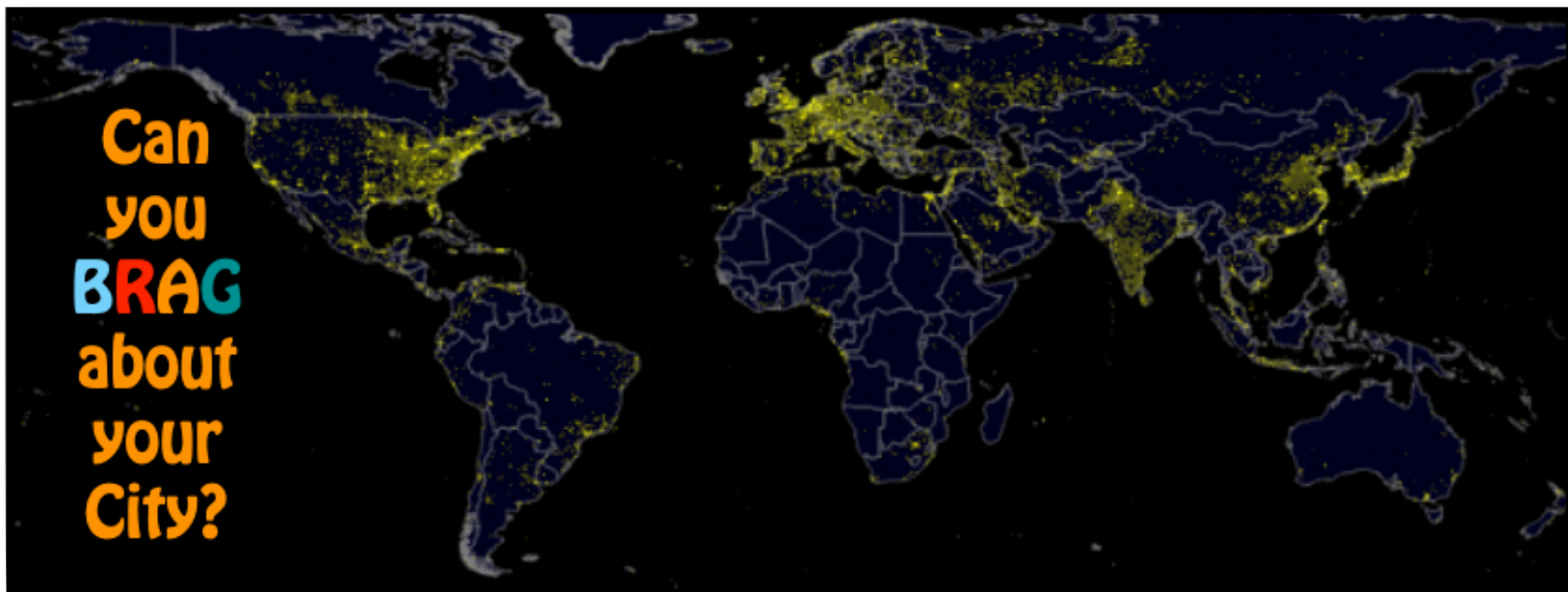


BRAG City RF Project

How to take measurements for this project

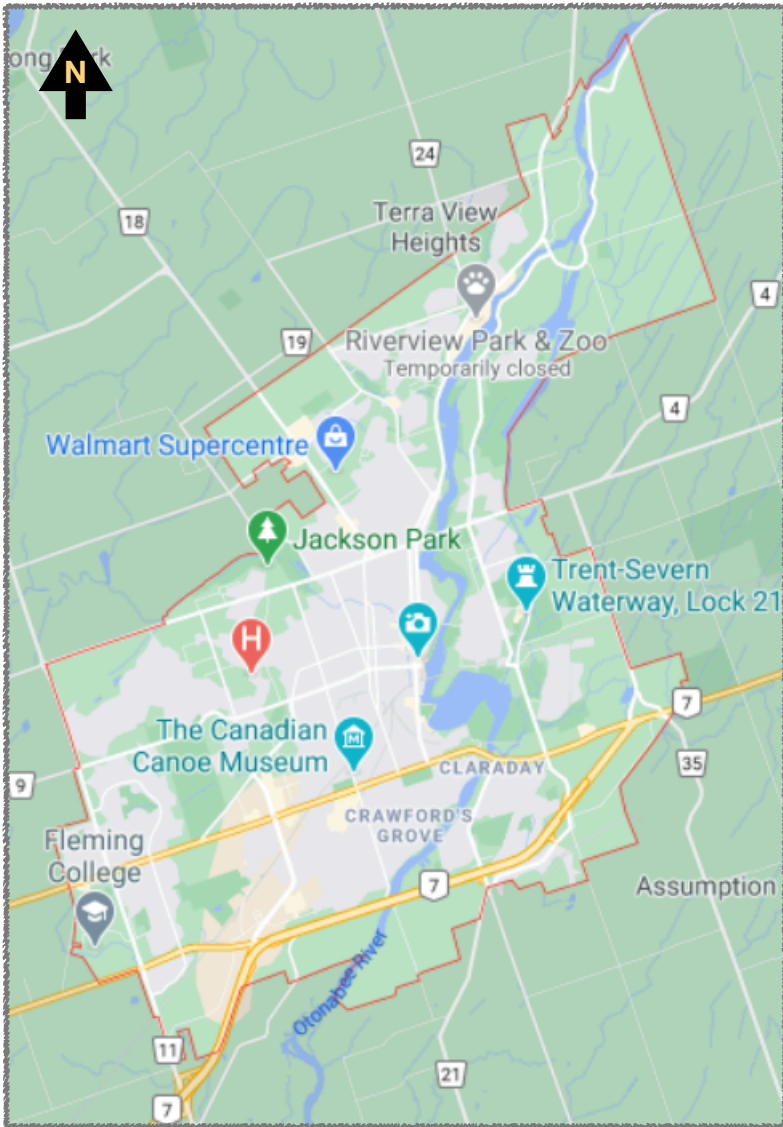


Magda Havas, March 2021, BRAG.city.RF@gmail.com

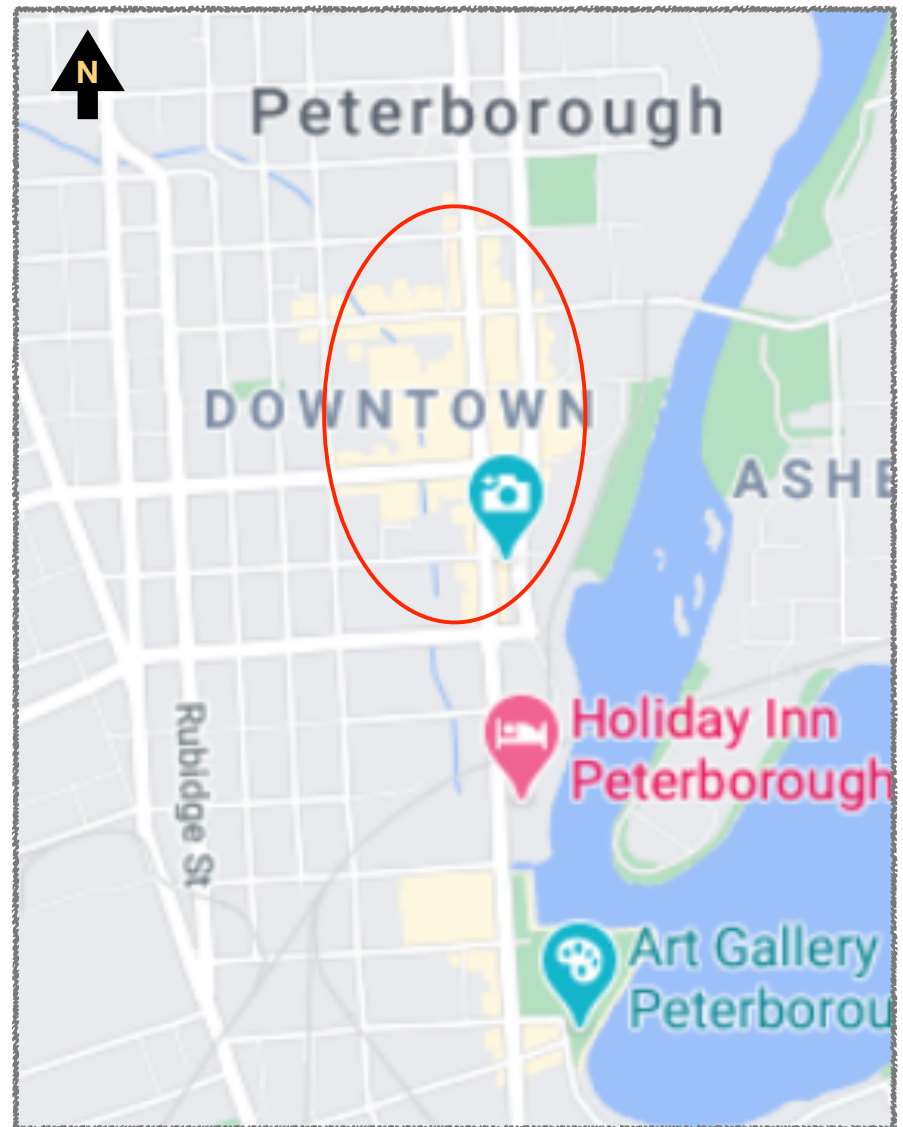
Step #1: Select a City to monitor

Step #2: Identify “north”

Step #3: Locate the downtown core where there are restaurants, shops, & pedestrian traffic. In other words, select a street where people spend time shopping/socializing.



City of Peterborough (used as an example)



Downtown core Peterborough

Step #4: Select a **Main Street** that has at least 4 or 5 intersections. Smaller towns won't have 5 intersections along one street so you can do a cross with two main streets, one running east/west and the other running north/south. The important point is to be able to return to the same intersections for repeat measurements at a later date.



Main Street = George Street

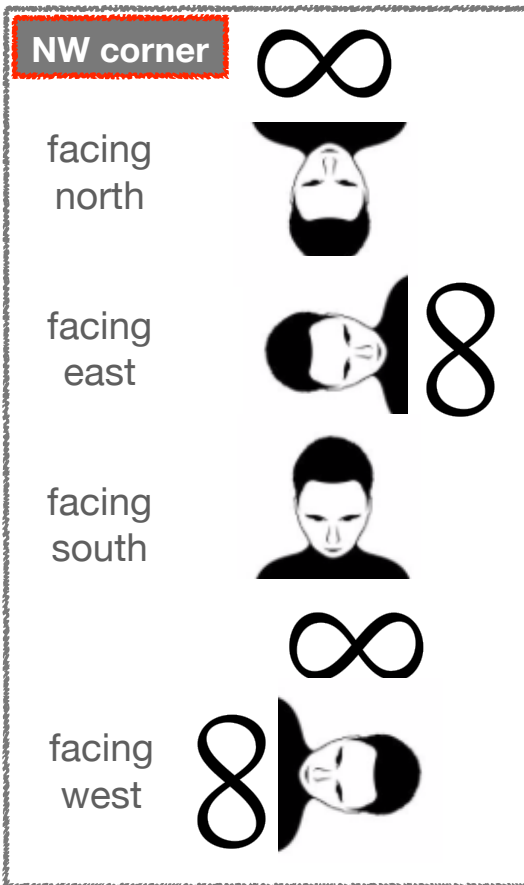
The most efficient way to do this is to start at **intersection 1** and measure two corners. In this case it would be SW and NW corners and then walk to **intersection 2** and repeat the same corners. Do this until you get to **intersection 5** at which point you will cross the street to the other side and repeat the measurements on the NE and SE corner for intersection 5, 4, 3, 2, 1 by which time you will be back at your starting point.

Remember to record both **start time and end time** on the form provided.

If you are monitoring more than one city, please **print a copy of the form for each city.**

Step #5: At each corner **reset the maximum button** for S&S Pro II or turn the meter off and on if you have S&S Pro I **just before each reading.**

Step #6: At each corner you will perform the **figure 8** with the meter **3 times** while facing in each of the **4 cardinal directions:** N, E, S, W. This will take about 15 seconds.



The reason for facing different directions is to minimize your body blocking any sources.

The figure 8 helps to capture all sources of RFR.

This is the reading you will enter on the data sheet provided for both **average** and **maximum** at that corner.

Global RF Monitoring Project #1: Please return to: BRAG.city.RF@gmail.com
Can you BRAG about your City? Starting Date: April 2021; Ending date: TBD

Name (Citizen Scientist) Email Country State/Province City Population of City Date of Measurements Start Time End Time Duration of testing (minutes) Temperature (centigrade) Precipitation? (yes/no)		REMINDERS	
Main Street		<p>NOTE: "average" value changes constantly. Record the highest average reading at each corner.</p> <ul style="list-style-type: none"> • turn cell phone OFF • no fitbit, smart watch • no wireless headphones • stay 2 m away from objects • reset Max before each reading • measure all 4 directions (N,S,E,W) at corners <p>EQUIPMENT needed:</p> <ul style="list-style-type: none"> • S&S meter • clip board • this sheet • pencil • compass • thermometer • extra AA batteries 	
units	Corner	$\mu\text{W}/\text{m}^2$ average	$\mu\text{W}/\text{m}^2$ max
Intersection 1 Street Name:	NW SW SE NE	XXX	XXX
Intersection 2 Street Name:	NE NW SW SE		
Intersection 3 Street Name:	NE NW SW SE		
Intersection 4 Street Name:	NE NW SW SE		
Intersection 5 Street Name:	NE NW SW SE		
COMMENTS			

Note: fill in white space on this sheet.

You will receive this form in a printable format

This should be fairly straight forward

insert Name of Main Street

insert Name of each intersection

Step 7: You will then be asked to transfer your values to a **google form** for which you will receive a **link**.

All of this for one city should take less than 2 hours.

If you are unable to use a computer because of sensitivity, please ask a friend for help.

Global RF Monitoring Project #1: Please return to: BRAG.city.RF@gmail.com							
Can you BRAG about your City? Starting Date: April 2021; Ending date: TBD							
Name (Citizen Scientist)		REMINDERS					
Email		<ul style="list-style-type: none"> • turn cell phone OFF • no fitbit, smart watch • no wireless headphones • stay 2 m away from objects • reset Max before each reading • measure all 4 directions (N,S,E,W) at corners EQUIPMENT needed: <ul style="list-style-type: none"> • S&S meter • clip board • this sheet • pencil • compass • thermometer • extra AA batteries 					
Country							
State/Province							
City							
Population of City							
Date of Measurements							
Start Time							
End Time							
Duration of testing (minutes)							
Temperature (centigrade)							
Precipitation? (yes/no)							
Main Street	other?						
	units				$\mu\text{W}/\text{m}^2$ average	$\mu\text{W}/\text{m}^2$ max	COMMENTS
Intersection 1	NW						
Street Name:	SW						
	SE						
	NE						
Intersection 2	NE						
Street Name:	NW						
	SW						
	SE						
Intersection 3	NE						
Street Name:	NW						
	SW						
	SE						
Intersection 4	NE						
Street Name:	NW						
	SW						
	SE						
Intersection 5	NE						
Street Name:	NW						
	SW						
	SE						

Note: fill in white space on this sheet.