



United Nations Sustainable Development Goals Open Pedagogy Fellowship

Making Cities Resilient: Understanding risk to our city using the Sendai Framework for Disaster Risk Reduction (SFDRR)

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2021-2022

Introduction:

You are a part of a collegewide effort to increase access to education and empower students through "open pedagogy." Open pedagogy is a "free access" educational practice that places you - the student - at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Geography and Anthropology to achieve SDG #11: Sustainable Cities and Communities 11.5; 11.b 11.5; 11.b

Learning Objectives:

- To become aware of the variety of risks facing cities today, in particular in the City of Vancouver (Washington, DC).
- To understand that risk is increasingly systemic (relating to a system).
- To appreciate the collaborative nature of risk reduction: working cross-sectors, between and within institutions, and ensuring harmony from policy through to activity.
- To familiarize with Sendai Framework for Risk Reduction
- To understand that in order to be sustainable, development must be risk informed
- To apply the SFRR and utilize the QRE (Quick Risk Estimation) tool to inform risk at the municipal/local level.

Purpose/Rationale:

This exercise will allow students to fully appreciate the risks facing their city and at what level citizens are or are not prepared for the risk. This knowledge will prove useful when analyzing risk at the local level and how risk mitigation is integral to developing cities that are both resilient and sustainable.

“Disaster risk reduction (DRR) is an integral part of social and economic development and is essential if development is to be sustainable for the future. The 2030 Agenda for Sustainable Development recognizes and reaffirms the urgent need to reduce the risk of disasters.” - UNDRR

“A resilient city is one that is able to reduce, resist, absorb, accommodate, and recover from the impacts of hazards in a prompt and efficient manner, by preserving and restoring essential basic structures and services.” – UNDRR

Instructions:

You have been hired by the City of Vancouver (DC gov) to make key recommendations to their current disaster response plans. In order to better understand the risks, you will have the opportunity to research, analyze and assess UN related disaster policy and apply it to Vancouver/DC.

Step one, familiarize yourself with the Sendai Framework by exploring the related website here (approx. 20-30 mins): <https://www.undrr.org/implementing-sendai-framework/what-sendai-framework>

You will also find useful information from the 10 essential tools for Resilient Cities:

<https://www.unisdr.org/campaign/resilientcities/toolkit/article/the-ten-essentials-for-making-cities-resilient>

Step two, download the QRE (Quick Risk Estimation) tool here:

<https://www.unisdr.org/campaign/resilientcities/toolkit/article/quick-risk-estimation-qre>

Using your own city (Vancouver or DC) for analysis, go through the instruction as described in the QRE (approx. 1.5-2 hours).

Whether you have lived in Vancouver or DC your whole life or just arrived to the city from elsewhere, the following websites provide detailed information regarding the city’s disaster plans and will prove helpful when filling out the comments and justification column for your responses. You’ll need to make educated guesses in regard to the vulnerability ratings and the current level of response measures. Do your best to explain your scores in the comments an justification column.

The purpose of completing the QRE is to provide you a broad overview of the all the potential risks that are faced by the City of Vancouver/DC. You do not need to research extensively but you do need to familiarize yourself with the city’s plans for certain risks and how they plan to mitigate them.

City of Vancouver

<https://vancouver.ca/home-property-development/prepare-for-other-disasters.aspx>

DC

<https://ready.dc.gov/>

Step three, once complete, save the QRE. Use the Data Scores, Risk Summary, and Vulnerability Report to respond to the following questions.

1. Based on your analysis, what risks are highest on the risk matrix output? What are the top three risk scenarios most likely to occur in Vancouver/DC?
2. How prepared is the city when it comes to these three scenarios?
3. What trends emerged as you were writing the responses to the comments and justifications section? For example, did the city seem equally prepared for all risks? How were they the same, how did they differ?
4. Why is it important to know this type of information? How can it be useful for cities and for governments?
5. If you had to implement 3 of the 10 Essentials for Making Cities Resilient, which ones should Vancouver start with?
<https://www.unisdr.org/campaign/resilientcities/toolkit/article/the-ten-essentials-for-making-cities-resilient>
6. Why is it important for cities to adopt Sendai Framework and how might that look for Vancouver/DC?
7. Do you think tools like the QRE are useful for cities in the context of sustainability? Was there anything not found in the tool that you think would have been helpful for better understanding risk?
8. What is the connection between risk assessment and sustainability in the context of cities?
9. How has this exercise helped your own understanding of risk in Vancouver/DC?

Format Requirements:

Please submit your saved QRE as an excel doc., including your responses to the questions above.

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