Accessible







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What is it?

AQI-Accessible stations are mobile structures that monitor and display air quality data in an understandable and readily available format for the people of Montreal. Each station not only measures surrounding air quality but also serves as a collection point for user generated data through the use of feedback surveys pertaining to subjects such as the environment and health. Prompted as a redesign of the existing air quality stations in Montreal, which are in obscure areas and aesthetically ambiguous in their function, AQI-Accessible stations are meant to communicate their function through their design and be placed in public spaces to encourage interaction from citizens.

How it works

The City of Montreal measures air quality in the form of a numerical value called the "Air Quality Index" (AQI). AQI-Accessible stations are designed to illuminate a specific colour corresponding to the hourly updated AQI calculation from the station - serving as a real time representation of the surrounding air quality. AQI-Accessible stations also display other information via a touch screen such as an air pollution heat map of Montreal and additional information about the specific air pollutants such as carbon monoxide, sulfur dioxide, nitrogen dioxide, Tropospheric ozone and particulate matter that make up the AQI.

Why is it needed?

Air pollutants can directly affect people's health and in cities there is a larger risk of poor air quality. Existing air quality stations collect important data but do not implement it in a way where people can easily interact with it. AQI-Accessible stations are intended to not only educate the people about data which is collected by the city but also encourage active participation in data collection. Additionally, an overall increase in the number of air quality stations in areas that are heavily populated such as downtown or in areas surrounded by plant life such as parks, would result in a more detailed and versatile data set. Further, the mobility function of AQI-Accessible stations would allow for "snapshots" of specific events that take place in Montreal e.g. protests, festivals, sporting events.

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