Thank you Chair Sollman and members of the committee for allowing me to speak here today in support of SB 726. I am Mason Leavitt; my background is in Geographic Information Systems or GIS. I represent Beyond Toxics, an environmental justice advocacy organization working to build community driven leadership across the state of Oregon, where we envision a just society where everyone has access to clean air, water, and healthy food.

Other testimonies today by Industrious Labs, Carbon Mapper, and Rocky Mountain Institute have emphasized the capacities of advanced methane monitoring technologies to reduce leaks of landfill gas, which includes methane and many toxic airborne pollutants that escape with it. In addition to the climate benefits, reducing these leaks also improves the local air quality for residents near landfills across the state and reduces fire hazards from explosive or flammable concentrations of methane.

My focus is on one very important aspect of SB 726 -- its requirements to improve data transparency. As a GIS technician, my job is to examine data in a mapped format, and on occasion to design maps that enable us to see the full picture of interacting data components. Maps can be wonderful guides. They show us where things are in relation to one another, they can show us what data is most important, and they allow us to put all kinds of information into one environment to look at holistically.

SB 726 would require landfill operators to evaluate, analyze, and share more data on methane monitoring. It specifically requires that data to be viewable in a Geographic information systems software, which will be easier to view and interpret thus saving DEQ staff time.

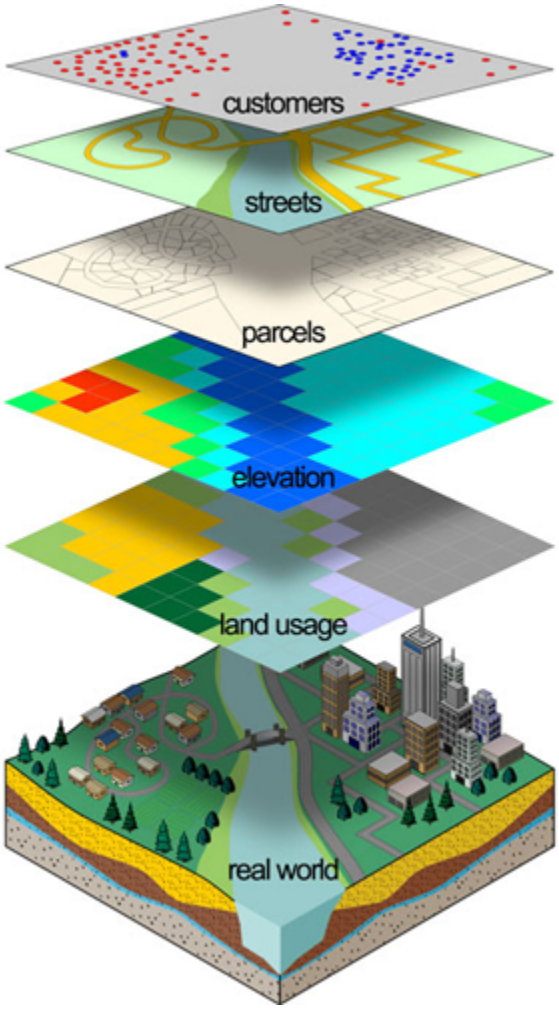
Allow me to highlight one example where this would allow the Department of Environmental Quality to better monitor existing landfill gas rules.

In Oregon, landfill operators are required to walk in paths no more than 25 feet apart over the entire landfill a given year. The primary way operators do this is by walking every 100 feet every quarter, and then offsetting that path by 25 feet each quarter. By the end of the year, the landfill operator will have walked every 25 feet of the entire landfill surface.

As the law currently stands, operators do not have to report any data on the paths they walked. This means DEQ has no way to verify operators followed the 25 foot rule or provide assistance to operators looking to do so.

This is like trying to use google or apple maps, but without any street information for orientation. In order for a map to be useful, we need to have all of the information present.

In order for DEQ to ensure an operator has monitored every 25 feet over a given year, they need to have data showing where operators have monitored.



Lafayette County, Wisconsin GIS

SB 726 requires that current data on surface emissions monitoring, and new advanced methane monitoring technology is reported in what is called a shapefile or GEOJSON file. These are like PDFs, PNGs, or JPEGs, but for mapping software. Operators already have this data, they just aren't required to report it. In addition to this data being useful for DEQ to verify compliance with existing rules, DEQ could use data generated from advanced methane monitoring technology to get a fuller picture of landfill methane monitoring.

Our navigation mapping software combines roads, buildings, street names, traffic lights, and navigational directions allowing us to understand where we are and how we are traveling in space. SB 726 allows the same for landfills.

By combining data from satellites, drones, human-based walking surface emissions monitoring, and landfill gas collection infrastructure, we get a methane map of landfills. Each of these components allow landfill operators and DEQ staff to understand where methane leaks are occurring, why those leaks are occurring, and what needs to be done to fix them and send that escaping methane into a gas collection system to generate energy. Right now, the state does not have any of this information. We are driving blind! SB 726 gives us the data we need to map a route to a more stable climate, safer air quality, and reduced fire hazards from landfills.