

WGBH - Beach Equity	
Contact	<p>Chris Burrell</p> <p>Investigative Reporter</p> <p>617-300-2670</p> <p><a href="mailto:christopher_burrell@wgbh.org">christopher_burrell@wgbh.org</a></p>
Organization	WGBH
Organization Description	WGBH enriches people's lives through programs and services that educate, inspire, and entertain, fostering citizenship and culture, the joy of learning, and the power of diverse perspectives.
Project Type	Data Science
Project Description	<p>Our goal is to have a relational database using the government data sources below which map and identify more than 500 ocean beaches in Massachusetts</p> <p>We are specifically interested in quantifying beach lengths (in miles) and their ownership classifications. The EPA site only shows if they are public or private while the state site breaks them down by federal, state, municipal and nonprofit ownership status.</p> <p>This data analysis will inform a story that will explore multiple barriers to beach access in Massachusetts, especially for urban residents. Many public (state/federal-owned beaches) have limited capacity and nearly all town-owned beaches are off-limits to anyone but residents. Then there's pollution (fecal) that can often close down a beach.</p>
Data Sets & Sources	<p><a href="https://mass-eoea.maps.arcgis.com/apps/MapSeries/index.html?appid=35ba833bdc704d49b71a71c511224eb6">https://mass-eoea.maps.arcgis.com/apps/MapSeries/index.html?appid=35ba833bdc704d49b71a71c511224eb6</a></p> <p><a href="https://watersgeo.epa.gov/beacon2/">https://watersgeo.epa.gov/beacon2/</a></p>

Suggested Steps	<ul style="list-style-type: none"> <li>● Collect/Scrape data from Datasets/Sources, save as shapefile/geojson</li> <li>● Use geopandas/shapely to inspect beach polygons/multipolygons to calculate beach lengths</li> <li>● Look into owner classifications and standardize owner names</li> <li>● Save data into a hosted relational database (Client to provide/We host?)</li> <li>● Display on static or interactive (Tableau) maps.</li> </ul>
Questions to be answered in Analysis	<p>One of our main questions is:</p> <p>How many miles of MA shoreline are open to all members of the public?</p> <p>And how many miles are only quasi-public – accessible mainly to residents of coastal towns?</p>
Ideal Output + Final Deliverable	A relational database with headings/fields for beach name _ city/town _ ownership status _ length in miles _ notes
Additional Information	<i>Client to paste in a couple links that have served as useful background in initial reporting</i>