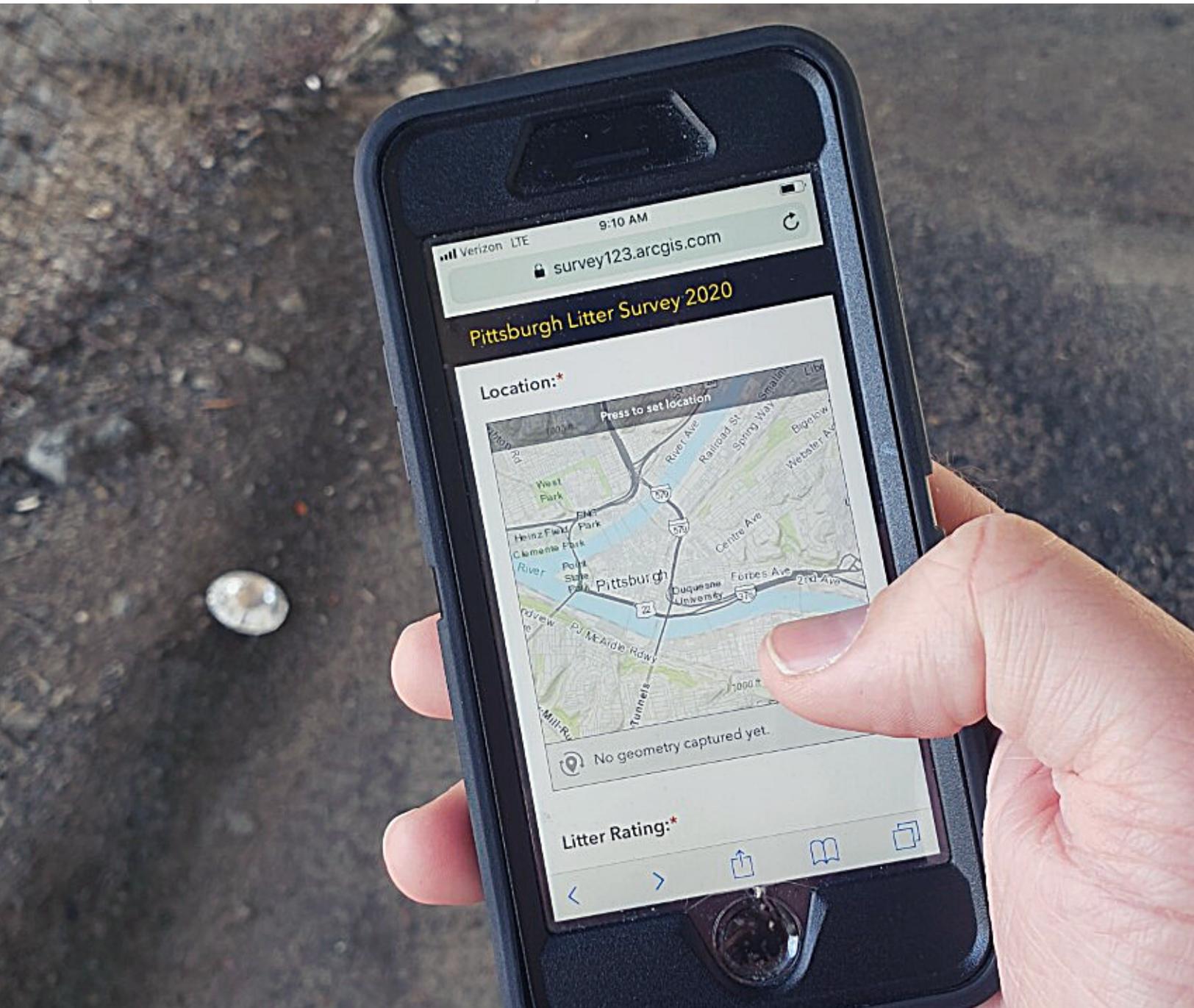
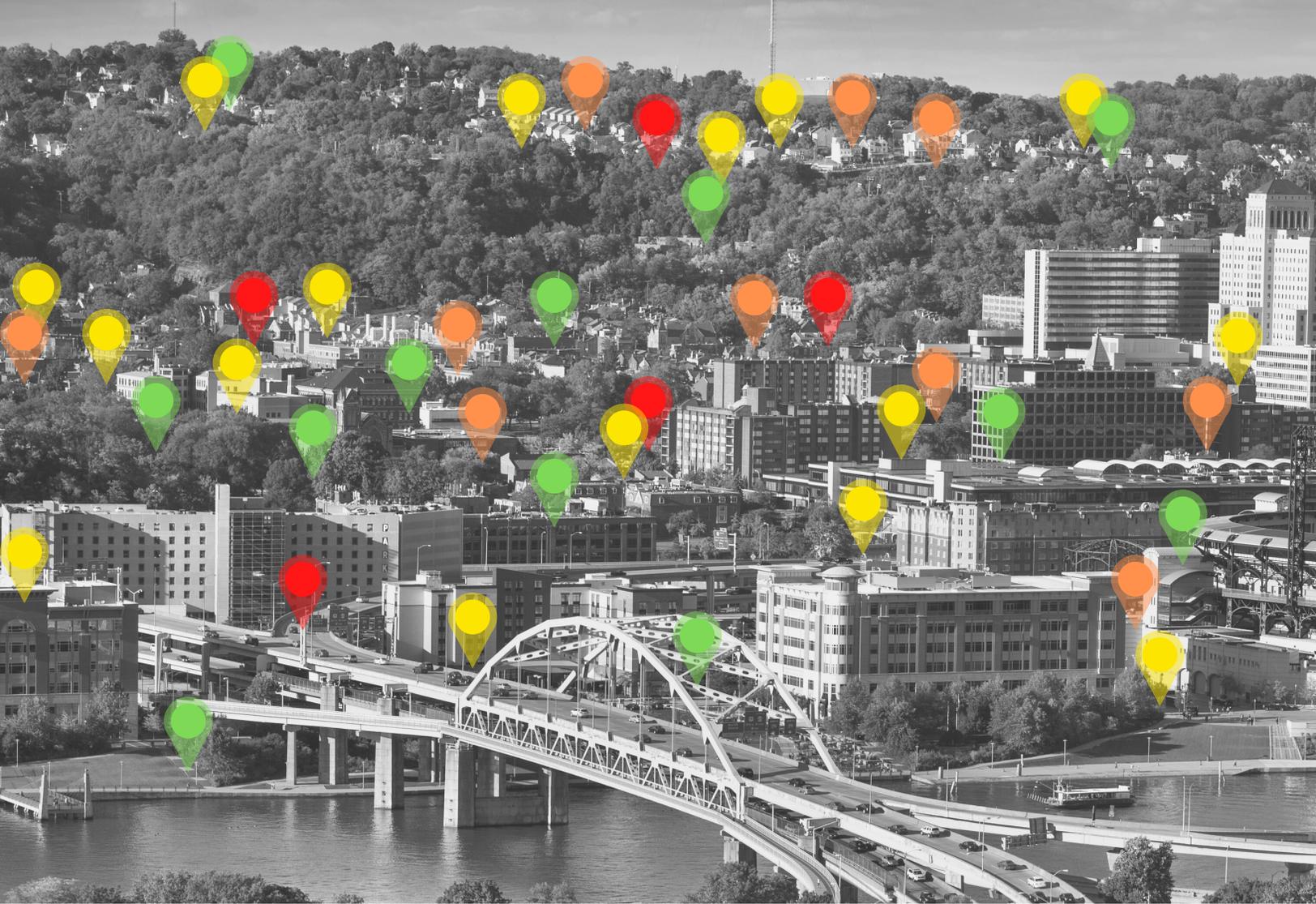




2020 LITTER INDEX PILOT REPORT

Wave 1





OVERVIEW

A Litter Index is a survey based tool to help quantify just how littered an area is by giving an objective measurement. This information shows where litter is most concentrated, giving the City of Pittsburgh areas of focus to improve, as well as providing a benchmark score to work towards lowering.

The Pittsburgh Litter Index pilot program took inspiration from Philadelphia's approach in mapping out the city's litter density. The pilot was conducted in Pittsburgh's North Side, and recorded using an application made by the City of Pittsburgh's Department of Innovation and Performance with the Department of Public Works' Anti-Litter Specialist.

PILOT OBJECTIVE

Indexing the entire City will require a full team of surveyors, but for our pilot we used a single surveyor to measure things like how many manhours per miles this work will require, the best methods of recording, field testing our webapp, and making the case for future yearly indexing.



METHODOLOGY



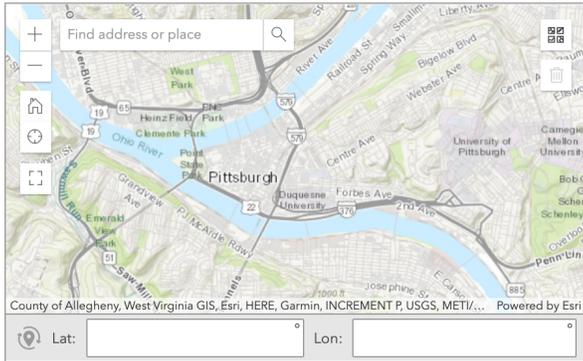
Streets were rated by visual assessment of surveyor. Streets were broken up by **SEGMENT**. This means that a long road, such as Perrysville Ave, would be broken in smaller sections by every intersection. So instead of Perrysville Ave be rated as a whole, it would be Perrysville Ave from N Charles St to Kenwood Ave. This ensured fair ratings between long and short streets.

Each street segment was given a 1 - 4 rating based on how much litter was found, based on the Keep American Beautiful metric.

This information was entered into the webapp, along with optional additional information such as number of tires, television or bulk items found. Surveyor could also submit dump sites found into the 311 system, straight from the webapp.

Pittsburgh Litter Survey 2020

Location:*



Litter Rating:*

1. Little to no litter

2. Litter in the amount that can be collected by single person

3. Litter in the amount that would require collection by a team

4. Litter in the amount that would require collection by a large team of people and/or heavy machinery

The webapp was developed by the City of Pittsburgh's Department of Innovation and Performance, utilizing ArcGIS Survey123 technology.

INPUT

To gain the final results of the pilot:

2,039

DATA ENTRIES

43

HOURS

420

MILES

1

SURVEYOR



FINAL RESULTS AND RATING

Averaging all of the data points yielded an overall final rating of

2.02



Over 3/4ths of the streets in the North Side have at least a moderate amount of litter

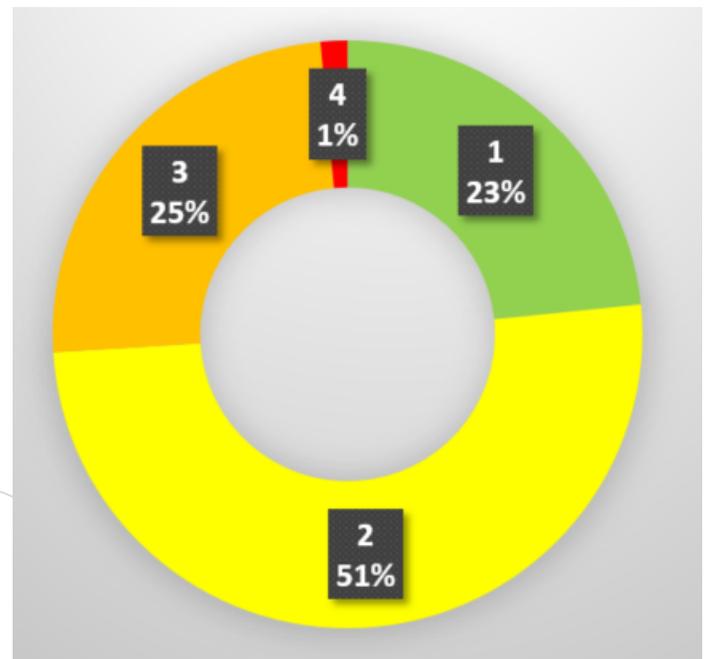


Of those littered streets, 1/3rd is so heavily littered that it would require a team to clean



Just over 1% warranted a 4 rating, but that means there were 30 locations that were either illegal dumping locations, or so much litter accumulation that it would require heavy machinery

A rating of **2.02** may seem like "2 out of 4, only half way littered!" But when this rating is parse out to show just how much of our streets are covered in litter, we can see how extensive and widespread this problem is.



EXPANDING THE INDEX

The results of the Litter Index pilot was successful in making the case within City administration that this program is worth expanding city-wide. While it is too late into 2020 to do full coverage before winter, the pilot is continuing with a second wave of neighborhoods in the Western quadrant of Pittsburgh, including Sheraden, Crafton Hieghts, and Westwood.

The Department of Public Works is exploring how to best perform this yearly indexing of every street in Pittsburgh, and finding ways to gain more data as we survey as well.

DATA TO INFORM ACTION

Taking in data through the survey allows us to view the problems through an overhead lens. The only way to recognize patterns in whose needs are not getting met is to continuously collect objective information. For example, 311 request maps do not show where problems are, but rather where people are who are likely to report a problem. By knowing about conditions we aren't expressly told about by the public, we can transition from **REACTIVE** to **PROACTIVE**.

