



Curb the Violations

Effectively communicating with residents about curbside waste violations using automatically generated postcards

Challenge - curbside violations

Responsive, tailored educational postcard to residents who don't set out properly

On occasion, residents don't set out their curbside trash or recycling correctly:

- trash carts may be placed too close to objects like telephone poles or cars
- trash may overflow out of the cart
- recycling carts may contain material that is not recyclable.

These missteps slow collection and can create unsafe or unsanitary conditions. Unfortunately, notification of these mistakes may be inconsistent, delayed, or confusing.





Our solution for generating postcards

- Postcard automatically created for addresses that had violations
- Can filter by number of violations
- Postcard notes the date and type of violation, and has optional comments from pick-up crew
- Handles edge cases of too many violations to fit on a card and empty violations records
- Generates a single PDF containing all postcards from LaTeX
- Has URL and QR code for site giving guidelines for putting out trash



Example of Generated Postcards

Dear City of Knoxville resident,

We had the following problems collecting your trash:

- 2018-01-11 Your trash was not out.
- 2018-01-12 Your trash was not out.
- 2018-12-24 Your trash was not out.
- 2018-12-25 Your trash was overflowing making it difficult to pick-up.

We have the following notes regarding removing your trash:

- 2018-12-24 2 CITY TOTERS, REFILLED THE CANS ALSO
- 2018-12-25 TOILET

Cordially,

Knoxville Solid Waste Management

http://knoxvilletn.gov/government/city_departments_offices/public_service/solid_waste



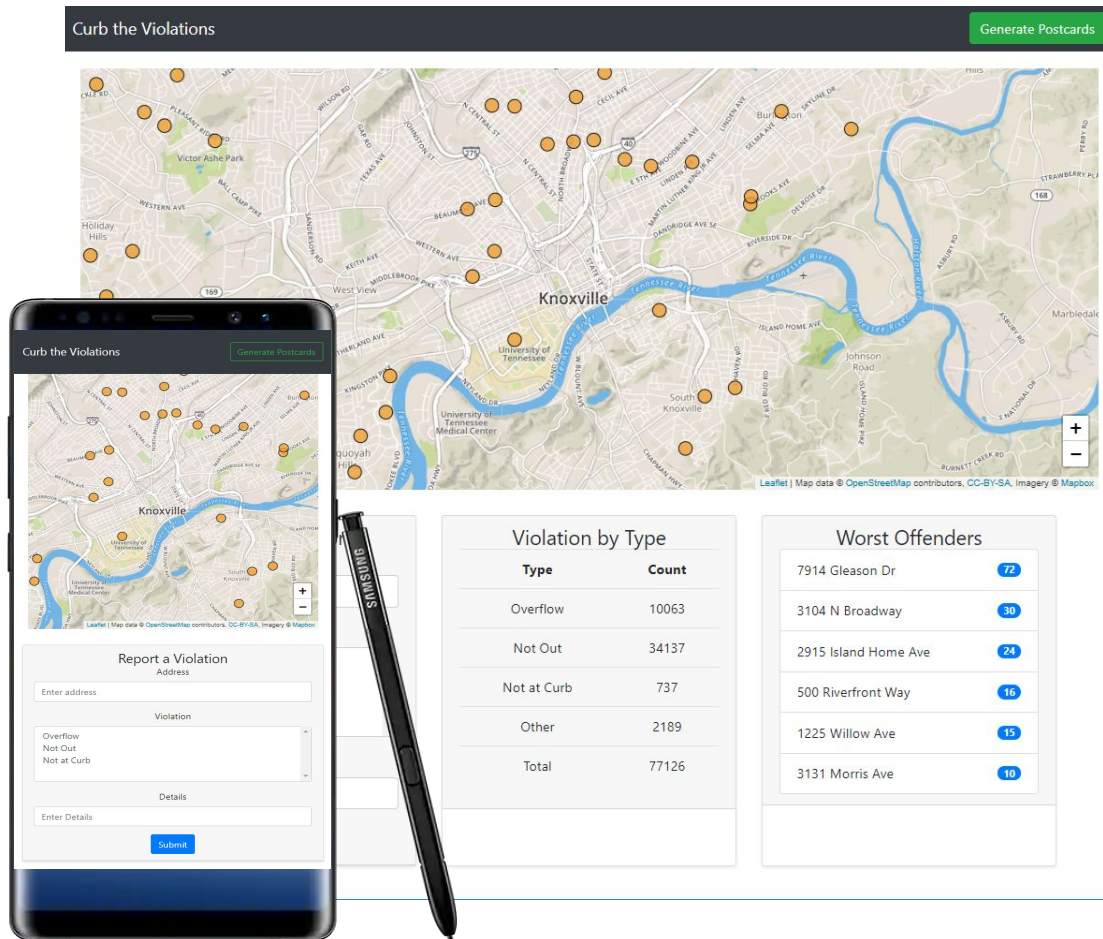
CITY OF KNOXVILLE
MADELINE ROGERO, MAYOR

Knoxville Solid Waste Management
400 Main St., Room 470
Knoxville, TN 37902

Resident
7914 GLEASON DR
Knoxville, TN 37902

Dashboard

- For internal department use
- Summaries and map of violations
- Form to enter a new violation
- Responsive design





Design Principles

- Open source
- Microservices
- Containers

Architecture

