1. <https://app.powerbi.com/view?r=eyJrIjoiMDBjNTQ2MGYtNjdiNy00NTc4LTk1ZGQtOGNkMTAwNjVhMWFmIiwidCI6ImFmZjM2MzMxLTNlNWUtNDdlOC1hZjkzLTE4NTFkNmQxZmUzYiIsImMiOjh9>

**about a (reasons for unserving), (total statistic), (by dates).**

1. [https://maps.vilnius.lt/map/miesto-tvarkymas#layers](https://www.google.com/search?q=https://maps.vilnius.lt/map/miesto-tvarkymas%23layers)

**interactive map (waste, road, …) (get the data from here!)**

1. <https://www.zaliasistaskas.lt/teisingo-rusiavimo-atmintine/>

about sorting the waste

1. VASA container data: <https://atliekuaiksteles.vasa.lt/?zoom=17.50&center=54.69357%2C25.29820&dumpster_type=%5B%22Mixed+municipal+waste%22%5D>

**Info about broken bins, reasons for non-service.**

1. [Mišrių komunalinių atliekų sudėties tyrimai ir biologiškai skaidžių atliekų vertinimas - Aplinkos apsaugos agentūra](https://aaa.lrv.lt/lt/veiklos-sritys/atliekos/atlieku-apskaita/misriu-komunaliniu-atlieku-sudeties-tyrimai-ir-biologiskai-skaidziu-atlieku-vertinimas/). Based on vilnius city data – minestery of lithanian environment (data on composition of mixed waste)
2. <https://aaa.lrv.lt/public/canonical/1741263143/3276/MKA_sudeties_tyrimai_2024.xlsx>

Excel file for regions and their diviation by amount.

Task:

How can we optimize waste collection in Vilnius using real-time data? Too frequent or too infrequent waste collection causes inconvenience and wastes resources. Create a data-driven solution that would help plan the optimal garbage collection route and schedule, saving time, fuel, and reducing pollution.

People complain

If more containers wait more

Cost (), co2, statisfaction.

Recycling encouragemnt + discount,

Fullness + repair (AI for image).

Admin no manual + adj.

Selling

Driver (path, how full each container, photo) Car types.

Admin (path of Each driver, new place for rash, repair inputs from drivers, people complain)

People (10/10, good, how Co2 + money effective, photo of trash if classified correctly gives discount)

Predict (Trash fullness, repairs)

Car (75% full) for extra capacity for chp.

AI for waste prediction

Algorithm for the best route (inputs: conditions in road, season, waste-AI, number of cars, fullness…)

VAI-for distinguishing the broken parts (a camera in the truck will check using ai)

VAI-for discounts (you will scan your trash it will give instructions where to put it and after that give a discount for each correctly thrown waste).