



Litter Reduction and Prevention Programme City of Amersfoort

Strategy and Projects
2023 - 2024



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City of Amersfoort

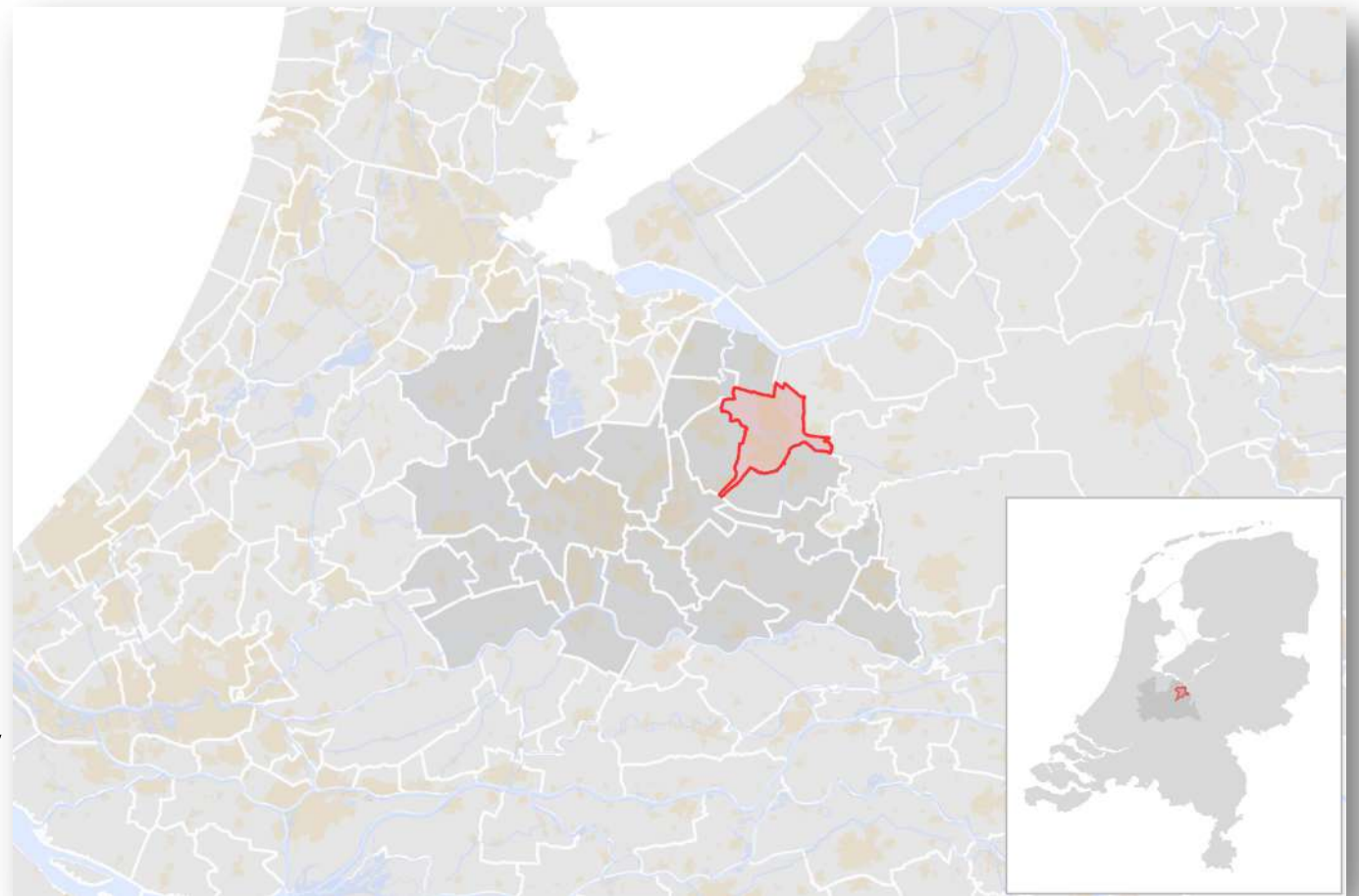
Department Living Environment

Introduction presentation litter and waste in Amersfoort

- Introduction of city of Amersfoort
- Collection of waste and litter (who, how, costs, materials)
- Introduction of the new Litter Reduction and Prevention Programme
 - Monitoringsdata
 - Goals and objectives
 - Strategy
 - Projects

City of Amersfoort

- 160.840 citizens
- Part of the Province of Utrecht
- In the centre of The Netherlands
- Nr 16 on the list of biggest cities in The Netherlands
- European City of the Year 2023!
- Healthy, attractive, future proof city
- Mideavel city centre, canals and modern housing



City of Amersfoort



Household waste & dumping collection in Amersfoort

- Household waste collected by ROVA, public company
- ROVA works for 23 municipalities



- Collection of household waste:
 - Bins at home for recyclable waste: paper and card, organic, plastic-cans-drinks cartons
 - Underground containers: residual waste
- Collection of waste dumpings

Collection of waste from public bins & litter picking

- Collection by 5 private waste collectors
- They collect waste from public bins
- Pick up litter
- They maintain public green spaces



Costs of the collection public bins

- Collection and processing waste from bins: €253.700 p/yr
- We have 1968 public bins and 27 open waste bins alongside cycle paths (easy to throw in waste on your bike)
- 419 dog waste bins: €100.000 p/yr



Costs of cleaning up litter in Amersfoort

- Total costs of collection and processing litter waste: €1,2 miljoen
 - Picking up litter by hand €900.000
 - Sweeping machines: €100.000
 - Collection of waste in water: €200.000



Cleaning the public space

- Waste collectors need to keep the public space clean
- Based on CROW levels A+, A, B, C, D
- City centre level A. The rest of Amersfoort level B.
- Collectors decide how many times they clean up / empty bins

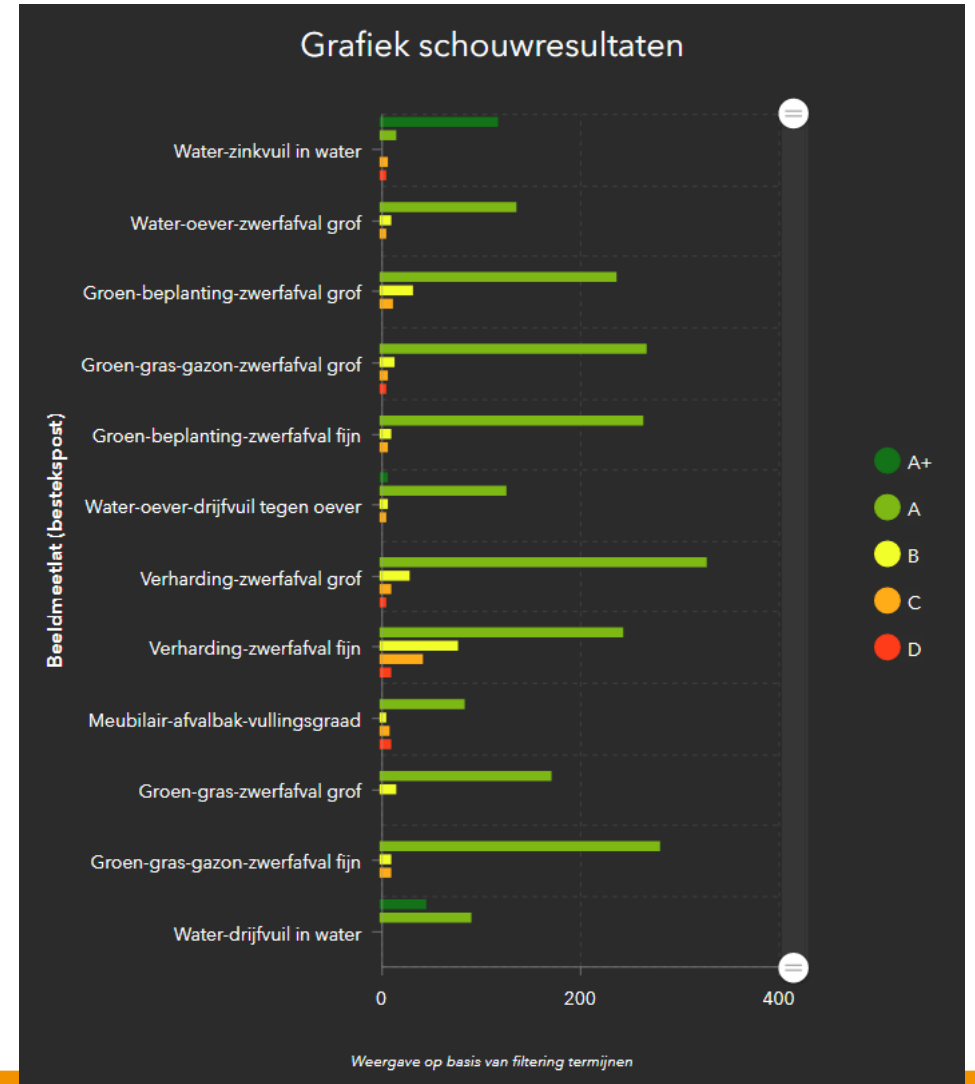


Litter Reduction and Prevention Programme

- Renewed programme since 2023
- Main goal: reduce litter as much as possible and create a clean and healthy public space
- Two objectives:
 1. Reduce the amount of litter in the 5 focus areas by at least 10% in 2024
Measure this objective by monitoring
 - 2: Contribute to achieving a circular economy in Amersfoort

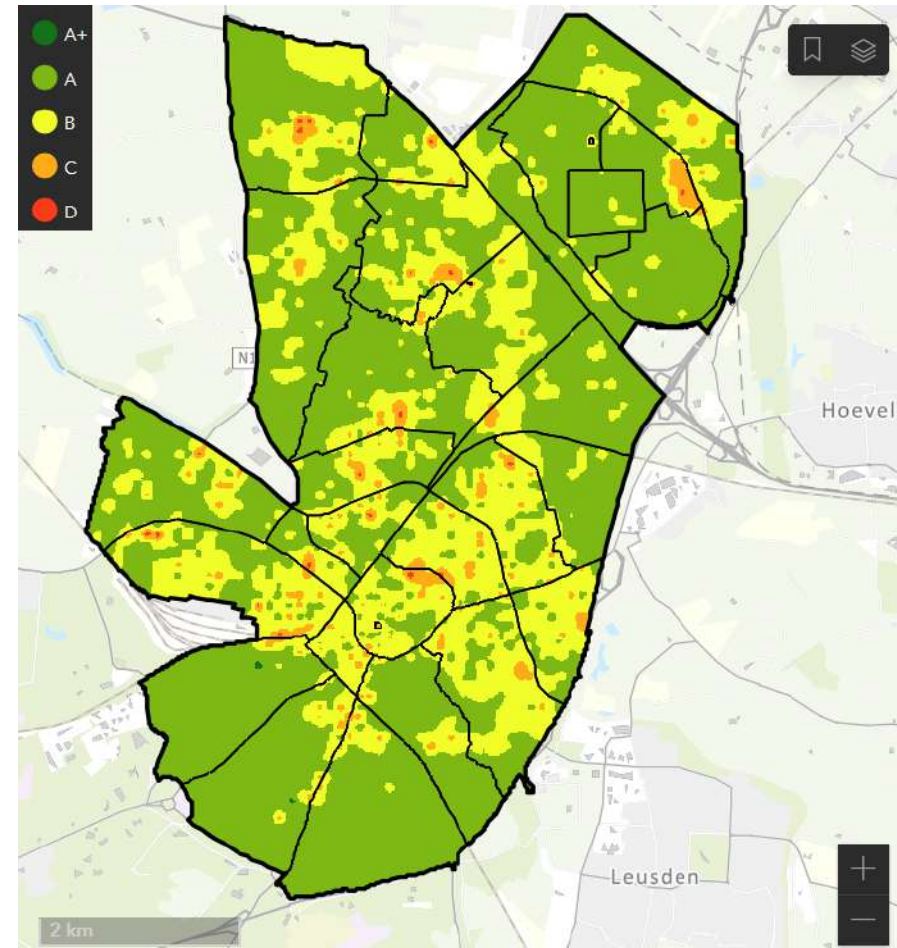
Programme is based on monitoring data

- The work of waste collectors is monitored by random sampling to measure the level (A+, A, B, C, D)
- Monitoringsdata for litter on:
 - Pavement
 - Grass
 - Plants
 - Small litter (1-10cm)
 - Big litter (<10cm)
 - Water and water banks
 - Bins



Programme is based on monitoring data

- Monitoringsdata is converted (by extrapolation) into a map
- This maps shows data of 2022 for small litter (1-10cm) on pavement
- The map shows us the hotspots: most polluted area's



Comparing monitoring data from multiple sources in a yearly report

- Top 3 hotspots indicated per district by the waste collectors
- Hotspots indicated by volunteers who clean up litter
- National Shopping centre litter monitorings research
 - Amersfoort participate with 16 shopping area's
 - Interview citizens (how clean do you rank this are)
 - Monitor how much litter and which types of litter
- Research on waste dumpings
- National data on microplastics and litter

Main conclusions based on the monitoring data in Amersfoort

- Litter is widely spread, can be found anywhere
 - More litter in bushes and water than available data show us
 - Collectors only pick up litter they visually see (not going to search in water in reeds and in bushes). Part of litter stays hidden
 - Not enough data of litter under water
- Mostly small litter (1-10cm) on pavement (it's easier to clean up bigger litter)
- Hotspots: shopping areas, train stations, overflowing bins, certain districts
social housing, social hang-outs, dumpings next to containers, fast food restaurants, parking spaces, roadsides, litter from construction sites
- Types of litter: small unidentified plastics, packaging (food), cigarette butts, cans and bottles, paper napkins

Litter Reduction and Prevention Programme

- We focus on 5 area's in 2023-2024 where we reduce litter with at least 10%
 - City centre
 - Central trainstation area
 - Food Court (fast food area with McDonalds, KFC, etc.)
 - Shopping areas in 2 districts: Kruiskamp and Liendert (social housing)
- We focus on these types of litter:
 - Packagings of food
 - Cigarette butt's
 - Microplastics

Strategy Litter Reduction and Prevention Programme

Waste Prevention: Single Use Plastics, circular (refuse, reuse, reduce), deposit

Work together with other cities and ministry

Cleanup litter: clean-ups, community participation, 25meter regulation (for shops/restaurants/organisations)



Prevent litter: communication, public enforcement, public space (bins, containers), education, behavioural change, stakeholder cooperation, target the source of litter, monitoring

Waste Prevention

- Holders for cans and bottles with deposit
- Homeless people collect the cans / bottles
- Test in central trainstation area
- 2024 expand to other area's (parks, shopping area's)



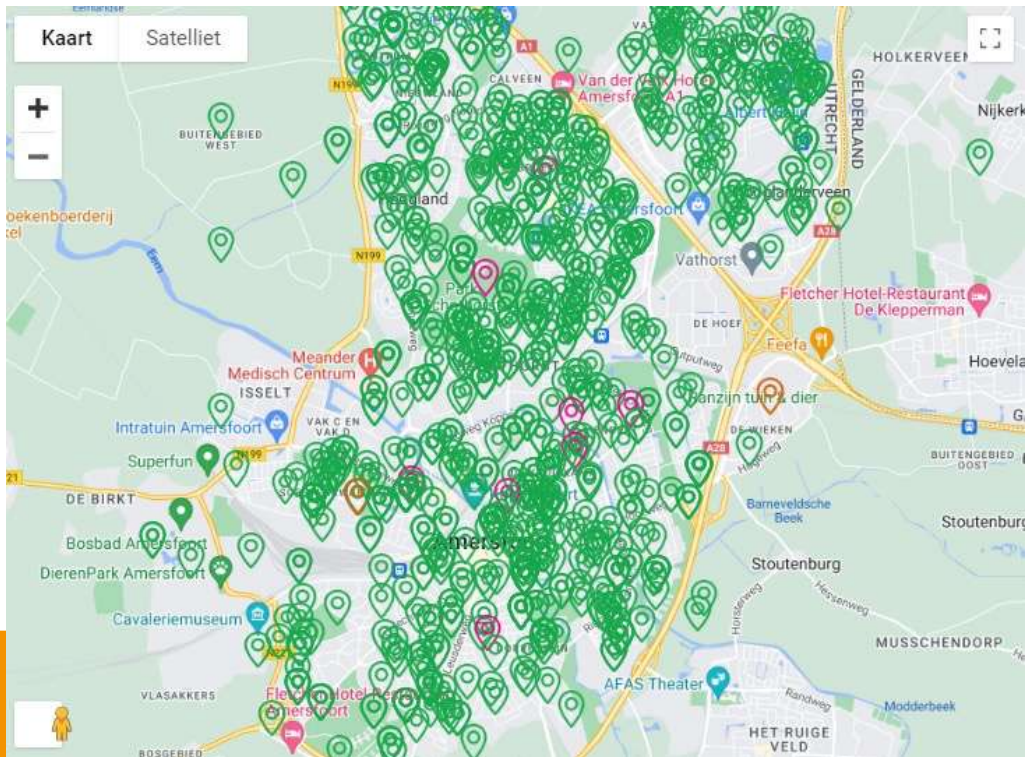
Waste Prevention

- Zero Waste shopping tour: promote shops with zero-waste products
- Bring your own packaging campaign: Are you a Packaging- King?
 - Promote 40 shops where you can use your own coffee-cup, bowl, food box
 - Online social media, posters, information signs in shops
- 2024: more waste prevention projects on reusable diapers, Zero Waste Week



Clean-up litter: with citizens

- Free litter gripper
- 2100 volunteers on map on the new website www.amersfoortschoon.nl
- World Cleanup Day september: 40 big cleanups





World Cleanup Day

[World Cleanup Day in Amersfoort - YouTube](#)

Clean-up litter: with schools

- Free educational litter programme (goal is to clean-up and prevent)
- Teaching materials for:
 - Primary schools
 - Plastic soup, environmental impact of litter
 - Secondary schools
 - Learning projects about litter
 - 2024: microplastics and circular economy
- 2024: World Cleanup Day Competition with 30 schools



Clean-up litter: with shops, restaurants, organisations

- **25 meter rule: clean-up litter within 25meter of the building**
- **Information campaign about litter and 25meter rule**
 - Action team visits and inform shops, restaurants, organisations
 - Also doing a monitoring in 16 shopping area's: asking citizens to rank the shopping area on how clean it is and monitoring litter
 - 2024: enforcement inspectors checking shopping area's on how clean it is and visit shops and restaurants
- **City centre focus area:**
 - Stakeholder cooperation (shops, restaurants, waste collector, municipality, enforcement officer)
 - 2023-2024: Plan of action in focus area: reduce litter 10%
 - Clean-up more/better, communication campaign, influence behaviour (multiple actions)

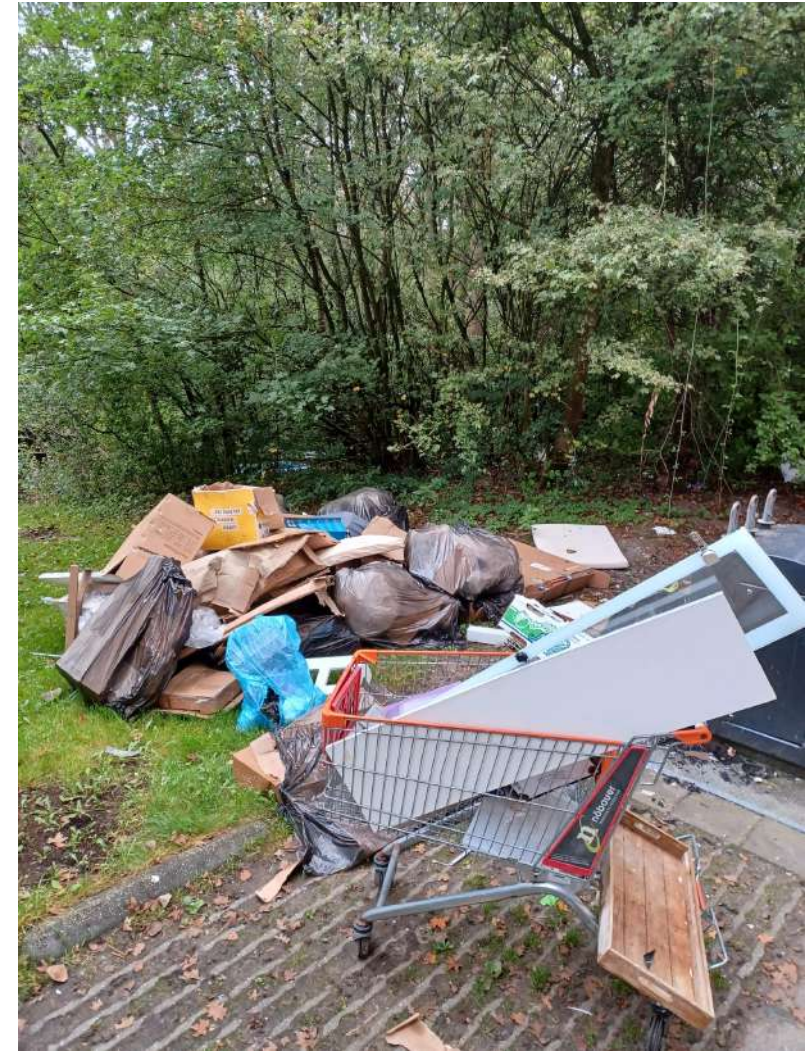
Clean-up litter: cigarette vacuum cleaners

- Cigarette butt's cleaner (also cleans small litter)
- 1 waste collector has 4 cleaners in 2023
- 2024: all waste collectors get free cigarette vacuum cleaners



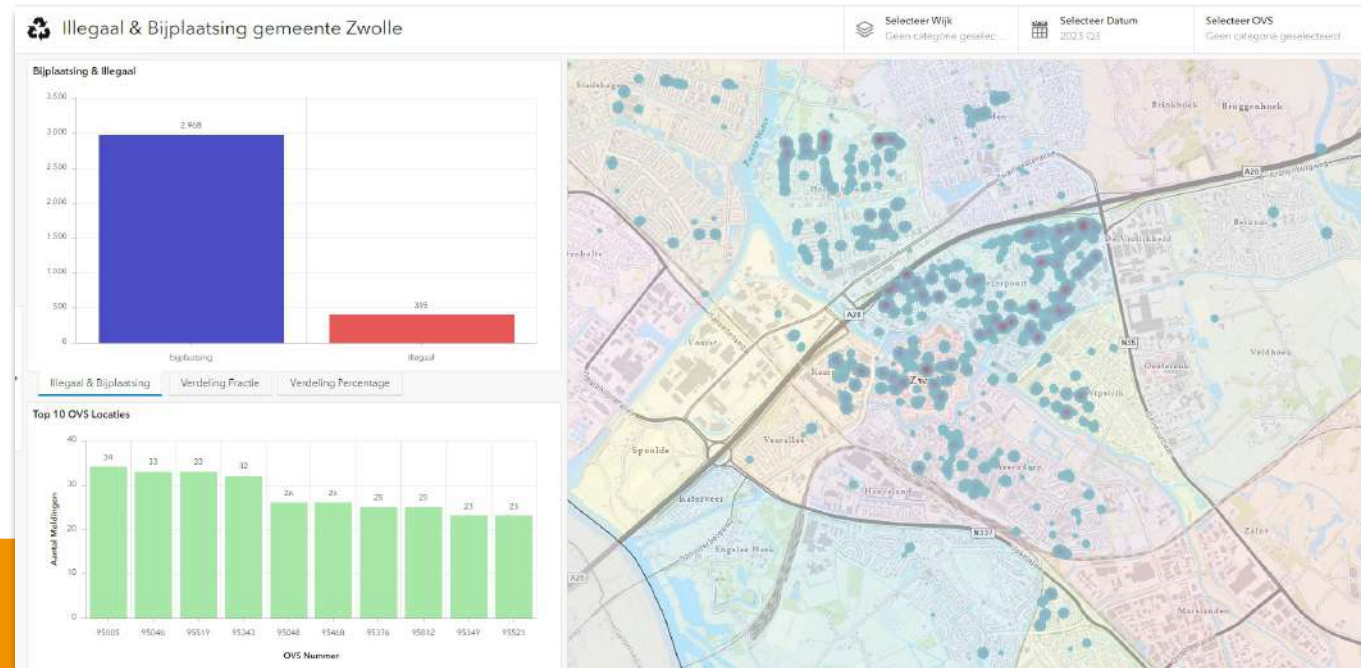
Prevention of litter: reduce waste dumpings

- Research of waste dumpings in Amersfoort
- Why do people dump waste next to containers?
- Where does it happen in Amersfoort
- What can we do about it:
 - We tested multiple interventions



Prevention of litter: reduce waste dumpings

- Reasons why people dump waste next to containers:
 - Habit, no container card, language barrier to make appointment, knowledge, copying behaviour of others, no car, etc.
- Where does it happen in Amersfoort:
 - In 2021 – 2023 we made a hotspot list
 - In 2024: we are going to work with a new app of ROVA



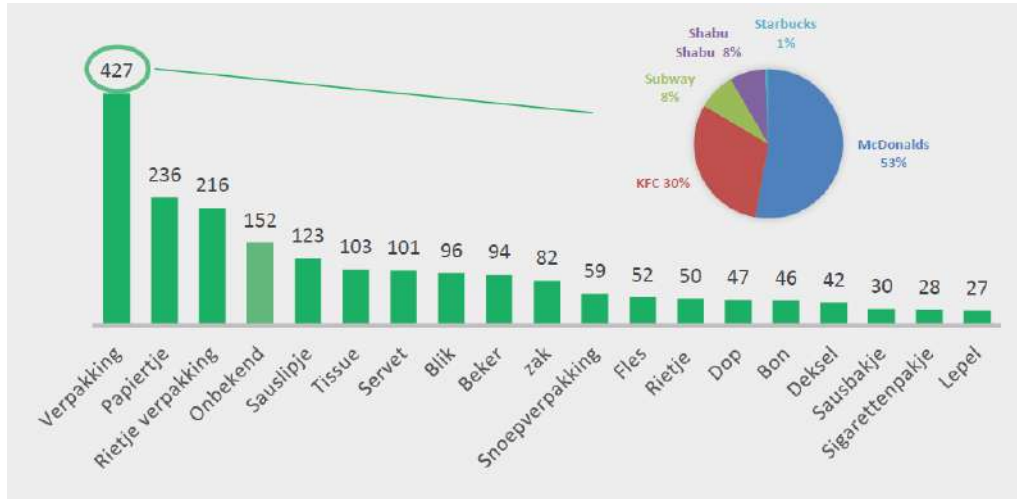
Prevention of litter: reduce waste dumpings

- What can we do about it:
 - We tested multiple interventions, some of them succesfull, some of them not
 - Based on behaviour change techniques
 - Signing, enforcement, ambassadors, letters, illustrations, pictures



Prevention of litter: fast food area

- Food Court: McDonalds, KFC, Subway, Shabu Shabu, Starbucks
- Litter of packagings everywhere (citizens complain about this)
- We did several monitoring researches to confront them
- They have to clean-up better, otherwise penalty



Prevention of litter: Liendert shopping area

- Stakeholder cooperation: supermarket, restaurant, church, municipality, enforcement, waste collector
- Monitoring in focus area for more detailed information on the amount of litter, types of litter, hotspots



Prevention of litter: Liendert shopping area

- Interviews with shops, restaurants, church to get input on causes of the litter (people who visit the area, students, birds picking out trash from bins)
- Behaviour change expert team observes people and surroundings
- Action plan with measures based on the data
- 2024: implementation measures and monitor effects

Budget of the Litter Programme

- We use the budget we receive from the Extended Producer Responsibility on single use plastics to finance our programme
- We receive €3,49 per citizen in 2023 (this varies every year)
- This gives us a yearly estimated budget of €561.049



Questions?

Thank you for listening!