

OAKLAND CITY COUNCIL · MARCH 2026

Aerial Detection of Illegal Dumping

Privacy-first camera technology that finds,
measures, and reports
abandoned waste — so Oakland can clean smarter,
faster, and more equitably.

Aerbits Inc. · Brian Johnson, President & Founder

Oakland spends **\$24M+** per year on illegal dumping

-  **Complaint-driven systems are inequitable.** Wealthier neighborhoods file more reports — underserved communities get less service despite worse conditions.
-  **You can't manage what you can't see.** Without proactive data, DPW deploys blind — wrong truck, wrong crew size, wrong location priority.
-  **Dumping recurs in the same spots.** Without ongoing monitoring, cleaned sites are re-dumped within days.

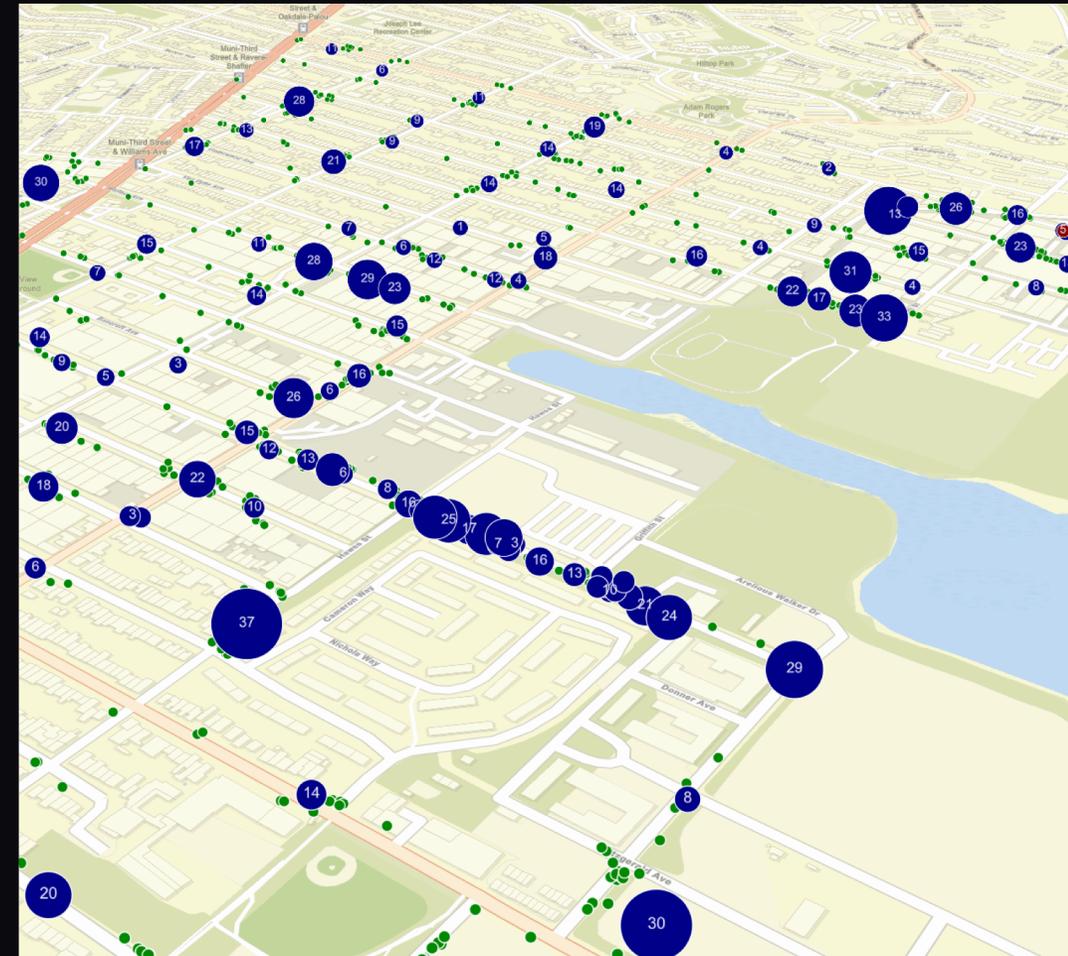
How it works: Camera → AI → Data → Action

⚡ One pilot covers 1 sq mi in 30 minutes on a single battery (DJI Mavic 3 Enterprise)

📊 AI detects waste at 98-100% confidence — finds dumps hidden behind vehicles, in remote locations

📝 Auto-classifies waste type — mattress, furniture, construction debris, loose bags, appliances

🌍 GPS-precise location — mapped, clustered, deduplicated for efficient routing



Built **privacy-first** from day one



**No Facial
Recognition**



**No License Plate
Reading**



**Private Property
Redacted**



**Private
Infrastructure**



**Short Retention
Periods**



**Restricted Live
Access**

Privacy redaction **in action**

Every image is automatically processed — vehicles masked, private property removed, waste detected and classified.



Proven in Bayview: 118 → 3 dump sites in 26 days

Consistent reporting = cleaner streets. Daily reporting drove 97% reduction in under a month.

One person, one drone, one app. The entire case study was run by a single pilot.

AI finds what eyes miss. Remote locations, hidden waste, small debris — all detected at 98%+ confidence.

Data enables accountability. Before/after verification proves cleanup and catches re-dumping.

**118
dump sites**



Continuous Reporting

Steadily decreases the amount of waste on the streets and sidewalks.

**5
dump sites**

Oakland-scale coverage: **fast, efficient, affordable**



Pre-programmed flight paths.

Automated waypoint navigation — consistent, repeatable coverage every time.

▴ **1,440 linear road miles** in the 6-month pilot — covering Oakland's most impacted areas.



Regular monitoring catches recurrence. Re-fly the same routes to verify cleanup and detect new dumping.

💰 **\$150K pilot = 0.6% of Oakland's \$24M dumping spend.** Small investment, massive data upgrade.



The Oakland Pilot: 6 months, \$150K

6

Month pilot

72

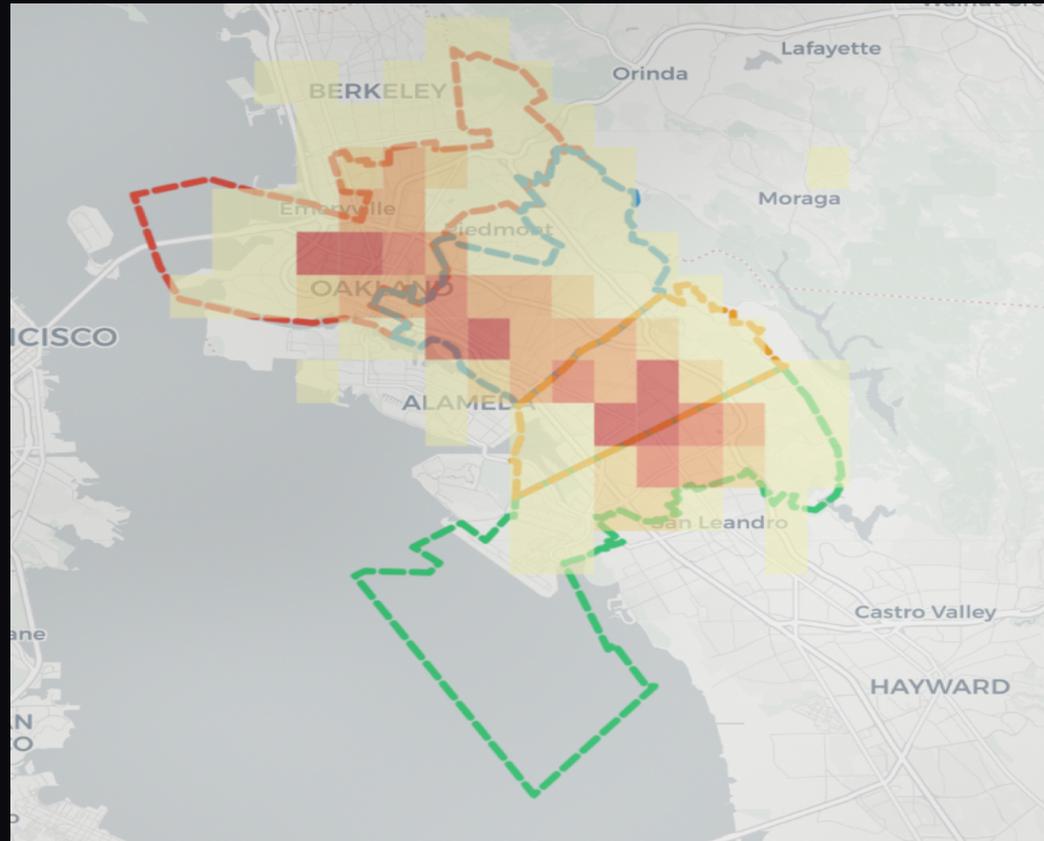
Scheduled flights

1,440

Linear road miles

\$150K

Total budget



THE ASK

Approve the amended Use Policy & \$150K pilot

Give Oakland the data to fight illegal dumping smarter, faster, and more equitably — with strong privacy protections.