



Case Study: Smarter Street Sweeping with CompassCom's Esri®-Integrated AVL and Telematics

Overview

Street sweeping is more than clean roads—it's about public safety, environmental compliance, and operational accountability. From fall leaf removal and post-snow cleanup to construction site support and special events, sweepers are essential to Public Works fleet management.

Cities and contractors are under pressure to deliver efficient, transparent, and cost-effective municipal fleet services. With CompassCom's cloud-based AVL software for municipalities, agencies gain real-time fleet visibility, GIS-integrated fleet tracking software, and automated reporting—transforming street sweeping into a smarter, data-driven operation.

Challenges

Public Works departments and contractors often face:

- Missed routes or duplicate coverage, wasting fuel and staff time.
- Lack of broom up/down tracking, making it difficult to verify actual sweeping activity
- Incomplete documentation, complicating responses to citizen complaints

- High fuel usage and equipment wear from inefficient routing.
- Limited visibility into both real-time operations and historical performance

Solution: CompassCom AVL for Street Sweeping

CompassCom delivers a unified AVL (Automatic Vehicle Location), and fleet management platform designed specifically for municipal sweeping and public works fleet management.

Powered by Esri ArcGIS®, the solution provides a centralized operational map, integrates with in-vehicle telematics, and supports both on-premises and cloud deployments.

Key Features

- Broom Up/Down Monitoring – Verifies sweeping activity to ensure coverage and route efficiency.
- Speed & Mileage Tracking – Enforces optimal sweeping speeds and schedules proactive maintenance.
- Geofencing & Alerts – Monitors activity around hydrants, dumpsites, and maintenance yards
- Automated Supervisor Reports – Provides performance metrics, exception reporting, and compliance documentation.
- Public-Facing Street Sweeping Map for Citizens – Improves transparency and reduces complaint calls.
- Historical Playback – Replays sweeper movements for training, investigations, and service validation

Results

Agencies and contractors implementing CompassCom's street sweeping AVL system have achieved measurable improvements:

Fuel Efficiency Gains

Optimized routing and reduced overlap deliver 20–30% fuel savings.

Citizen Transparency

Public-facing Street sweeping maps have cut complaints by 40%, with accurate documentation to back every operation.

Operational Accountability

Fewer missed or overlapping sweeps reduce costs and improve efficiency.

Improved Coordination

Seamless collaboration with towing, snow removal, and construction crews enhances service delivery.

Safer Streets

Proactive debris removal and runoff management keep roadways safer for drivers and pedestrians.

Conclusion

Street sweeping requires more than manpower—it requires real-time visibility, accountability, and GIS-integrated fleet tracking software.

With CompassCom, Public Works agencies gain:

- Real-time fleet visibility across sweepers, water trucks, and support vehicles
- Esri-integrated reporting tools for compliance and citizen engagement
- Smart fleet monitoring that reduces costs while improving public trust

Unlike generic fleet tracking tools such as Samsara or Geotab, CompassCom is purpose-built for municipal operations, with Esri-native integration and citizen-facing transparency tools that strengthen accountability.

By unifying AVL software, Esri ArcGIS integration, and public works fleet management transparency, CompassCom empowers agencies to deliver cleaner, safer streets while building long-term community confidence.