

Smarter Cities Start with Smarter Fleets

A GUIDE TO TRANSFORMING GOVERNMENT OPERATIONS



Smarter Cities Start with Smarter Fleets

- 01 — Data-Driven Public Services are on the Rise
- 02 — Connected Technology Improves Quality of Life
- 03 — Start With Fleet to Connect Your City's Operations
- 04 — Case Study: Boston Metro Area



01

Data-driven public services are on the rise

According to a study¹ of 17,000 people in a number of U.S. states, speed, simplicity, and efficiency make the biggest difference when it comes to effective city services. So how can your city deliver services more efficiently while staying within budget?

It all starts by getting data on all of your existing operations. With insights into critical public service performance such as on-time performance for transit routes and average response time to a citizen call, your city can begin to identify trends and fill service gaps quickly. Connecting your data across multiple departments—such as waste management, road safety, public transportation, and more—is critical so you can operate your city safely and efficiently.

1. McKinsey & Company



With nearly 70% of the world population expected to live in urban areas by 2050,² many cities are increasingly turning to smart city technology and the Internet of Things (IoT) for data and insights that help deliver essential services and reduce costs.

EXAMPLES OF CONNECTED CITY TECHNOLOGIES



Telematics for municipal fleets



Smart street lighting



Trash and waste removal sensors



Connected public transit



Smart parking solutions



Remote utilities monitoring

WHAT IS A SMART CITY?

Smart cities use IoT sensors and technology to collect data and use insights to manage resident services efficiently.



DID YOU KNOW?

2 out of 3

cities have invested in smart city technology³

2. *United Nations*

3. *National League of Cities*

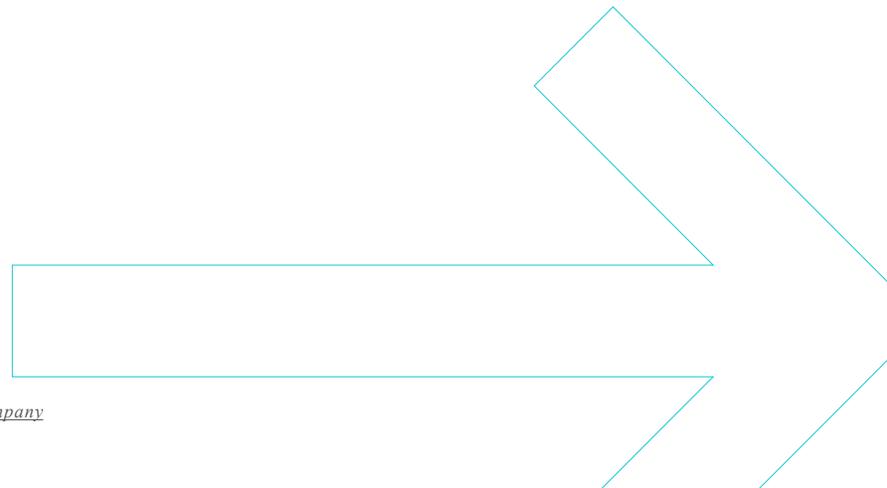


02

Connected technology improves quality of life

Why should your city care about connecting its operations? Research from McKinsey⁴ shows that cities that leverage technology to get operational visibility can reduce road traffic fatalities by 10%, improve emergency response times by 35%, cut emissions by 15%, and reduce the volume of solid waste per capita by 20%.

4. *McKinsey & Company*



In addition, connected cities have the opportunity to reduce citizens' average commute by 15-30 minutes per day, resulting in fewer cars on the road and better air quality for your city.

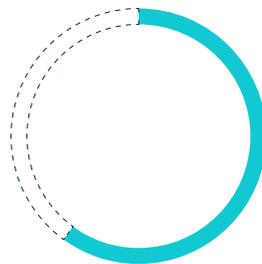
Improvements like these not only show your commitment to improving the safety, efficiency, and sustainability of your city, but they can also reduce costs and increase the confidence your citizens have in your services.

When citizen expectations are high and resources are in short supply, data is critical to make sure all city services run smoothly. Connected technologies can help collect accessible and actionable data. But where should you start?

DID YOU KNOW?

60%

of greenhouse gas emissions are produced by cities.⁵



CONSIDERATIONS FOR CONNECTED CITY TECHNOLOGY

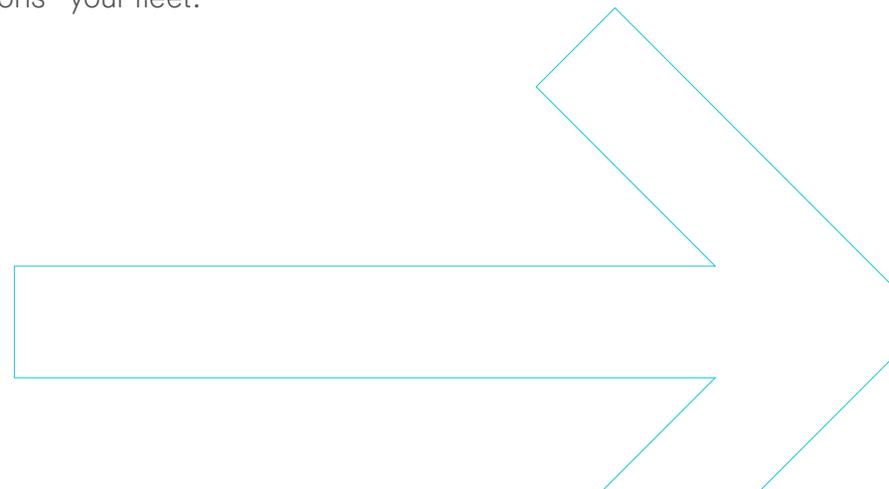
- Can it be used across multiple departments?
- What assets and operations do you need to monitor?
- Do you need real-time data?
- How much time and effort will it take to implement a new system?
- Will it be easy for employees to use?
- Will the data be easy to understand and manage?
- Does it work with existing tools, such as geographic information systems (GIS)?



03

Start with fleet to connect your city's operations

Budget constraints can make it difficult for local governments to invest in technology all at once. Instead of trying to pilot emerging technologies or embarking on massive changes to infrastructure, experts recommend starting with one of the highest-impact areas of your operations—your fleet.



Fleet-level investments get city-wide results

For most cities, fleets act as the city's central nervous system by connecting citizens with high-touch city services such as public transit, public works, and more. Because most of your city's critical service operations have fleets, investing in fleet will give you the greatest opportunity for city-wide improvements and results.

In order to improve in service delivery, you need greater visibility into your fleet operations. The more data your city has on how it's delivering public services, the more opportunities you have to make enhancements, gain efficiencies, and reduce operational costs.

With Samsara, you not only collect critical data on your city's services, but you also have powerful tools to analyze and visualize data so you can take action fast.

HOW CITIES BENEFIT FROM SMART FLEET TECHNOLOGY

\$137,000

INCREASE

in monthly net revenue by improving parking enforcement operations

Massachusetts Bay Transit Authority, MA

\$70,500

SAVED

by decreasing fuel consumption over a six-month period

City of Fort Lauderdale, FL

25%

REDUCTION

in non-public safety fleet by monitoring vehicle utilization

Township of Edison, NJ

50%

DECREASE

in harsh driving events with driver scorecards and coaching

Athens-Clarke County, GA

Data insights from connected fleet technology

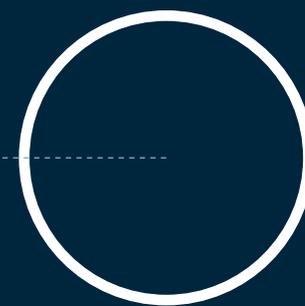
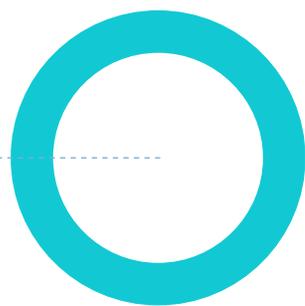
From public works to your city's fire department, fleet technology can give you the visibility and data you need to improve service quality, safety, and efficiency across every department. But how does it work? Telematics devices track vehicle locations in real time, helping you verify where and when services are performed. GPS and engine diagnostic data provide visibility into driver behavior, such as speeding, giving you insights to improve safety and reduce unsafe driving behaviors. Internet-connected dash cams capture footage that can be used to exonerate drivers from claims and capture proof of service.



There is a lot that goes into delivering the services that people have come to expect. Collecting good data is important in making decisions in how we deliver services.

CHRIS LAGERBLOOM

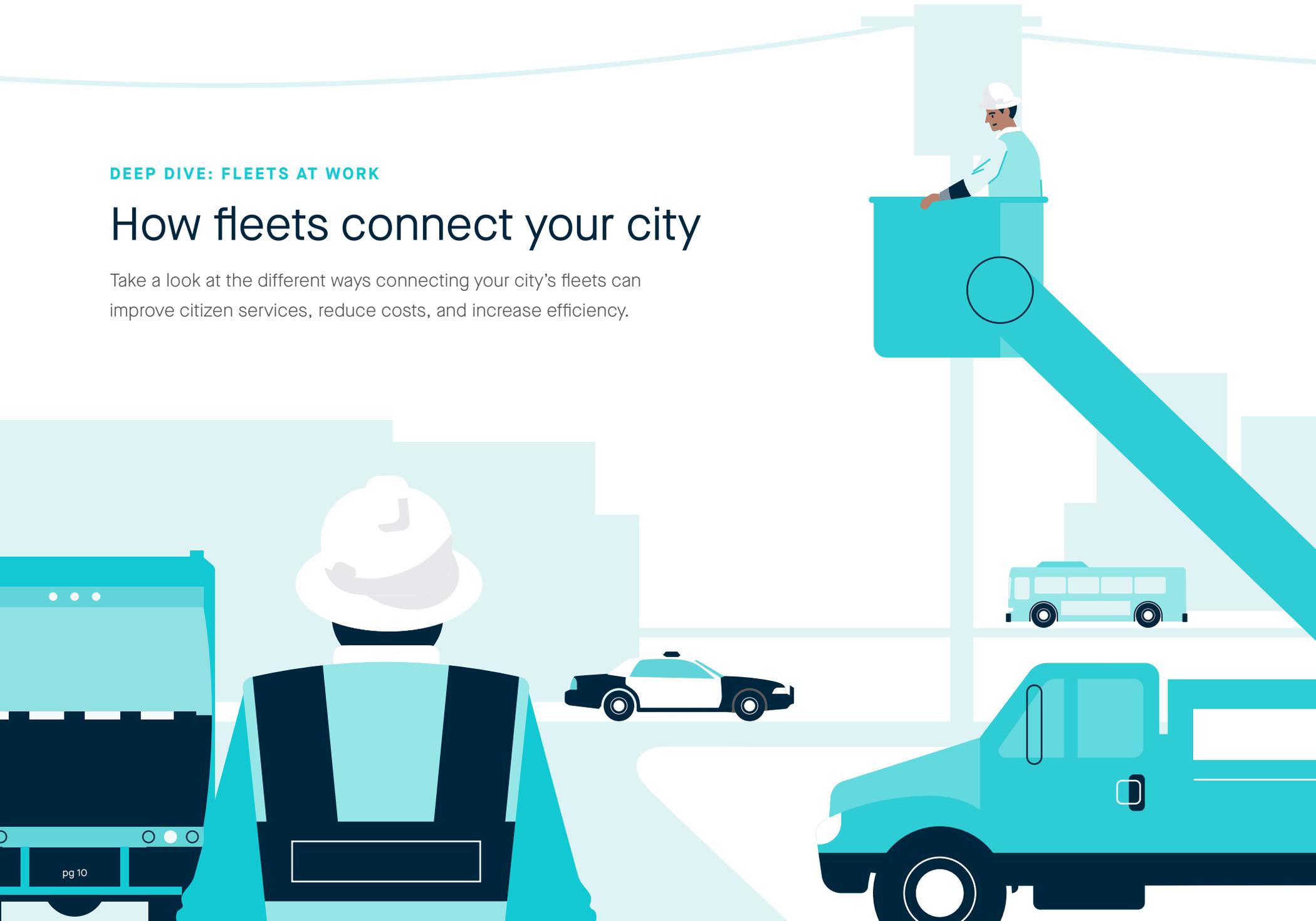
City Manager, City of Fort Lauderdale, FL



DEEP DIVE: FLEETS AT WORK

How fleets connect your city

Take a look at the different ways connecting your city's fleets can improve citizen services, reduce costs, and increase efficiency.



Police

PROTECT CITIZENS AND OFFICERS

Live GPS tracking enables more accurate and efficient 911 dispatching. With one consolidated dashboard, deputies track nearby colleagues and get situational awareness to respond to emergencies.

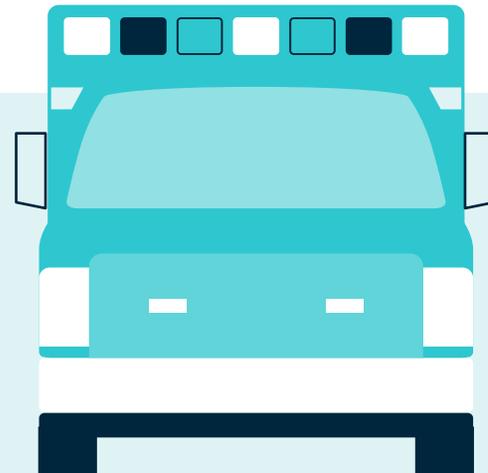
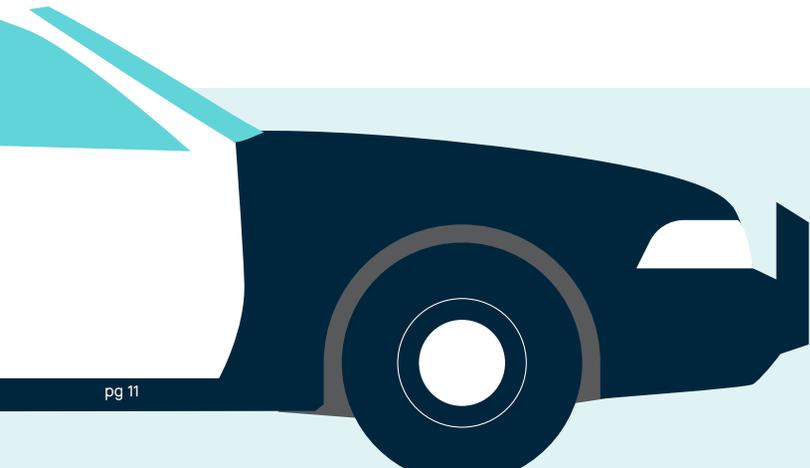
“Our deputies keep the Samsara dashboard running all day so we can track the real-time location of all of our vehicles to enable fast response”

Washington County Sheriff

Fire

RESPOND TO INCIDENTS FASTER

Real-time GPS tracking helps dispatchers accelerate response times by sending the closest rigs to an incident. Departments can accurately track historical departure, arrivals, and response times, helping improve performance and avoid fines.



Utilities

DELIVER SAFE AND RELIABLE SERVICES

Industrial controllers, wireless sensors, and telematics give agencies a unified view into critical infrastructure, such as water distribution systems and treatment plants. Dispatch the closest technicians in seconds to respond to outages and restore service.

1 Million

CITIZENS

with uninterrupted service thanks to efficient routing during power shutoffs

San Jose Water Company

Waste Management

IMPROVE COLLECTION SAFETY AND EFFICIENCY

Searchable trip histories make it easy to respond to citizens and confirm service quality. Use route playbacks and driver scorecards to coach workers on safer routes and driving behavior. Route tracking and analytics help identify operational efficiencies while maintaining service for the whole community.

Parks & Recreation

SAVE TIME SEARCHING FOR CRITICAL ASSETS

Avoid wasting time searching for assets such as lawnmowers, tree trimmers, trailers, and bucket trucks with real-time asset tracking. Use searchable trip histories to validate service delivery and respond to citizen concerns.



Public Works

VERIFY SERVICE PERFORMANCE

Easily look up historical vehicle locations to confirm when, where, and whether services were performed. Use dash cams to investigate complaints and exonerate drivers from erroneous claims.

Public Transportation

IMPROVE THE RIDER EXPERIENCE

Real-time GPS data enables more accurate ETAs for bus and rail systems. Public transit systems can leverage GPS locations and engine fault codes to eliminate time spent searching for buses and diagnosing maintenance issues, so teams can be more efficient and provide better service for riders.

General Services

OPTIMIZE ASSET UTILIZATION

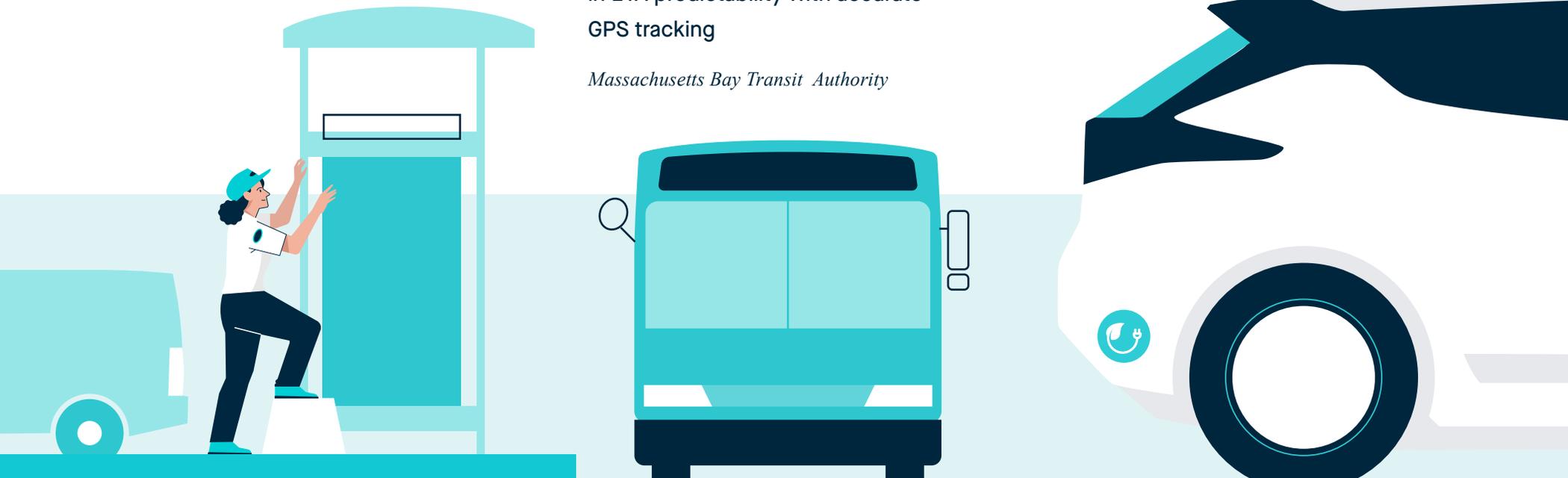
Telematics data helps you monitor how much, when, and where assets are being used. Allocate resources more efficiently with granular utilization insights across every department.

10%

IMPROVEMENT

in ETA predictability with accurate GPS tracking

Massachusetts Bay Transit Authority



CASE STUDY: BOSTON METRO AREA

Paving the way with smart fleet technology

The City of Boston

In order to improve their public services, the City of Boston invested in Samsara Vehicle Gateways to connect and monitor their municipal fleet. Now, the City's public works department has complete visibility into their vehicles so they can better track services such as snow plowing, trash and recycling, and street light maintenance. With live GPS tracking and detailed trip histories, the City is able to easily verify their fleet services to respond to constituent complaints and improve their service and reputation.

The City of Boston also uses Samsara electric vehicle (EV) reporting to improve the efficiency and sustainability of their fleet. With a commitment to fully transition their fleet to EVs by 2030, the City leverages Samsara's fleet electrification report to make critical decisions to make sure they are on track to their goal.

700,000+
RESIDENTS

400+
VEHICLES

22+
ELECTRIC & HYBRID VEHICLES



CASE STUDY: BOSTON METRO AREA

Massachusetts Bay Transit Authority

Meanwhile, the Massachusetts Bay Transportation Agency (MBTA)—Boston’s regional transit authority—uses Samsara’s real-time GPS tracking to help improve bus predictability and route efficiency. By leveraging Samsara’s open API, the MBTA feeds location data to on-the-ground dispatchers to optimize routing and dispatch in heavily trafficked areas. With Samsara, the MBTA saw a 10% improvement in bus predictability in just a few months.

In addition to improving their bus service, the MBTA’s parking division—which operates the biggest commuter-based parking operation in the country—was able to improve the efficiency of their daily parking enforcement operations across their 100+ parking facilities. With the help of Samsara’s route planning tools and turn-by-turn directions, the parking division has increased monthly revenue by \$115,000 and reduced operating costs by more than \$20,000.

1,050
BUSES

450,000
DAILY PASSENGERS

177
ROUTES



Since installing Samsara we have reduced parking enforcement costs by 50% and increased ticket issuance by 18-25%.

BRUNO LOPES

Director of Parking Services





samsara

samsara.com/free-trial