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Elevating the Last Mile Experience with Google Maps Platform

Part 3: Delivering real-time insight and control to fleet managers





What's in this eBook?

This is the first installment in a three-part series exploring the rapidly changing landscape of last-mile fleets and the many ways Google Maps Platform can help you make the most of it-for your customers, drivers, and fleet managers.



Part 1: Keeping customers engaged and informed



Part 2: Keeping drivers empowered and on track



Part 3: Delivering real-time insight and control to fleet managers





The last mile has never been more important—or more challenging

These days, convenience is a way of life. Consumers rely on deliveries more than ever before and expect them to be fast, reliable and low-cost. In fact, ecommerce shipments are on track to double by 2026¹ and 90% of U.S. consumers expect free two-to-three-day shipping.² This means last mile fleet operators have to work harder to create better consumer experiences and improve their operations.

It's with all this in mind that Last Mile Fleet Solution from Google Maps Platform was created, helping fleet operators create exceptional delivery experiences, from ecommerce order to doorstep delivery. It builds on one of our existing mobility solutions, On-demand Rides & Deliveries, which is used by leading ride-hailing and on-demand delivery operators around the world. The solution allows your business to optimize across every stage of the last mile delivery journey: capturing valid addresses, planning delivery routes, efficiently navigating drivers, tracking shipment progress, and analyzing fleet performance.

Mapping at a global scale: The foundation of every great delivery experience

Let's start at the beginning: the data that makes exceptional rides and delivery experiences possible. Our deep roots in mapping the world have led to maps in 99% of the world's countries and territories, 50 million daily updates, and over 1 billion monthly active users. And we deliver it all in the form of easy-to-use APIs, tailor-made solutions, and high quality, continuously updated data, all designed to help bring the power of location to the moments that matter most to your customers. Simply put, the world never stops changing. That's why we don't stop mapping it.



Ecommerce shipments are on track to **double** by 2026.1

90% of U.S. consumers expect two-to-three-day shipping for **free.**²



^{1 &}lt;u>Pitney Bowes Parcel Shipping Index, 2021</u>

² McKinsey & Company, "Retail Speaks", 2021

The last mile is a journey of its own, and winning means perfecting every step

Mapping is an essential foundation for navigating the last mile, but it's just the beginning of the journey. Consistently successful delivery depends on perfecting three parallel experiencesthose of the fleet manager, the driver, and, of course, the customer.

The previous two installments explored the delivery experience from the point of view of the customer and the driver. In this final installment, let's follow a package to see first hand how Google Maps Platform makes this challenge especially easy to overcome for the fleet manager.

Meet Acme

Acme is a local fulfillment operator. They're a small business in a world of big players, but they pride themselves on efficiency and excellent experiences. In fact, they recently invested in Google's Last Mile Fleet Solution to accelerate their business-elevating experiences for customers and drivers alike, all while identifying opportunities for operational optimization.

Challenge: A great driver experience depends on tools that assist without distracting

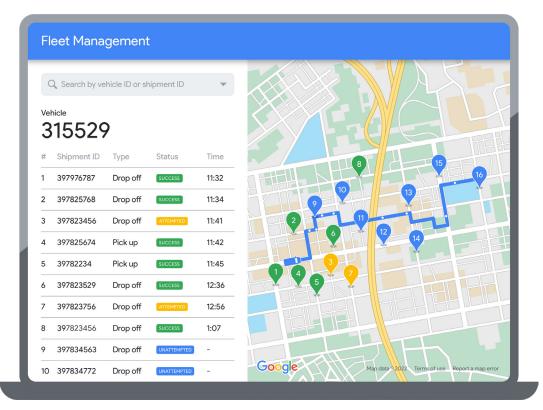
Acme applies Last Mile Fleet Solution's Route Optimization to each delivery. The process begins with Acme's own preferred routes, including options to favor the shortest, fastest, or overall cheapest, and to help ensure adherence to those preferences along the way. Next, each vehicle's capacity and form factor are considered, as navigation can vary significantly depending on whether a package is in the back of a truck, or in the front of a delivery van. Finally, the latest traffic and road conditions are incorporated to generate an ETA.

Last Mile Fleet Solution broadens this analysis to Acme as a whole with Fleet Performance, which presents a bird's eye view of the area and an intuitive set of tools for optimizing the big picture. Hands-on features include visualizations and searches of delivery tasks and vehicles alike, while unexpected complications can be spotted automatically-vehicles that might experience delays, for instance, along with options to automatically split up shipments across other drivers. And all this is delivered as a scalable service-no servers to configure and maintain and no geographical borders to negotiate.



Acme, a local fleet operator looking to stand out





Fleet Performance presents a bird's eye view of the big picture and an intuitive set of optimization tools.

Challenge: Optimizing an entire fleet is even harder

Today is different, though; Acme recently added Google's **Cloud Fleet Routing** to their toolbox, running it each morning to coordinate the day's deliveries. Rather than solve each route as an isolated optimization problem, Cloud Fleet Routing treats the entire fleet as a single, interconnected system; it not only helps to ensure individual deliveries are performed as efficiently as possible, but takes advantage of the complex dynamics that reveal themselves when each vehicle and driver is considered in relation to their colleagues.

Despite the sophistication of Cloud Fleet Routing, however, Acme has been amazed by the ease of the user experience. A fleet manager simply provides a list of their vehicle locations, packages, and delivery destinations, along with a few simple preferences— whether they'd like to optimize for miles driven, dollars spent, total time taken, or some other metric—and Cloud Fleet Routing helps do the rest. The output can be passed to Last Mile Fleet Solution like any other delivery plan, and can even be re-run throughout the day if adjustments are necessary. It's like having an elite team of dedicated delivery strategists on demand, all delivered via a single cloud service. And it's billed per unique shipment, with repeat optimizations available throughout the day for no additional charge.



Challenge: Keeping a fleet competitive requires powerful analytics

Finally, Acme is reaping benefits that go far beyond any single delivery, as ongoing analytics become an investment in the company's future performance. The same foundation that empowers their drivers with up-to-the-minute guidance and keeps customers informed doubles as a wealth of fleet management data. For instance, on a per-driver and even per-delivery basis, Last Mile Fleet Solution allows Acme to track a comprehensive history of driving speeds, route compliance, delivery windows, and other metrics. At the level of an entire fleet, and extended across time with detailed cloud logging, Acme is given a deep understanding of their operational performance - and the insights they need to make it even better.

What's next?

This is the final installment of a three-part series. It began with Part 1, which explores the delivery experience from the customer's point of view, then proceeds into Part 2, which shifts the focus to the driver. Along with this installment, they tell a complete story of making the most of the last mile.

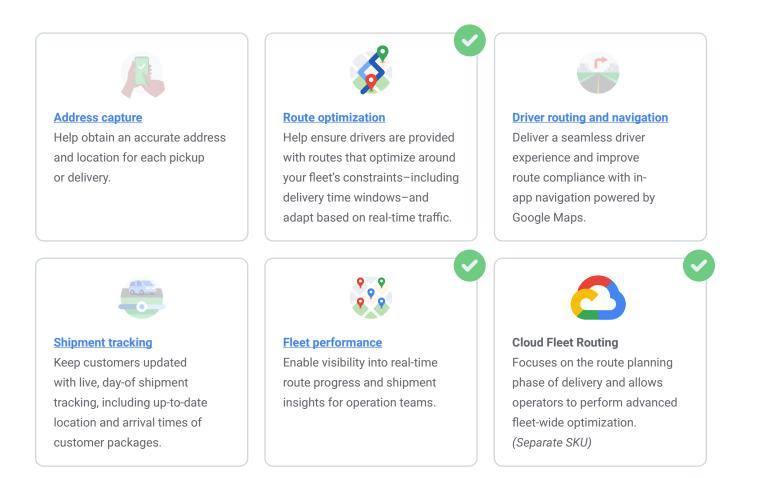
Visit the Google Maps Platform Last Mile Fleet Solutions to learn more.





Summary: Last Mile Fleet **Solution Capabilities**

Acme manages their fleet and continues to refine its performance using Route Optimization and Fleet Performance, two of the capabilities found in the Last Mile Fleet Solution, as well as Cloud Fleet Routing.





Let's get started.

Documentation, examples, and development resources:

developers.google.com/maps/documentation/transportationlogistics/last-mile-fleet-solution



