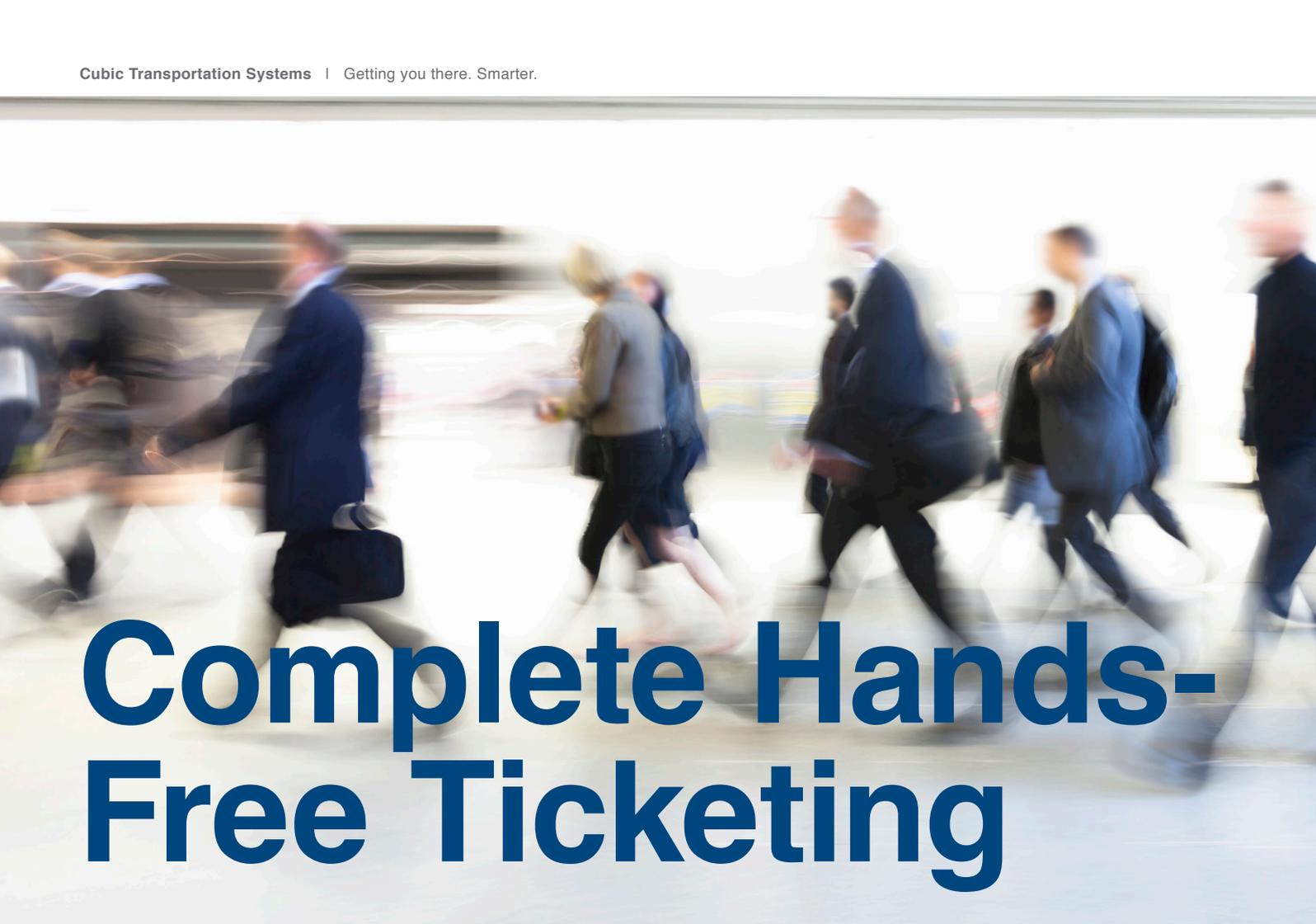


Cubic Hands-Free Ticketing

The Ultimate Travel Experience





Complete Hands-Free Ticketing

As the speed of innovation in transportation increases, so does the need for simple, lightweight, and effortless ticketing solutions. The era of paper tickets has ended – and Cubic firmly believes the future of ticketing belongs to mobile. With this in mind, we have leveraged our global resources and industry expertise to create a new solution uniquely positioned to benefit agencies worldwide. Cubic’s Hands-Free Ticketing Solution is based on technology that has the potential to revolutionize mobile ticketing and inspire a whole new way of thinking about the transit ticketing experience – from both the perspectives of the consumer and the transit agency.

The Hands-Free Ticketing solution delivers Cubic’s latest innovations to large and medium-sized transit agencies, providing multimodal travel services to a single agency or in cooperation with other operators. Hands-Free Ticketing benefits agencies and travelers by maximizing transit system efficiency and speeding station entry and vehicle boarding by allowing travelers to board vehicles without slowing down to tap smartphones to NFC readers or scan digital ticket barcodes.

The state-of-the-art collection of Cubic software and hardware beacons enriches the travel experience through smartphone mobile and Bluetooth Low Energy (BLE) technology, integrated into Cubic’s Mobile App for Travelers, along with BLE beacon arrays and proximity BLE beacons. Cubic’s Hands-Free Ticketing Solution comes in two flavors: Check-in/Be-out (CiBo) and Be-in/Be-out (BiBo).

Mobile app for travelers

Cubic’s cross-platform mobile application was designed with transit agency passengers in mind. It combines multimodal mobile ticketing, smart trip planning, and complete account management into an agency-branded application for popular smartphones.

Convenient CiBo option

Increases convenience for travelers with smartphones

Cubic’s CiBo enables agencies to speed station entry and vehicle boarding by removing the time-wasting steps of manually inspecting and validating tickets, tapping smartphones to NFC readers, or scanning digital barcodes. With the CiBo option of Cubic’s Hands-Free Ticketing Solution, travelers conveniently

We can deliver a genuine hands-free mobile ticketing experience for travelers that eliminates NFC tapping and barcode/QR scanning



Directional BLE beacon arrays

These unique, Cubic-developed directional Bluetooth beacons are installed at station gates and transmit BLE signals in a specific pattern. This enables accurate detection by the Mobile App for Travelers application installed on passengers' smartphones as they walk through the gate (BiBo). The technology requires minimal equipment and can fit into any existing gate.

Proximity BLE beacons

These Bluetooth beacons are installed on transit vehicles to transmit BLE signals that are automatically detected by the Mobile App for Travelers application installed on users' smartphones. This enables the mobile app to automatically determine when vehicles approach (CiBo) and when travelers board and disembark (BiBo and CiBo).

Simple to deploy for existing gates and vehicles

The Hands-Free Ticketing solution requires a minimal amount of transit system hardware and traveler software to operate. Agencies can add Cubic directional BLE beacon arrays to existing gates and Cubic proximity BLE beacons to existing vehicles, thus avoiding the need for costly hardware replacements. Travelers download the free Mobile for Travelers application from the Apple App Store or Google Play Store and install it on their smartphone. Cubic makes it fast and easy to transition agencies to Hands-Free Ticketing.

check into the transit network when boarding transit vehicles through the Mobile App for Travelers application installed on their smartphones. When disembarking, the check-out process happens automatically and without the need for user interaction once the user's smartphone loses signal from the transit vehicle.

Automated BiBo option

Provides the ultimate traveler's experience

The highly automated BiBo option of Cubic's Hands-Free Ticketing Solution delivers the ultimate hands-free ticketing experience to travelers by eliminating the need to slow down or complete an action, e.g., tapping their smartphone to a reader, when walking past gates to enter or exit a transit system or when boarding and disembarking transit vehicles. The Cubic Mobile App for Travelers application installed on users' smartphones automatically detects Cubic BLE beacons on gates and vehicles – even when the smartphones are in use – to accurately determine transit system entries and exits.

Integrates with Cubic Services for Transportation

With the growth of multimodal travel, the performance of an intelligent urban transportation system depends on the seamless integration of diverse components. By managing the business support, financial services, IT operations, asset management and professional services, Cubic helps transit agencies deliver what they do best – providing high-quality, customer-centered transportation services.

NextCity – building a smarter tomorrow

The Cubic Hands-Free Ticketing Solution is inspired by NextCity. NextCity is Cubic’s vision for city management and integrated traveler payment and information that centers on three core principles: the delivery of an integrated customer experience, one account and integrated operations and analytics.

As the world’s population moves to urban centers, the result is greater traffic congestion, frustrated travelers and lessened productivity. Intelligent and actionable information is the key to ensuring that everything is running as smoothly and efficiently as possible within the travel networks – and will empower travelers to make smarter, more informed decisions based on facts. NextCity provides a roadmap for a coordinated framework – using legacy and emerging payment methods and information system to integrate all travel information and payment, customer experience, operations and analytics in the region for all modes of transportation.

The NextCity vision is built on a model for real-time data gathered across a transportation network through payments, cameras and other touchpoints, increasing travel efficiencies without losing individual authority flexibility. For travelers, this means personalized, actionable information sent directly to their mobile device, all supported by a single account to pay for their entire trip.

Cubic – a leader in intelligent travel solutions

At Cubic, we believe our identity is intrinsically linked with our customers, and the people our customers serve. How they get from one place to the next – how that impacts their lives, their fellow travelers and their cities – and how it feels along the way.

That’s why we’re passionate about developing transportation solutions that improve the way we move throughout cities. Innovation is in our culture, and our history speaks for itself. In our 45-year history, we’ve delivered state-of-the-art public transit and traffic management systems to over 450 operators in major cities on four continents.



Cubic Transportation Systems, Inc.

5650 Kearny Mesa Road
San Diego, CA 92111
TEL: +1.858.268.3100
ctsinfo@cubic.com
cubic.com/transportation