

Cubic Data Management & Analytics Platform

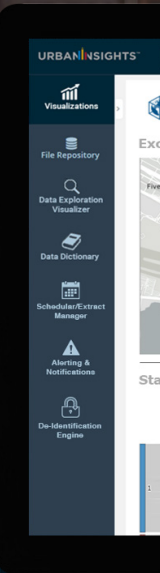
Explore the Power of Data



Explore the Power of Data

As cities become smarter and more digitized, transportation agencies gain access to a growing wealth of data, ranging from back-office and Internet-of-Things endpoints to transportation devices and ridership statistics. Aware of the opportunities brought about by the connected economy, travelers increasingly demand immediate and reliable data insights that would make their journeys shorter, simpler, and more efficient. Yet, limited analytics tools, incomplete data sets, and a lack of integration between data management systems prevent most agencies from understanding the full-picture of day-to-day operations and making the most of data assets available at hand for their own benefit and the benefit of their riders.

That's why we have developed Cubic Data Management & Analytics Platform – a transportation-oriented, cutting-edge, secure, multi-tenant cloud-based data management and analytics solution, capable of satisfying even the most demanding transportation analytics needs. Supporting both service and operations, Cubic Data Management & Analytics Platform equips transportation agencies with a readily available framework that can answer the toughest industry questions and provide real-time, actionable insight to drive operational excellence, improve service quality, and reduce costs – allowing transportation agencies of any size to explore the power of data and put it to good use.



- Low-cost, high-reward one-stop shop for all your data & analytics needs
- Secure, versatile and customizable transportation analytics solution
- Intelligent, actionable insights at a press of a button

Real-Time Insights and Alerts

With Cubic Data Management & Analytics Platform, transportation agencies can take advantage of real-time insights and alerts to improve their decision-making, shorten response times, and proactively address any developing issues. Both user and role-based, the platform ensures the right insights reach the right audience at just the right time. Notifications and real-time alerts make monitoring data anomalies and out of tolerance thresholds based on historical trends straight-forward, immediately flagging any potential issues and contributing to smooth network operation.

Passenger Movement Analysis

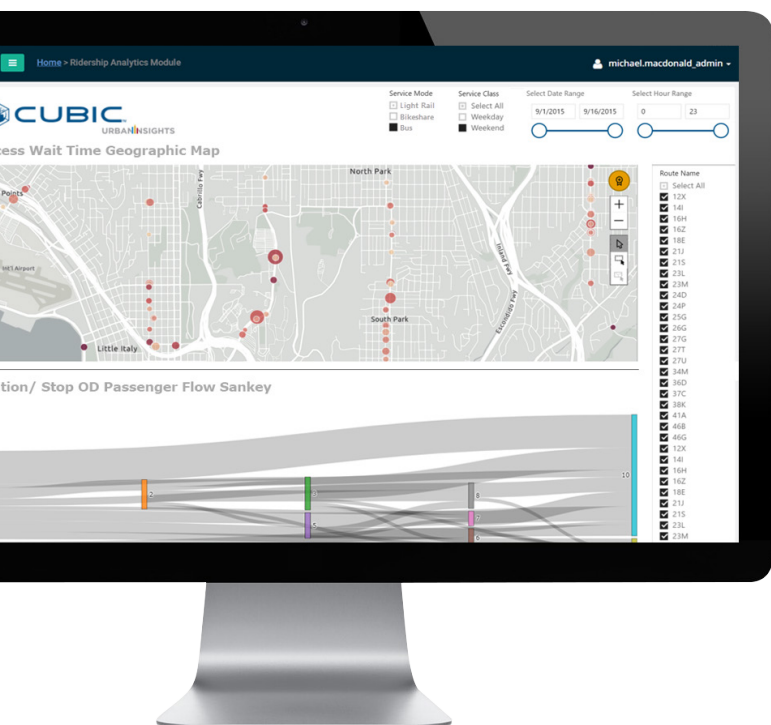
Cubic Data Management & Analytics Platform includes a powerful and flexible tool that allows agencies to gain actionable insights into full customer journeys, including origin, destination, and linked passenger trips. By leveraging multiple agency data sources, including fare collection, passenger count, and vehicle location, the Passenger Movement Analysis module can predict customer destinations, improving route and schedule alignment, fare product optimization, and reducing operating costs.

Low-Cost, Low-Risk with High-Return

By leveraging the next-generation data integration technology, Cubic Data Management & Analytics Platform allows transportation agencies to take advantage of new technologies without the associated risks of exposure. Various subscription levels and modular features make the platform affordable for agencies of any size and with varying data management and analytics needs. Furthermore, the platform keeps consumption costs down by auto-scaling services so that agencies pay only for what they use within their subscription.

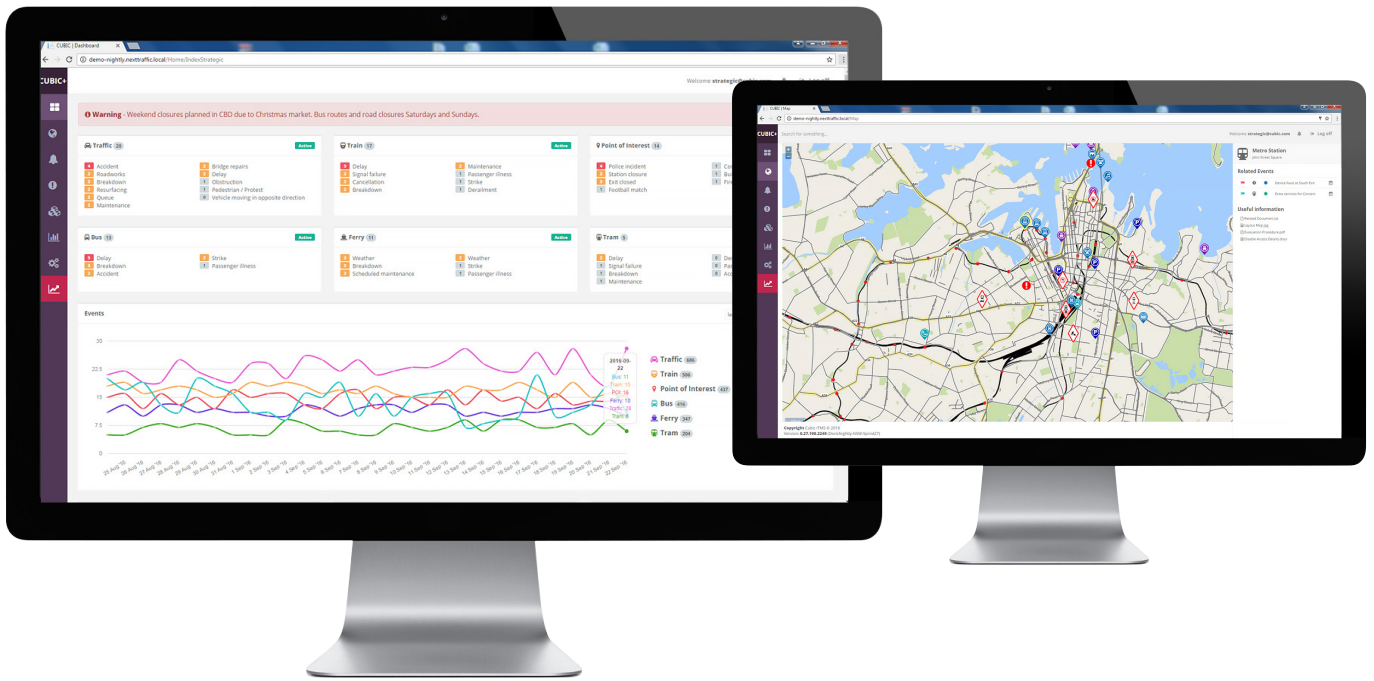
Cubic Data Management & Analytics Platform Overview

Our next-generation Data Management & Analytics Platform works out of the box with Cubic products but can support any transportation data. It is entirely customizable, allowing agencies to choose among many prebuilt, transportation-focused analytics modules and features that best suit their route networks, modes of transportation, analytics and data management requirements, and available data feeds. A number of advanced analysis and data management tools combine innovative technologies for robust, intelligent, real-time data insights from multiple transportation data sources:

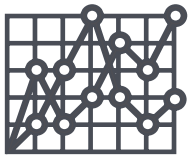


Superior Data Analytics

Powered by state-of-the-art Artificial Intelligence and Machine Learning capabilities, Cubic Data Management & Analytics Platform offers a superior suite of advanced data warehousing, reporting and analytics capabilities that bring real customer value in areas that matter the most, including predictive analytics, system integration, and traveler insights. Featuring robust techniques for ingestion, cleansing and consolidation of data from multiple transportation data sources, including Cubic Urban Mobility Back Office and Cubic NextBus, as well as any third party data sources (device, AFC, AVL, APC, IoT, and more), the platform enables ready access to advanced analytics techniques and empowers agencies to perform meaningful analysis, maximizing the use of transportation planning and operations even on a limited budget.



Analytics



The platform features several preconfigured but flexible modular packages of insight and data management and analytics capabilities, including data exploration, alerting,

export, and APIs, providing transportation agencies with contextualized, actionable analysis in the form of helpful visualizations, data dictionaries, and analytics white papers.

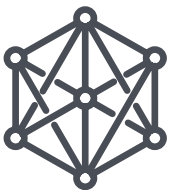
Data Exploration



Cubic Data Management & Analytics Platform scales to extremely large data sets and features a data exploration visualizer which allows transportation agencies to easily

take command of their data, make discoveries, identify trends, and share insights.

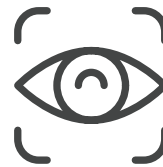
Service Quality Analytics



The service quality module provides transportation operations and planning staff with a suite of reporting and decision-support tools that include service performance analysis, reliability

indices, and network connectivity across transfer points and modes of transportation.

Device Monitoring & Proactive Management



Cubic Data Management & Analytics Platform offers extensive device monitoring and management capabilities, providing advanced analytics

around crucial transportation and city assets to monitor device health, optimize and maximize device life, and enable proactive prescriptive and predictive maintenance.

De-Identification Engine



Cubic Data Management & Analytics Platform comes with built-in data privacy features. The de-identification engine enables secure use of data, automatically transforming sensitive and

personally identifiable (PII) information into an analytics-ready dataset that can be securely consumed for research, monetization schemes, and other internal and external purposes.

Analytics Advisory Services



The Analytics Advisory Services module provides additional hands-on consulting services, helping guide agencies through various current and future data management and analytics

initiatives, such as conducting ridership studies, identifying strategic growth areas, drafting grant proposals, and shaping data systems and priorities.

NextCity – building a smarter tomorrow

Cubic Data Management and Analytics Platform is inspired by NextCity, 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 systems 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, sensors 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 transportation and traffic management systems to over 450 operators in major cities on four continents.



Our platform comes preconfigured with Cubic data but is adaptable to any agency data source, offering seamless user experience with consolidated, contextualized analysis and tools.



Cubic Transportation Systems, Inc.

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