

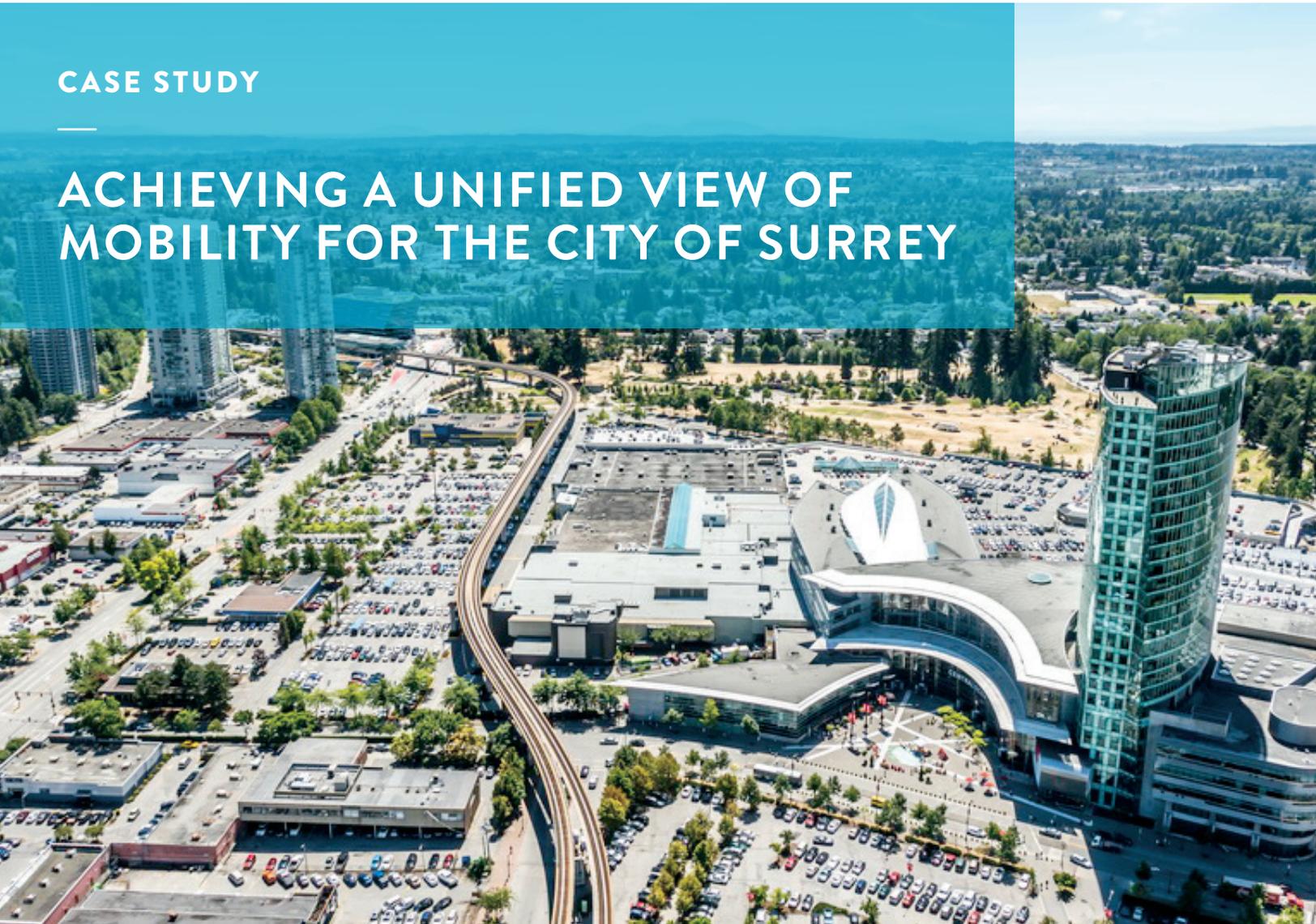


URBAN LOGIQ

Building Better Communities with Data

CASE STUDY

ACHIEVING A UNIFIED VIEW OF MOBILITY FOR THE CITY OF SURREY



PROFILE: CITY OF SURREY

Population: 517,887

World's Top 7 Intelligent Community Winner

2016 Open Data Excellence Award Winner

EXECUTIVE SUMMARY

With approximately 2,700 sensors spread out over 300 intersections producing real-time traffic count data, the Traffic & Transportation Department at the City of Surrey was looking for a way to leverage this valuable data source for strategic and operational traffic engineering and transportation planning purposes.

The City of Surrey utilizes induction loop sensors and traffic cameras throughout most major intersections. Data from induction loops are transmitted to a central server, in 15-minute intervals, on a daily basis.

RESULTS

A complete, unified view of the City of Surrey's traffic and transportation data and derived insights on mobility patterns.

UrbanLogiq's Traffic Intelligence Platform was deployed to automatically aggregate and perform mission-critical analytics on this sensor data, resulting in the following benefits:



Instant access and generation of traffic count reports for internal and public consumption, taking months off the average workload of staff.



Real-time calculation of Average Daily Traffic (ADT) and Peak Hour Factor (PHF) to aid transportation planners.



Cost savings due to a reduction in required manual counts programs.

“UrbanLogiq’s platform allowed us to replace our tedious and expensive data collection program by leveraging our existing infrastructure to provide real-time traffic volumes without the need for any additional hardware.”

TAYLOR SPRAGGS, TRAFFIC ENGINEER

PROBLEM ASSESSMENT

The City of Surrey is one of the largest and fastest growing municipalities in Canada. It sits just within the major metropolitan area of Vancouver and supports a growing amount of commuter traffic and congestion originating from within and flowing through city limits resulting in some of the worst congestion in North America. City staff needed to better understand movement patterns and road usage within the City in order to provide better services to residents and minimize congestion.

The City had made the decision to start to leverage its existing infrastructure, including induction loop sensors and traffic cameras, and began transmitting data back to their traffic management centre. However, lack of easy access to this data made it difficult for city staff to use.

As a result, despite having thousands of hardware sensors producing relevant but inaccessible data, the City continued to rely extensively on scheduling expensive manual traffic counts on an ad hoc and regular basis depending on internal staff and external customer requests.

THE CITY WAS LOOKING TO UTILIZE THIS LARGE DATASET TO REDUCE THE NEED FOR MANUAL COUNTS AND TO SOLVE THE FOLLOWING ENTERPRISE CHALLENGES:

EFFICIENCY

Rapidly search and filter data and perform traffic volume analysis to provide more efficient responses to frequent customer enquiries.

ACCOUNTABILITY

Aid in the transportation planning process with respect to long-term infrastructure and safety planning.

TRANSPARENCY

Support the Economic Development Department in the servicing of real estate, businesses, and land developers by accessing and providing more comprehensive, real-time traffic patterns.

To make all of this possible, UrbanLogiq's first step was to clean all of the City of Surrey's traffic data. **This is a core service of UrbanLogiq.** No matter how messy, disaggregated, non-uniform, or disparate your data is, UrbanLogiq commits to aggregating all of it at no extra cost. The process will never burden the client nor be taken on by external third-parties. That is the UrbanLogiq commitment to our customers:

A unified vision of all of your data without additional work on your end.

BROWNSVILLE

100 Ave

Surrey

HOW URBANLOGIQ HELPED

UrbanLogiq delivered and deployed a robust Traffic Intelligence Platform that:

Aggregated the City's traffic count data currently being transmitted via API connection from 2,700 induction loop sensors and layered it with more than 10 years of aggregated historical manual count data. The platform also allowed for all sensors and traffic count collection stations to be accurately displayed on a map.

Automated the generation of Annual Average Daily Traffic, Peak Hour Factor, and sensor maps in addition to producing reports in tailored formats according to the City's specifications and requirements. This gives City staff the ability to generate traffic count reports and metrics at the individual sensor and total intersection level, significantly reducing time spent generating reports.

RESULTS

The implementation of UrbanLogiq has given city staff real-time access to current and historical traffic count data in one central platform that is easy to share. This has led to the following results:

MORE VALUABLE TIME FOR TRAFFIC ENGINEERS:

Instant access to data and generation of traffic count reports for internal and public consumption, a process that has gone from taking days and weeks to minutes.

AUTOMATED CALCULATIONS AND METRICS FOR TRANSPORTATION PLANNERS:

Real-time calculation of Average Daily Traffic (ADT) and Peak Hour Factor (PHF) to aid transportation planners in infrastructure planning.

EASY ACCESS TO DATA AND INSIGHTS FOR CONSTRUCTION AND PUBLIC WORKS:

The ability of construction and design crews to review traffic count data to determine the required thickness of street pavement and to obtain real-time traffic insights remotely through a simple Internet connection.

TAX DOLLAR SAVINGS FOR THE LOCAL GOVERNMENT AND TAXPAYERS:

The city realized savings from reducing the number of expensive manual count programs.

“Having the ability to analyze and consider multiple data sources, particularly those that are near real-time, in one application significantly improves our staff’s ability to make sound decisions that affect all aspects of our transportation network. UrbanLogiq has developed a tool that will be used by the City well into the future and illustrates how sharing data can benefit an organization in new and unexpected ways.”

— BILL MCKAY, GIS MANAGER

ABOUT URBANLOGIQ

UrbanLogiq aggregates, automates, adds, and analyzes diverse data sets to help governments better understand the needs of their communities. The key to this is achieving the compounding value of data and visualizing how different datasets in your community behave and interact to both improve service delivery and plan for greater resiliency and sustainability. UrbanLogiq’s Traffic Intelligence Platform aggregates all traffic sensor data, regardless of source and format, to allow optimal timing of traffic lights and long-term planning for infrastructure investments.

Want to learn more?

Contact us today to schedule a demo.

1-833-872-2647 • info@urbanlogiq.com • www.urbanlogiq.com

