

CASE STUDY

DETAILS

City of Coquitlam's Award Winning Innovation in Facilities Asset Management

LOCATION:

Coquitlam, BC

FIRM TYPE:

Owner

PRIMARY INDUSTRY:

Government

PROJECT TYPE:

Asset Management

PROJECT SIZE:

~120 buildings

Coquitlam, located in the Lower Mainland of British Columbia, is a vibrant and growing city with a population of approximately 150,000 residents. The city prides itself on its well-maintained public facilities, which include recreational centers, parks, and municipal buildings. Managing these assets efficiently is crucial to the city's operations and service delivery.

The adoption of Cupix led to:

Easy access to asset information

Reduction in asset management system discrepancies

Cost savings on labor hours and fleet

Reduction of response time for maintenance

49% increase in the number of assets recorded in EAM software

94% Decrease in time needed to resolve a flooring issue

Challenges

Before adopting Cupix, Coquitlam faced several challenges in managing its facilities:

- **Data Accuracy and Completeness**

The city's asset data was spread across various systems, including Maximo for maintenance management and VFA (now known as Gordian) for capital planning. This fragmentation led to incomplete and sometimes inaccurate asset records, impacting preventive maintenance and capital planning.

- **Collaboration and Coordination**

Coordinating with contractors and internal teams often required multiple site visits, resulting in inefficiencies and delays in decision-making.

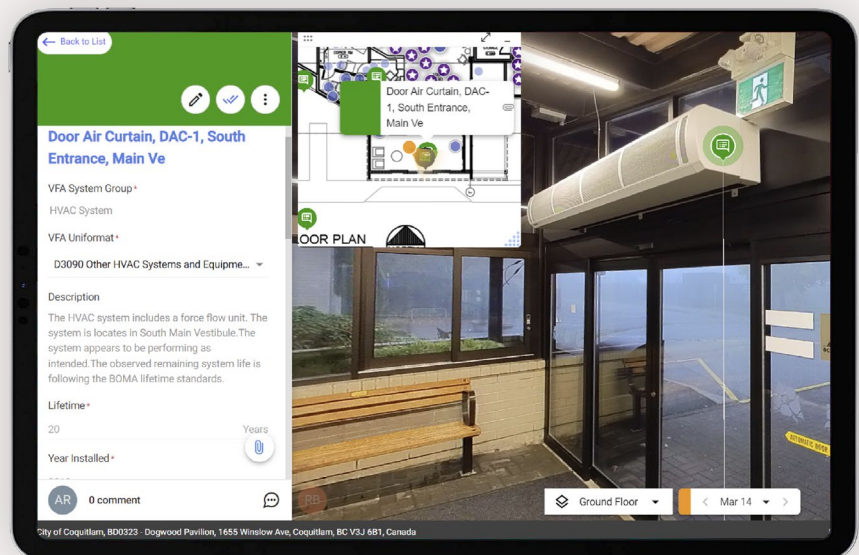
- **Asset Visibility**

Ensuring all assets were accounted for and maintained was difficult, leading to potential oversight in preventive maintenance and increased risk of unexpected failures.



Implementation of Cupix

Coquitlam's asset management team spearheaded the implementation of Cupix as part of a three-year phased approach to capture all city buildings, which total around 120. The project began with a pilot involving a large recreation center and a small spray park. The ease of data collection and sharing quickly gave all of the stakeholders visibility of facilities where they quickly saw the value of an accurate and accessible as-built data set.



Benefits and Results

- **Enhanced Data Accuracy**

With Cupix, Coquitlam was able to conduct an internal audit of its asset data for one of the buildings, resulting in a 49% increase in the number of assets recorded in Maximo and a 26% increase in VFA. This led to a 2% increase in the replacement cost of that building, reflecting a more accurate representation of its assets.

“Our site teams are using Cupix for progress reporting and verifying the accuracy of as-built construction against the BIM model with ease. Additionally, we leverage Cupix for collaborative discussions by virtually visiting points of interest.”

Alexandra Rhod

Facilities Asset Management Planner

- **Improved Collaboration**

Cupix's 3D reality capture capabilities allowed city staff to view and discuss facilities remotely. This reduced the need for site visits, saving time and resources. For instance, a flooring issue at a senior center was resolved in a 5-minute discussion using Cupix, avoiding a 45-minute travel time for both parties.

“Using Cupix, we can make decisions right away because we can see the space instantly. This has significantly improved our efficiency.”

Kevan Cornes

Manager Facilities Assets

- **Streamlined Contractor Coordination**

By sharing Cupix links with contractors, the city enabled them to view and assess work sites remotely. This facilitated better quoting processes and reduced the need for preliminary site visits.

“We shared Cupix links with contractors for quoting, allowing them to see the site remotely. This has streamlined our processes and improved coordination.”

Alexandra Rhod

Facilities Asset Management Planner



Benefits and Results

- **Reduced Response Time for Maintenance Requests**

Virtual visits enable maintenance personnel to quickly locate and understand the maintenance requirements to facilitate a quick and effective response and completion.

- **Enhanced Training and Safety**

The visual representation of assets helps staff prepare for site visits, reducing the risk of missing necessary tools or information. Cupix has also been used to attach training videos to the assets in the system, ensuring consistent and safe procedures.

“Having training videos and visual representations of assets in Cupix helps our staff perform maintenance safely and efficiently.”

Kevan Cornes

Manager Facilities Assets

- **Environmental Benefits**

The reduction in site visits also contributed to a lower carbon footprint, aligning with the city's sustainability goals.

“Reducing the need for travel to site visits has not only saved time but also helped us reduce our carbon footprint, supporting our sustainability initiatives.”

Alexandra Rhod

Facilities Asset Management Planner



Awards and Recognition

The City of Coquitlam's innovative use of Cupix has not gone unnoticed. The city won the Canadian Network of Asset Managers (CNAM) Innovation Award for its ground-breaking use of Cupix at their 2024 national conference. This prestigious recognition highlights Coquitlam's commitment to leveraging advanced technology for better asset management.

The city submitted the Cupix initiative for a 2024 Union of BC Municipalities Community Excellence Award, to be announced in late September 2024. By embracing state-of-the-art technology to enhance decision-making and operational efficiency, Coquitlam is supporting a sustainable and resilient future.



Future Plans

Coquitlam plans to continue its phased approach to capturing all city buildings with Cupix. The facilities management team is also exploring additional applications of the platform, such as embedding shutoff locations for emergency response and integrating hazardous material information.

They have been proactive in sharing their success with other municipalities, presenting at conferences and webinars. They see a significant opportunity for Cupix to become a standard tool in municipal asset management across Canada, driven by federal and provincial mandates for detailed asset capture.

Conclusion

The City of Coquitlam's adoption of Cupix has brought substantial improvements in data accuracy, collaboration, and operational efficiency. By leveraging 3D reality capture technology, the city has set a new standard for facilities asset management, ensuring better service delivery and resource management for its growing population.

