

CASE STUDY

Reduced Site Visits And Travel Time By 80% With Remote Oversight

Vancouver Area Municipalities Expand Use Of 3D Digital Twins To Save Time And Money.

Incorporating Visual Plan's 360 capture and platform into the workflow is allowing Coquitlam and other Vancouver-area municipalities to gain scalable, comprehensive virtual oversight of their buildings and public facilities, allowing for more effective and selective integration of more costly LIDAR and BIM technologies where needed. With 360 photogrammetry as the foundational visual record for each site, authorized Visual Plan provider Kickstart Technologies has **optimized the cities' management processes by leveraging Visual Plan's integrations with third party platforms, like IBM Maximo for work order and asset management and Gordian VFA for asset capital planning.** Other visual data like 2D blueprints, BIM, CAD, GIS data and LIDAR scanning are also imported, organized and available for equipment management, construction progress monitoring, maintenance tracking, and more effective quote solicitations, saving countless hours of time.



360 CAPTURE SPECS

camera Ricoh Theta Z1

capture sites Municipal buildings, aquatic centers, public parks, public school districts in the greater Vancouver area

capture size >1 Million sq ft

capture time <1 day per site

capture date June 2020

reduced site visits

& travel time by up to 80%

\$9000 savings

in 3D capture costs for single project, at a single site

\$500 pre-planning cost savings per repair

per contractor, on average

✓ **UP TO 80% REDUCTION IN TRAVEL TIME & SITE VISITS**

✓ **STREAMLINED DECISION-MAKING & COMMUNICATION WITH CONTRACTORS**

Enabling Remote Oversight And Comprehensive Visual Asset Management From A Single Data Hub

Every stakeholder – from government officials to, municipality engineers, service companies, architectural and engineering firms, and daily maintenance crews – can incorporate their annotations, still photographs and documentation reports along with 2D CAD, BIM, and 360 photogrammetry of each site, yielding a comprehensive single-source record of the current and as-built conditions of each facility.

For the City of Coquitlam, their existing GIS system was able to map out facility locations but lacked the ability to offer internal visualization of the buildings. With the implementation of Visual Plan's streamlined capture, processing, and accurate spatial alignment of 360 photos of the building interiors, stakeholders can now gain visualization for internal drill downs, oversight and streamlined asset tagging.

“The immediate money saver for Coquitlam will be to reduce back and forth review by service providers who need to view the site and assess needed maintenance or repairs. They are now able to figure out what needs to be done, where the repair needs are located, and what equipment will be necessary before the service provider or an employee even gets in a truck.”

– Doug Suddaby, Founder, Kickstart Technologies

KEY PLATFORM FEATURES

- Camera Agnostic Platform
- Multi-shot 360 Capture
- Pano Editing Tools
- 2D CAD/Floor Plan Import
- Automatic & Manual Redaction of Faces through a Blur
- Importing Additional Data (BIM, LIDAR, Revit models, GIS, 2D floor plans,)
- Annotations / Annotation Groups
- In-Environment Markup & Measuring
- Asset Management Integrations (Maximo)
- Share/Reporting (Deep links to specific locations / User access controls / HTML Reports)
- Remote Viewing & Access Secure Cloud Storage

Critical Features For Success

As Kickstart Technologies and the City of Coquitlam continue to see benefits from implementing Visual Plan into their workflows, the central theme for their success has been establishing their comprehensive data hub. The teams can easily capture their facilities, gain virtual oversight, integrate multiple forms of visual data, communicate effectively, and streamline decision making all from a single source: the Visual Plan SiteView platform..

- Visual Plan as a data hub with BIM, LIDAR, and CAD import
- Third-party integrations with asset management platforms
- Virtual walk-through functionality to enhance remote oversight & decision-making
- Easy import, scale, and alignment of floor plans to GIS via Import Floor-plan Wizard
- AI spatially and accurately aligned the panos automatically
- Intuitive organization of 360 photos across levels, areas, and spaces (accelerated via the Visual Plan Capture App)
- Eliminates BRAIN DRAIN (Employees retire or move on and so does all their knowledge)

Tangible Time & Cost Savings: ROI Of 3D Digital Twins For Municipalities

75% Cost Savings for Public School Capture For the First Project at a Single Site:

- Use of Visual Plan over LIDAR reduced the project capture and modeling cost from over \$12,000 to \$3,000 for a single project, on a single site, while still offering limited LIDAR capture where needed.

Reduced Site Visits by and Travel Time by up to 80% with Remote Oversight:

- Stakeholders can now remotely walk through any job-site, evaluate the necessary maintenance needs with subject matter experts or building professionals and communicate effectively with field teams to efficiently plan the repair or maintenance project – eliminating countless hours of travel time, per-diem costs and required safety protocols associated with on-site visits.

Expedited Preventive Maintenance & Improved Uptime

- Without 360 site visualization, a single repair typically requires two different service calls: the first to identify and evaluate the needed repairs, and the second to complete the repair. By conducting the pre-planning site visit virtually with Digital Twins, the City of Coquitlam is saving approximately \$500 per contractor, pre-repair review, and improving uptime with more knowledgeable vendors.

“You aren't using 15 different software applications – it's all in one place – if you have the ability to have 1 singular process that affects everyone the same way, giving the benefit to the organization, as one fixed process. How do you put a price on that? It's impossible because of the scalability of the benefit.”

– Doug Suddaby, Founder, Kickstart Technologies