



AUTODESK Construction Cloud

WINDOVER
CONSTRUCTION
WHERE TEAMWORK BUILDS RESULTS

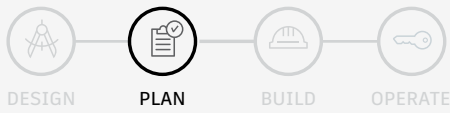
Windover Construction Reduces Quantity Takeoff Time by More Than 50% with Autodesk Takeoff

Windover Construction (Windover) is a construction management firm that takes an outcome-focused approach to projects, assessing technology against project challenges to implement the best solutions for project success. To better equip its estimating team with a robust quantification tool, Windover adopted Autodesk Takeoff within Autodesk Construction Cloud™. With the ability to do takeoffs in 2D and 3D, Windover can eliminate the gaps found in traditional methods of estimating, saving more than 50% of overall estimating time.

Customer Snapshot

FIRM SIZE: <500
FIRM TYPE: GENERAL CONTRACTOR
REVENUE: \$130 MILLION
FOCUS AREA: COMMERCIAL, INSTITUTIONAL
HQ: BEVERLY, MA, US

PHASE:



CAPABILITIES:

- Quantification

OUTCOME:

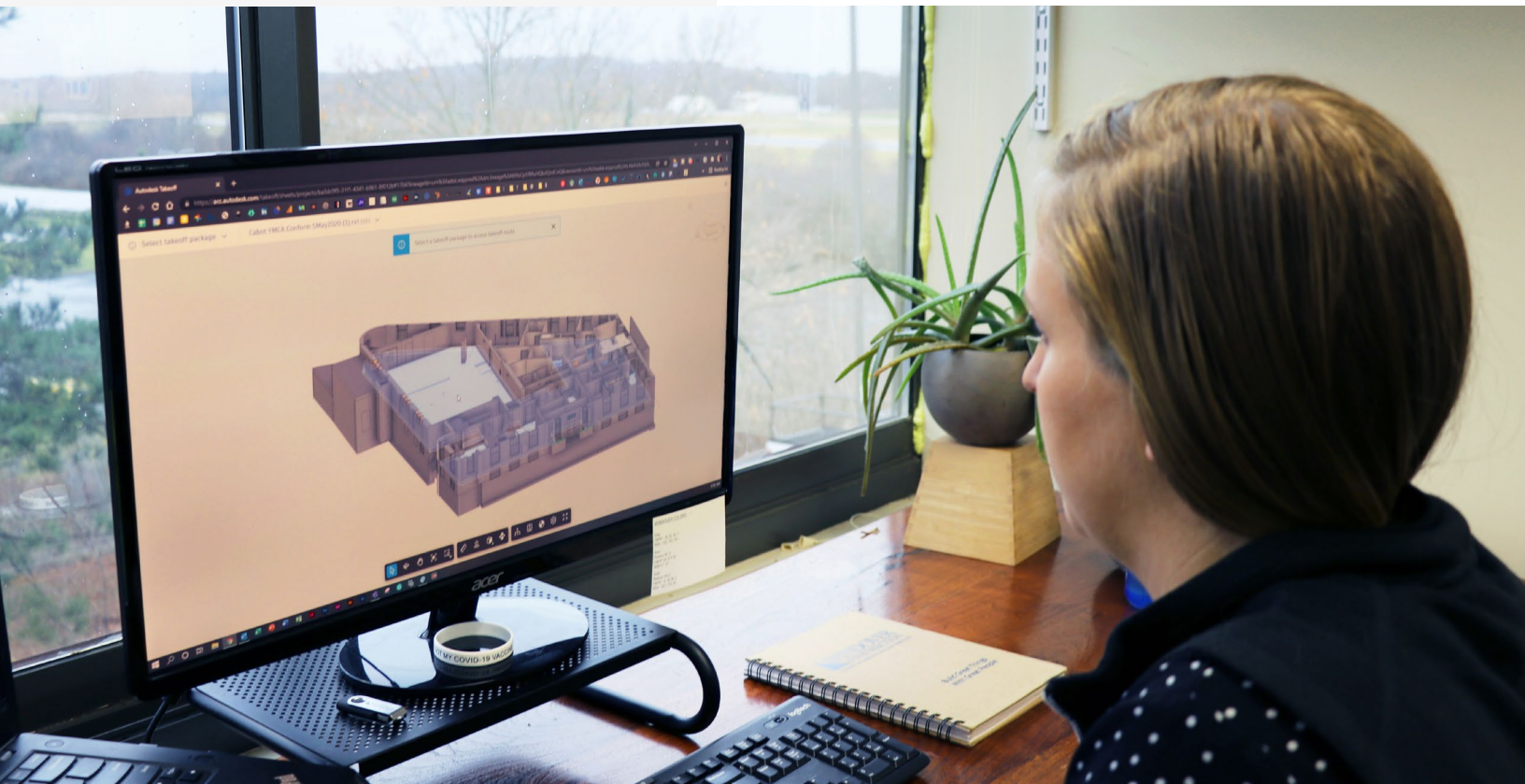


Eliminating Inefficiencies with Traditional 2D Takeoffs

Windover wanted to optimize the preconstruction process by connecting its data between Autodesk Revit and a cloud-based quantification tool to streamline the estimating process.

“All projects start in Autodesk Revit, and we think of that as the central station that is feeding efficient workflows across our projects,” says Amr Raafat, Vice President of VDC and Technology at Windover Construction. “To translate the data in the most efficient way between our VDC and estimating teams and provide an accurate estimate of the project cost, we wanted to invest in the data as much as possible to automate the process and provide a more efficient workflow.”

With the availability of Autodesk Takeoff - a cloud-based quantification tool - Windover saw the opportunity to connect BIM data into its estimating workflow to preserve and leverage the data from the 3D enriched model, when doing a 2D takeoff.



Connecting Data to Provide Accurate and Detailed Estimates

Windover's objective was to invest in its BIM data to drive efficiency and increase early collaboration between its estimating and VDC teams. Autodesk Takeoff provides a common data environment that supports effective data exchange between teams to streamline decision-making by simplifying access to information-rich 3D models. With Autodesk Takeoff, Windover's VDC team can share the enriched 3D models with estimators to work with 3D quantities instead of reinventing the wheel by completing a 2D takeoff.

In addition to quickly completing 3D takeoffs, Autodesk Takeoff supports 2D takeoffs when a model is unavailable. Creating takeoffs in 2D and 3D from one solution allows Windover to store data in one environment to ensure collaboration and a single source of truth for project data.

"For years, we've been trying to bridge the gap and eliminate redundancies from doing a 2D takeoff from a 3D model. Autodesk Takeoff facilitates information flow by eliminating data silos to produce efficient workflows for our projects to develop detailed estimates from enriched 3D models while saving time," says Kevin Hansen, Vice President of Preconstruction and head of the Estimating team at Windover Construction. "And not only that, but Autodesk Takeoff allows us, as estimators, to focus on what matters,

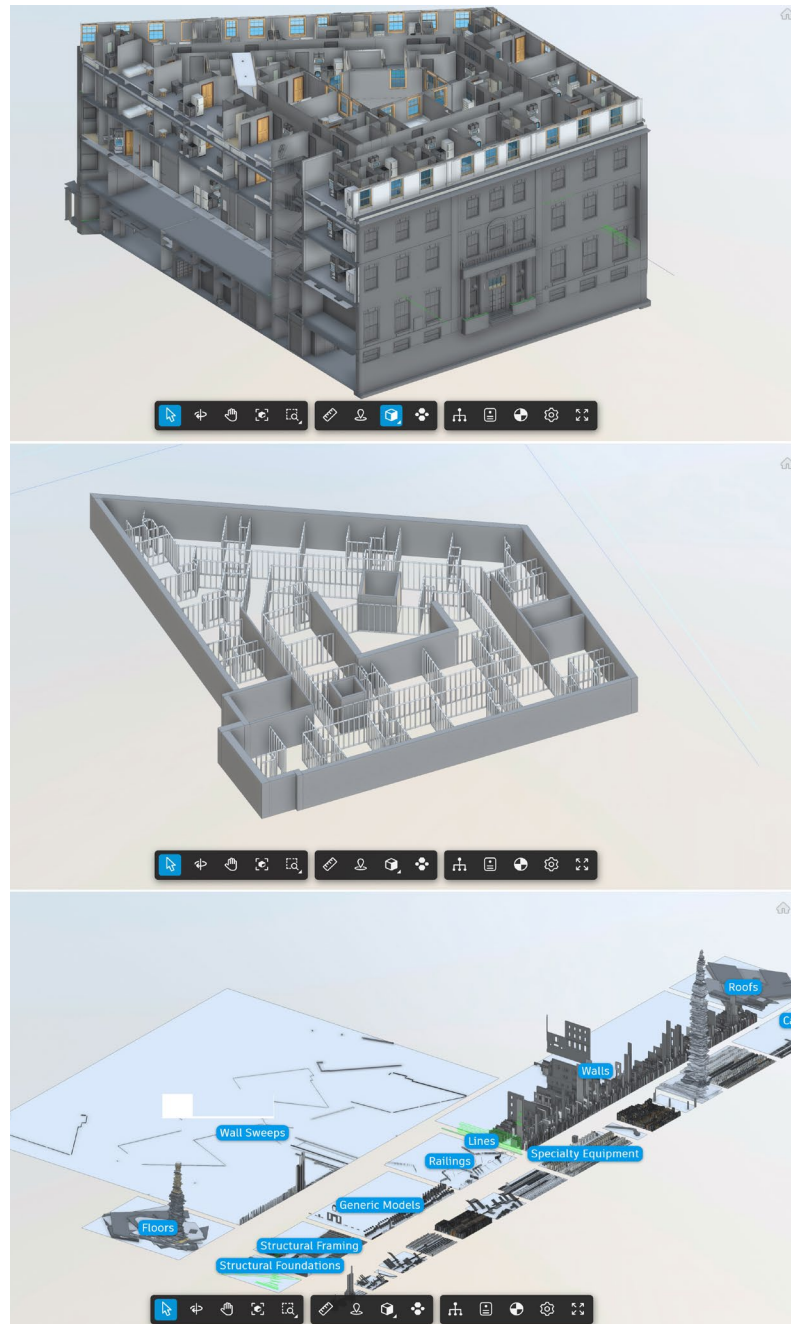
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With the adoption of Autodesk Construction Cloud, we can achieve this vision and transform the way we build with the most efficient and sustainable methods for our clients.”

-Stuart Meurer
President and CEO,
Windover Construction

providing a greater level of expertise to our clients. Instead of working in Revit or dealing with 2D plans, color-coded plans, measurements, or dimensions, we can easily extract the data, analyze it, and provide an accurate and detailed quantity takeoff which reflects positively on our overall estimating workflow.”

With access to 3D data at the click of a button, Windover's estimating teams can focus on pricing and cost to provide an accurate estimate within a matter of seconds. In addition to working more efficiently, Windover's estimating teams can work collaboratively on estimates regardless of location as data is not saved locally on a computer. Teams can complete estimates promptly without uploading or downloading models with access to real-time data.



Reducing Takeoff and Estimating Times by Automating The Quantification Process

The Windover team utilizes Autodesk Takeoff to generate exact quantities in both 2D and 3D to support prefabrication and offsite construction planning. With the ability to do takeoffs in 2D and 3D, Windover can eliminate the gaps found in traditional methods of estimating. This process reduces the risk of missed quantities and guarantees accurate data capture.

Windover automated the quantity takeoff process on a recent project, saving up to 30% estimating time. The team experienced a further time savings of more than 50% by replacing the traditional method with a faster way of completing a quantity takeoff by embedding the BIM data into Autodesk Takeoff.

A huge part of the estimating workflow is about quantities and material types used on the project. With many of Windover's project's renovating existing structures, they need to ensure that the new equipment and design elements are correctly modeled into the new space when designing in Revit. With laser scanning, Windover's VDC team can capture existing site conditions to share with Architects to design the model accurately. That data

is then funneled directly into Autodesk Takeoff for its estimating teams to better understand the nature of the space, select materials, and assess those materials against the supply chain to ensure the project stays on budget and schedule.

"For years, we had that data in Revit, but putting the data directly into Autodesk Takeoff is transforming the way we quantify, estimate, and plan our projects. Having all data connected in one ecosystem builds on Windover's purpose of automation and taking the proper steps to streamline our preconstruction workflow to ensure high-quality deliverables on every project. With the use of connected BIM data, we can reduce waste to build efficient, prefabricated modular construction for our clients," says Raafat.

"Windover's innovative mindset of developing tech-first approaches supports our long-term strategy of implementing solutions to ensure data flow throughout the project lifecycle," says Stuart Meurer, Windover's President, and CEO. "With the adoption of Autodesk Construction Cloud, we can achieve this vision and transform the way we build with the most efficient and sustainable methods for our clients."

