



## CASE STUDY **Tallman Building**

The Tallman Medical Office Building serves the healthcare needs of thousands of Seattle residents each year. A recent Tune-Up at the building is helping its tenants and owner save on energy bills and improve patient and tenant comfort.

The Tallman Building is located at the Swedish Medical Center Ballard Campus in North Seattle. The five-story, 85,000 SF-building is leased to the hospital, which has an emergency department and imaging center on the first and second floors, and another three floors of medical office and clinical space. The building is connected to the main hospital via a sky bridge, allowing patients, staff, and physicians to conveniently move between the main hospital and the emergency department, imaging and medical offices.

Completed in 2010, the Tallman Building is owned and managed by Welltower Inc.—a real estate investment trust with healthcare assets including medical buildings, assisted living facilities and senior housing complexes across the U.S. Welltower Real Estate Manager Susan Moore enrolled the building in the City of Seattle’s Building Tune-Up Accelerator program to get a head start on completing the requirement before the deadline. She was able to take advantage of the financial assistance provided by the program to hire a specialized contractor to evaluate the building and complete the necessary efficiency improvements. Susan hired Martin Clinton of UMC, a Washington-based building systems and engineering company with extensive experience in the healthcare industry.

After a thorough assessment of the building, Martin found that while it was in good shape overall, there were still areas where its energy efficiency could be improved. Some actions required cleaning and adjusting mechanical systems and performing some minor repairs, while others involved educating the building’s occupants. The Tune-Up and all the required corrective actions were implemented in the medical office space as of June 2019, and Susan is looking forward to seeing the energy bill savings add up.

“You always want to see savings in 10 to 18 months. But if people are feeling better, that has tremendous value too,” said Susan. “Brightness, efficiency, and comfort—if we have all three, the ‘Big Three’ as I call them—that’s worth something.”



Welltower Maintenance Engineer Kevin Gray checks the building’s energy management system controls. Photos courtesy Welltower Inc.

### WHAT IS A BUILDING TUNE-UP?

Building Tune-Ups are assessments of building energy and water systems to detect and correct operational or maintenance problems. Through Tune-Ups, building owners find operational efficiencies and low- and no-cost fixes that improve building performance. The City of Seattle requires Tune-Ups every five years for buildings with 50,000 SF or more of non-residential space.



“I went into the Tune-Up process begrudgingly, thinking it was just another government regulation. But halfway through I changed my mind. This program helps everybody—property managers, tenants, and owners. I plan on using the knowledge I gained from the Tallman Tune-Up to initiate cost-saving procedures and increase efficiencies in all my area buildings.” —**SUSAN MOORE**, WELLTOWER REAL ESTATE MANAGER



Photo courtesy Welltower Inc.

## FINDINGS AND FIXES REVEALED

Required actions included:

- **Lighting controls:** On/off controls were overridden, leaving all third-floor lights on 24/7. Welltower’s actions included educating janitorial staff to turn off lighting overrides when work was completed and/or to schedule work in conjunction with the lighting control schedule.
- **Heating and cooling (HVAC) maintenance:** Two of the building’s HVAC units needed cleaning and general maintenance and air intake sensors needed replacement.
- **HVAC scheduling:** Schedules and set points on multiple terminal units had been overridden causing them to run 24/7. A “re-set” ensured the occupied spaces are heated and cooled at the right times and temperatures.

## GOING ABOVE AND BEYOND

The Tune-Up process revealed several other energy-saving opportunities, such as:

- **Lighting:** Installing lighting occupancy sensors in exam rooms and bathrooms with manual switches and reducing the excessive brightness of elevator lobby lighting, which will save on electricity.
- **HVAC sensors:** Adding velocity sensors to each air handler unit (rather than relying on one to serve all units), which could help save significant energy in the summer and winter months by limiting over- and under-ventilation.

## MEET THE TUNE-UP TEAM

Susan Moore, Real Estate Manager, Welltower; Kevin Gray, Welltower Maintenance Engineer; Martin Clinton, Building Performance Service Manager, UMC

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- **HVAC filters:** Switching out fan terminal unit filters from one-inch filters to two-inch ones could cut labor costs in half and save approximately \$2,700 on energy costs per year and reduce HVAC noise in tenant spaces. Removing outdated air handling unit filters could save another 39,000 kWh or \$4,000 per year.

Following the Tune-Up, Welltower continues to proactively engage in improving the building. Maintenance Engineer Kevin Gray has been at the center of much of this effort, working to ensure the air handlers, terminal units and other systems are running as efficiently as possible.

## UNEXPECTED BENEFITS

While Susan expected to find energy-saving opportunities through the Tune-Up, she didn’t anticipate it resulting in better relationships with her tenants and staff. Many of the steps needed to improve the building’s efficiency relied on occupants and staff having a better understanding of how overriding lighting schedules and thermostats impact energy use. Susan launched a tenant education campaign on how to use the thermostats to stay comfortable, yet not override the backup setpoints, as well as remind janitorial staff to turn off lights when they are done cleaning for the night. Through this process, Susan learned what her tenants and staff wanted and needed to make the building more comfortable and workable, and now has a stronger relationship with them because of it.



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