



# INTELLI-HOOD®

## KEY SAVINGS

### Overview

Travelodge Dublin was built in 2018 and is a recently constructed hotel in the vibrant city of Dublin, known for its exceptional services and comfortable accommodations. To ensure efficient ventilation and temperature control within the premises, the hotel management decided to implement an Intelli-Hood installation, an advanced system that optimizes kitchen exhaust hoods. This case study aims to analyze the impact of the Intelli-Hood installation on the hotel's utility costs and operating expenses.

### Performance

Before the Intelli-Hood installation, Travelodge Dublin was estimated to spend approximately \$13,878 per year on utility costs without Demand Control Kitchen Ventilation (DCKV) controls. Recognizing the potential for substantial cost savings and improved energy efficiency, the hotel management opted to invest in the Intelli-Hood system.

The Intelli-Hood system was expertly installed in the hotel's kitchen to regulate the exhaust hoods based on real-time cooking activity. This intelligent technology ensures that ventilation is adjusted according to the cooking load, thereby minimizing energy waste and optimizing airflow.

- Total Energy Savings**  
 \$7,274/Year
- Carbon Dioxide**  
 21,381Lbs/Year
- Simple Payback Period**  
 1.1 Year
- Operating Expense Reduction**  
 48%

**Annual Kitchen Hood Energy Costs (USD)**

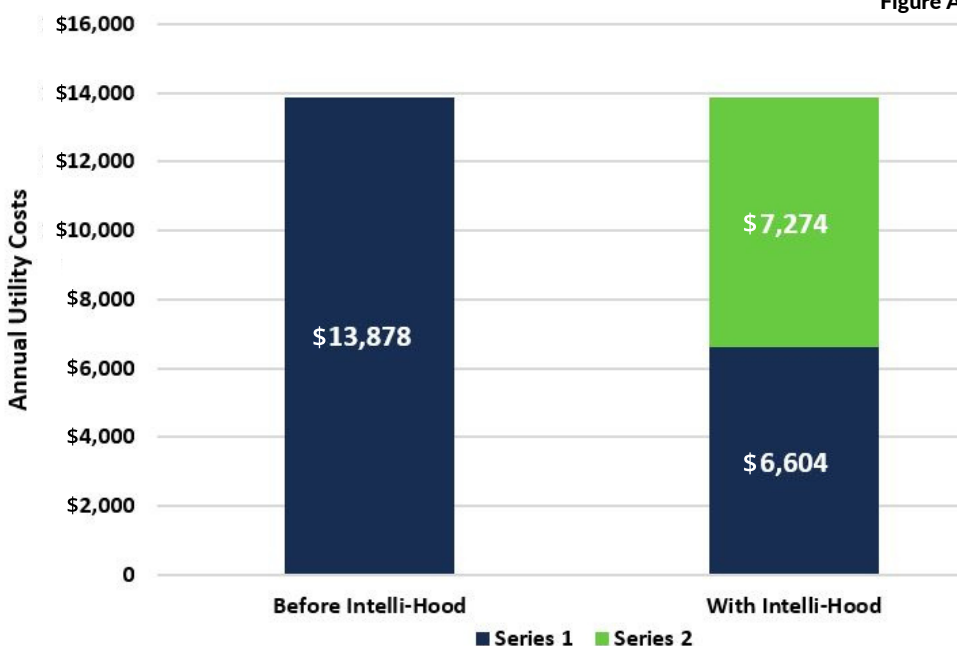


Figure A



Figure A shows the initial annual utility cost Travelodge would experience without Intelli-Hood's DCKV controls (left). The bar to the right compares the annual utility costs after Intelli-Hood's installation with the new savings as a result on the DCKV controls.

# Benefits

Following the successful installation of Intelli-Hood, Travelodge Dublin experienced remarkable results:

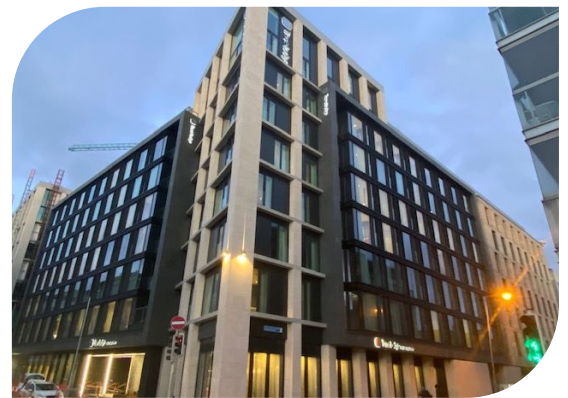
**Utility Cost Savings:** The installation of Intelli-Hood led to impressive annual utility cost savings of \$7,274. This significant reduction can be attributed to the system's ability to adjust exhaust ventilation dynamically, minimizing energy consumption during periods of low cooking activity.

**Operating Expense Reduction:** The hotel experienced an outstanding 48% reduction in operating expenses. This substantial decrease is a direct result of the Intelli-Hood's energy efficiency, which positively impacted the hotel's bottom line, allowing them to allocate resources to other critical areas of their business.

**Environmental Impact:** In addition to the financial benefits, the Intelli-Hood installation has contributed to the hotel's commitment to sustainability. By optimizing energy usage, Travelodge Dublin has reduced its carbon footprint, demonstrating responsible environmental stewardship.

**Enhanced Guest Experience:** The Intelli-Hood system ensures a comfortable dining environment for guests and staff by maintaining appropriate kitchen ventilation. Guests can now enjoy their meals without the discomfort of excessive heat and odors, leading to higher satisfaction levels and potential positive reviews.

The case study of Travelodge Dublin's Intelli-Hood installation demonstrates the remarkable impact of this advanced technology on the hotel's utility costs and operating expenses. With an estimated annual savings of \$7,274 and a substantial 48% reduction in operating expenses, the hotel has not only achieved financial benefits but also showcased its commitment to sustainability. The improved guest experience further solidifies Travelodge Dublin's position as a premier hotel in Dublin, attracting more patrons and positive word-of-mouth. Overall, the Intelli-Hood installation has proven to be a wise investment, setting an example for other hotels seeking to enhance energy efficiency and operational excellence.



### Travelodge Dublin City Centre

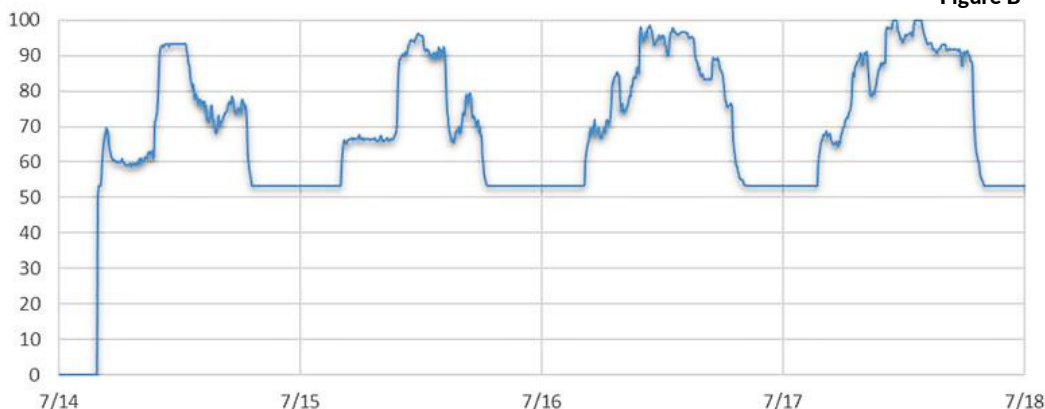


Figure B depicts a sample of Travelodge Hotel's fan speed over the course of one week. The spikes in fan speed can be attributed to times when the cooking demand was high for the commercial kitchen. The dips in fan speed were due to low cooking demand. This led to an average fan speed of 70%.

