Autocase

Airport Sustainability team Uses Autocase to Help Bolster the Business Case for Dynamic Glazing

Project Description

The DFW Environmental Affairs department was interested in evaluating whether the replacement of their existing baseline low-e glass with dynamic glazing was feasible for their 5 current terminals and their newly proposed terminal.

The team needed to make a convincing case to the capital team to request budget on the project.

Strategies Assessed

- Electricity use
- Natural gas
- Upfront costs
- Passenger productivity

PARTNERS
Dallas Fort Worth Airport (DFW)

DESIGN PHASE
Design Development

BUILDING TYPE
Airport Terminal

SIZE
13,500 sq ft of Glass

LOCATION
Dallas Fort Worth, Texas

Autocase

How Autocase was Used

The Environmental Affairs team inserted quoted costing for the dynamic glazing and current energy usage and pricing for the 6 terminals into Autocase. Enhanced thermal comfort was assumed from dynamic glazing and passenger information was provided allowing the Autocase economic support team to asses passenger productivity.

Feature	Low grade e-glass	Dynamic glazing
Incremental Cost	N/A	$12,000,000
Terminal Electricity Use	61,500,000 kWh	5.3% in Thermal Electricity Savings
Natural Gas Usage	13,000 MMBtu	5.3% in Natural Gas Savings
Note: Passenger information and thermal comfort was provided for passenger productivity		

The Outcome

Autocase showed large upfront investments in dynamic glazing never actually paid back financially over the lifetime of the project for all terminals.

The triple bottom line feasibility study supported the case for their most energy intensive terminal and capital was approved for dynamic glazing project for that terminal.

Triple Bottom Line Value = $16.6m

Financial	-$5,916,800
Social	$7,115,000
Environmental	$15,404,000

Want to learn more?

info@autocase.com

autocase.com