

# New Forecasting Tools for Airports: *QRAC and the “Four Layer Cake”*

---

Strategic Advice for Great Airports

[www.greatairports.ca](http://www.greatairports.ca)

October 2021

## QRAC NOWCASTING TOOL

QRAC is the (rough) acronym of Latin for “ By their searches, ye shall know them”

Old forecasting models are based on economics and make assumptions about consumer behaviour

QRAC uses internet and social media search patterns to reveal consumer intentions and actions. This is particularly important with Covid-19 when traditional models may not work anymore

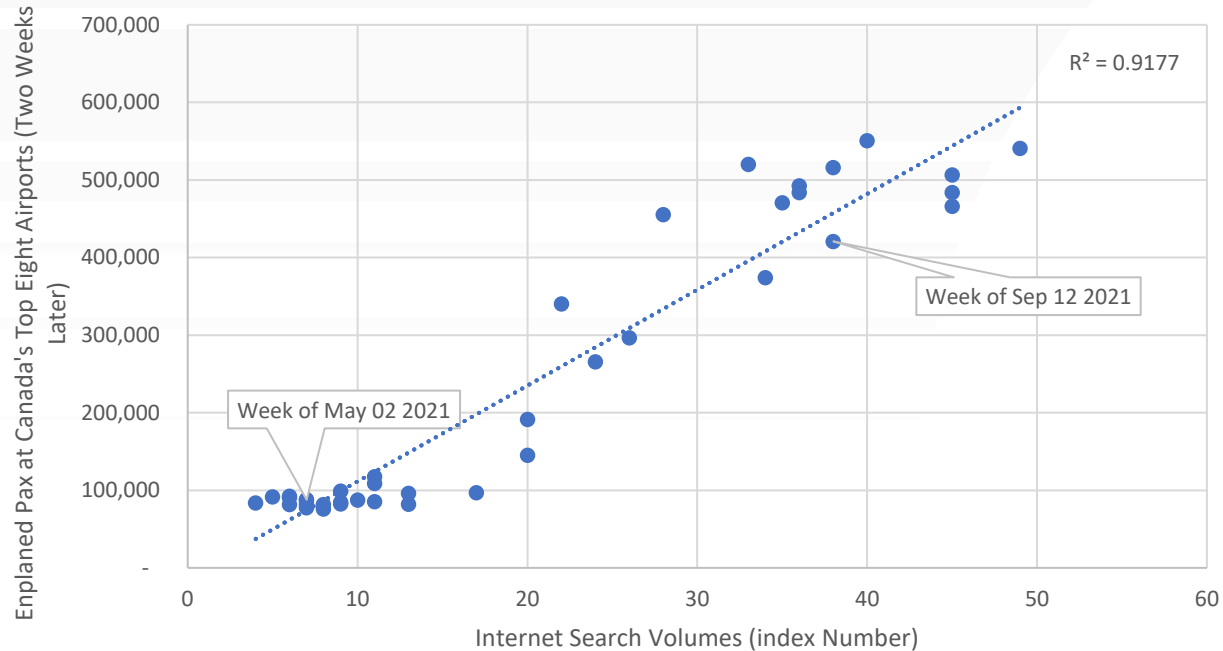
Mainly developed for the aviation and tourism industries, it has application everywhere.

QRAC is an affordable and accurate short-term forecasting tool.

# QRAC NOWCASTING TOOL

## Passenger Volumes at Canadian Airports

Internet Searches for "Airport Parking" and Passenger Volumes, Two Weeks Later



*Here QRAC shows a strong correlation between the volume of Internet searches in Canada for “airport parking” and passenger showing up two weeks later*

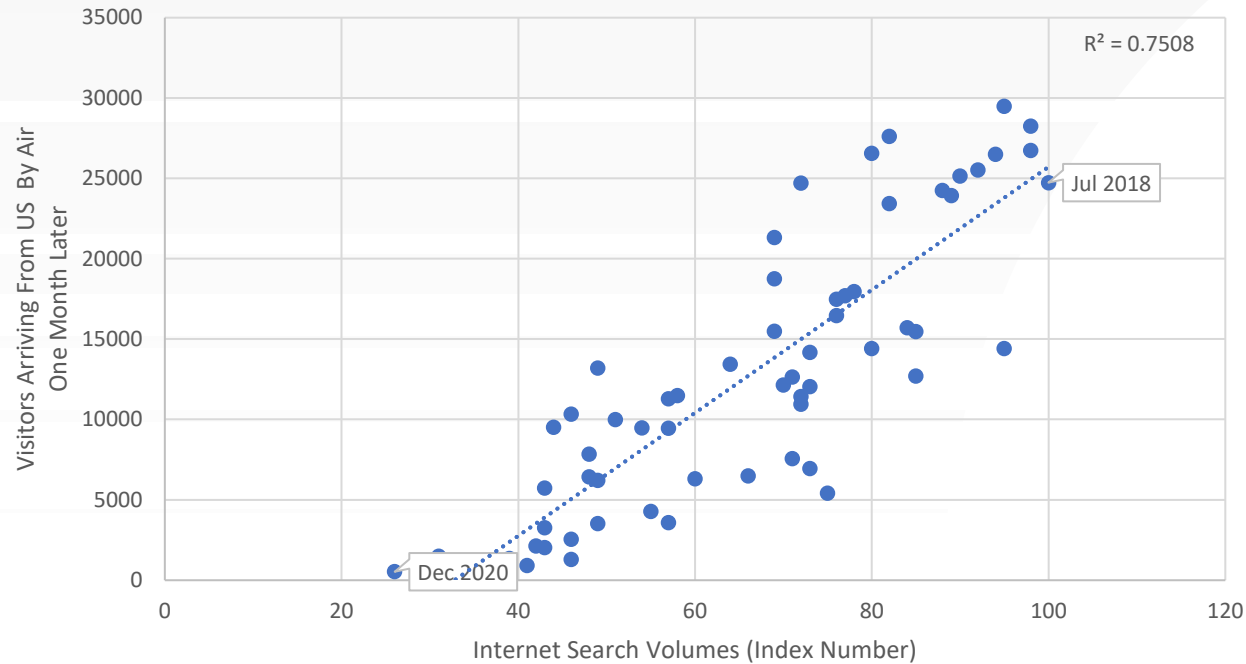
**STRATEGIC ADVICE  
FOR GREAT AIRPORTS**

[www.greatairports.ca](http://www.greatairports.ca)

# QRAC NOWCASTING TOOL

## *Arrivals by air in Bermuda from the US*

Travel Related Internet Searches in the US for "Bermuda" and US Residents Arriving One Month Later



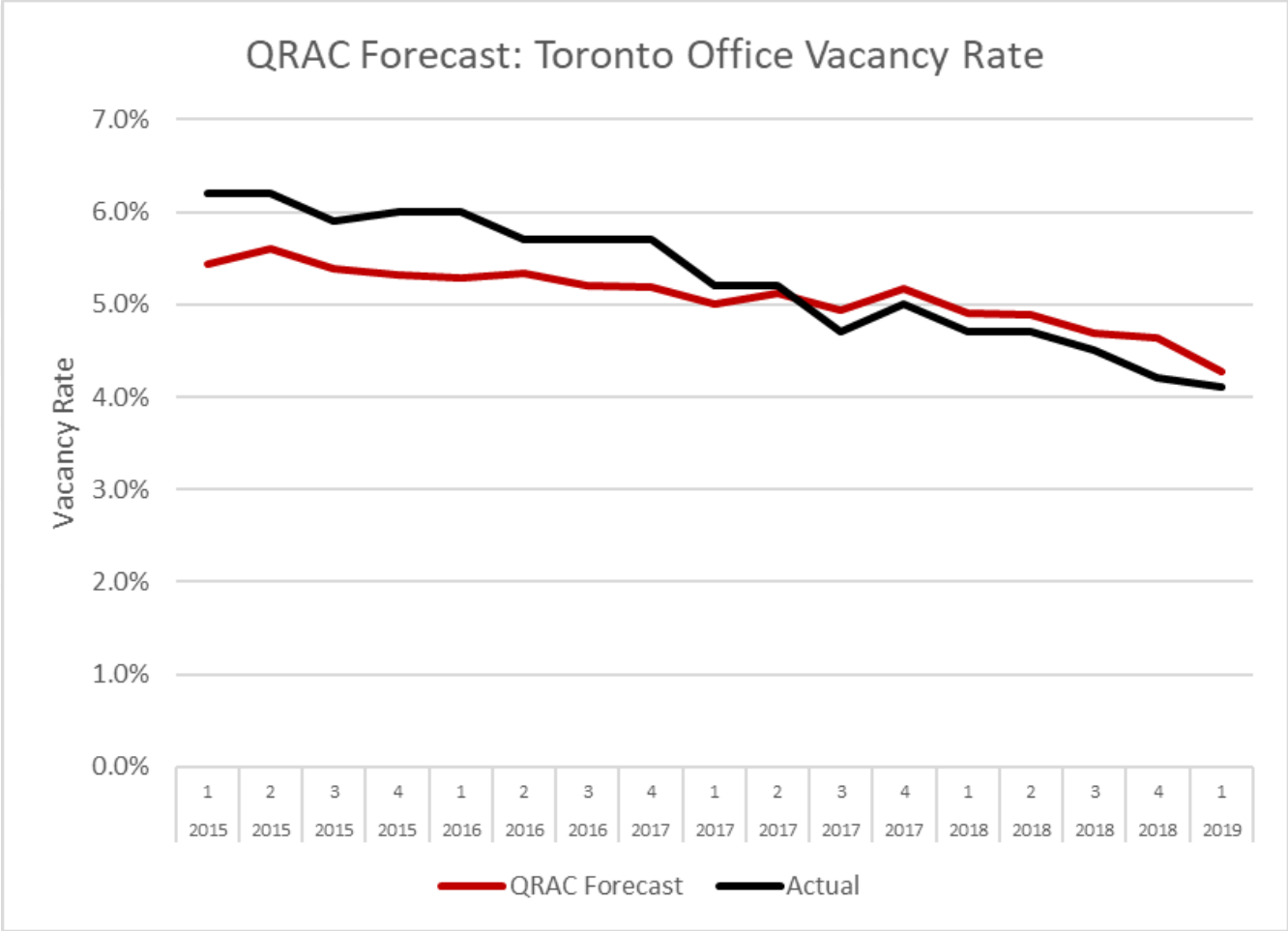
*Here QRAC shows a strong correlation between the volume of Internet searches in the US for “Bermuda” and visitors arriving by air from the US one month later.*

**STRATEGIC ADVICE  
FOR GREAT AIRPORTS**

[www.greatairports.ca](http://www.greatairports.ca)

# QRAC NOWCASTING TOOL

## Office Vacancy Rates in Toronto, Canada



*When we look at Internet search patterns for “Office Space Toronto” there is a strong correlation with the vacancy rates producing a good forecast model as a result*

## FORECASTING: “THE FOUR LAYER CAKE”

*A systematic approach to help airport leadership teams forecast the recovery from the pandemic, using a series of layers...the four “C”s:*

- 1) Covid-19:** *what are the epidemiological scenarios?*
- 2) Cost:** *will airfares increase and how will the new costs of air travel such as pre-and post flight testing affect demand?*
- 3) Competition:** *how much air travel will permanently migrate to ‘virtual’?*
- 4) Community:** *how will social attitudes to air travel change, e.g., because of concerns about climate change?*

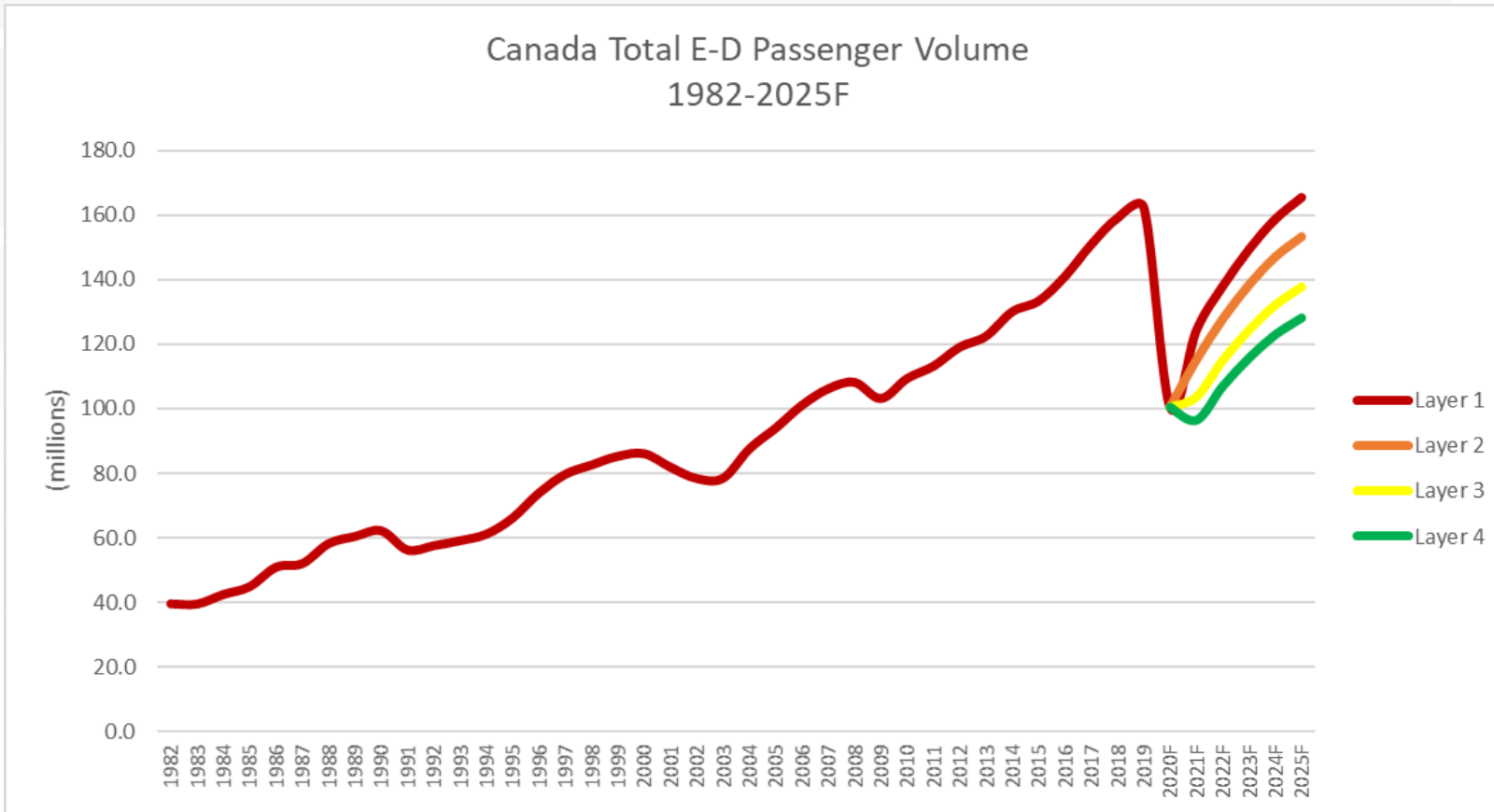
*Finally, what can the airport do to change the trajectory by coming back cleaner, greener, leaner and keener.*



**STRATEGIC ADVICE  
FOR GREAT AIRPORTS**

[www.greatairports.ca](http://www.greatairports.ca)

# FORECASTING: "THE FOUR LAYER CAKE"



*One illustrative scenario of how Canada's airports may recover from the pandemic considering structural changes such as competition from virtual and changing attitudes to air travel.*

**STRATEGIC ADVICE  
FOR GREAT AIRPORTS**

[www.greatairports.ca](http://www.greatairports.ca)

## QUESTIONS?



*Mike Brown*  
*Principal*  
*Strategic Advice for Great Airports*

***[www.greatairports.ca](http://www.greatairports.ca)***

***Email: [mikebeeonthekop@gmail.com](mailto:mikebeeonthekop@gmail.com)***

**STRATEGIC ADVICE  
FOR GREAT AIRPORTS**