

## AIRCRAFT FLIGHT ROUTINGS

The flight patterns and the distribution of aircraft over the Lower Mainland is dependent on which runway is active, and which runway is active is dependent on the wind conditions on the airfield – for safety reasons aircraft must land and take-off into the wind.

Based on historical observations, we typically see more take-offs and landings in an easterly direction – Runway 08 active - during the Fall and Winter, and aircraft take-offs and landings in a westerly direction – Runway 26 – during the Spring and Summer. Figures 1 and 2 help illustrate typical flight tracks observed during Runway 26 and Runway 08 operations. Over the course of a day, there is not a single area in the Lower Mainland that is not exposed to some level of aircraft over-flights.

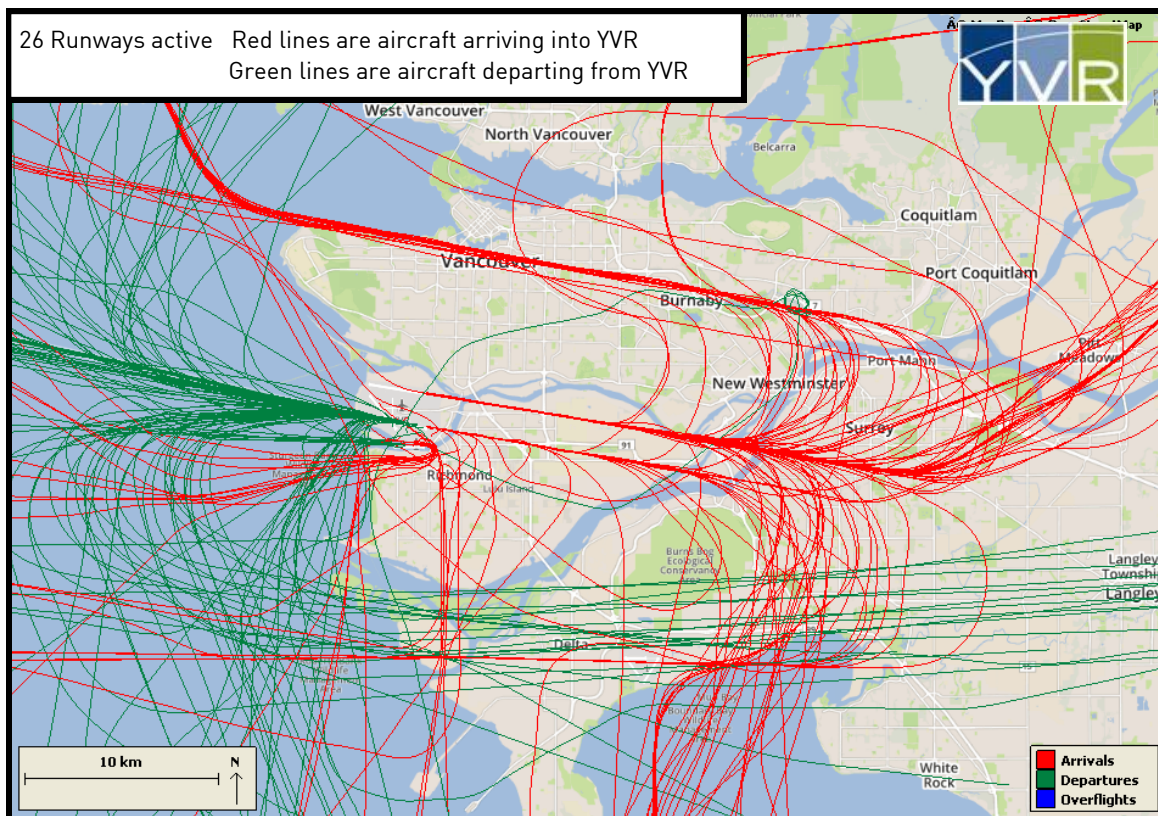


Figure 1: sample of runway 26 operations (flights from small airports in the area not shown)

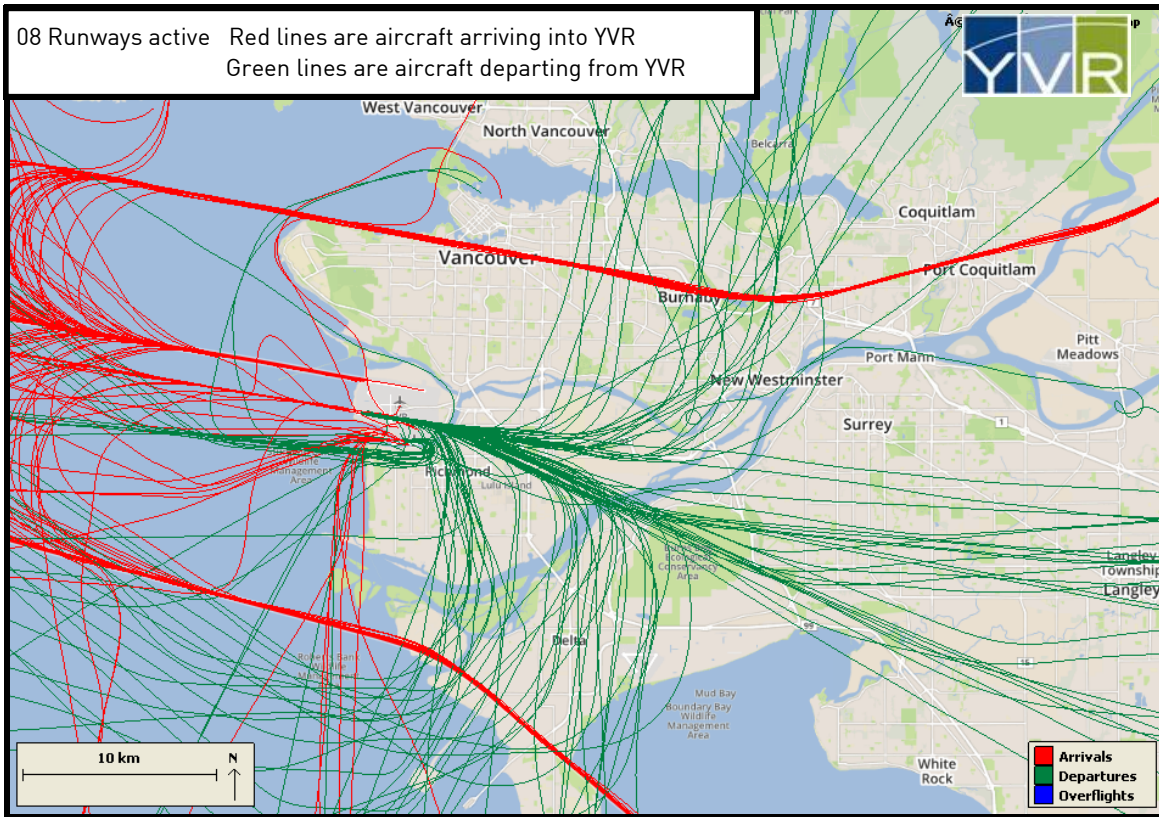


Figure 2: Sample of runway 08 operations (flights from small airports in the area not shown)

The flight paths are designed to ensure a high level of safety and to ensure safe separation between aircraft. This is a very complex job over the Lower Mainland due to the mix of large commercial jets and smaller propeller aircraft all using the airspace at the same time.

In addition, given the U.S. border to the south, the mountains to the north, and the various small airports in the Lower Mainland (e.g. Boundary Bay Airport, Langley, Pitt Meadows, Vancouver Harbour) the airspace around YVR is one of the busiest in all of Canada. Given these reasons, it is not possible to create “no-fly zones” over pockets of residential areas without severely impacting aviation safety.

The flight path associated with an aircraft is dependent on the origin/destination airport, performance of the aircraft, the proximity of other aircraft, visual reference points on the ground (for aircraft following visual flight rules) and the instructions provided by air traffic control.

Due to the complexity and high number of aircraft operating in such a small area, the arrival and departure procedures are highly structured and the standard arrival and departure procedures can be found in publications such as the Canada Air Pilot and the Vancouver VTA Charts.

*If you need more information, please contact the YVR Noise Management office at [noise@yvr.ca](mailto:noise@yvr.ca).*