



## GO TRANSIT

# Challenge: Expand Peak Crew Availability While Reducing Split Shifts

To facilitate the decision to expand Toronto’s “shoulder” peak rush hour service, Circadian was retained to undertake a complete review of the crew shift schedules at the GO Transit commuter rail operation to measure existing fatigue levels and improve the overall crew schedule assignments. The most common way to manage the increased demand for service during the morning and evening rush hours is to utilize split shifts. While this approach satisfies operational needs, they can lead to high levels of overtime and fatigue, particularly when crews have short turnarounds between their evening run and the start of the next morning run (on the following day). In most cases, efficient public transportation schedules, despite the higher risks of fatigue-related human error that they generate.

To minimize the number of these types of schedules, Circadian worked with managers at GO Transit to completely rebuild the crew schedules with the goals of minimizing fatigue, and its inherent costs, risk and liabilities. This achieved a significant reduction in the most fatiguing split shift assignments, while meeting GO Transit’s goal for expanded service without having to hire additional crews. This reduction in split crews was achieved by creating more straight shift assignments where crews had more schedules available that were 3 and 4 days in length with 3 or 4 days off. For the remaining split schedules, operational goals were by eliminating those schedules that had less than a 12 hour break between the end of their evening run and the beginning of the next morning’s run.