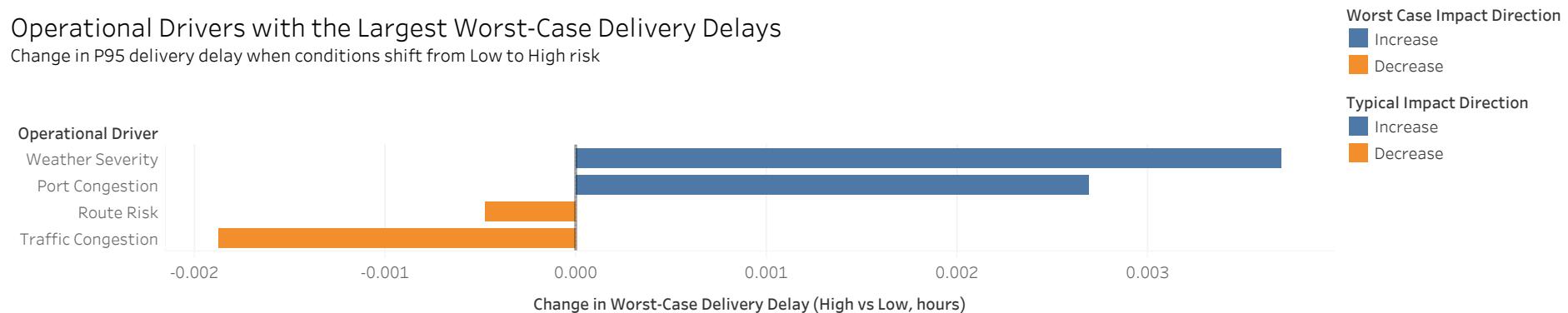


Operational Drivers of Delivery Delays: Typical vs Worst-Case Impact

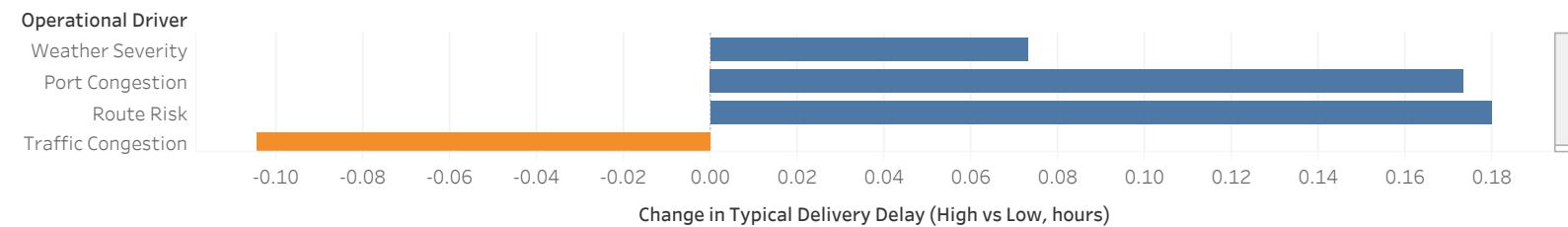
Operational Drivers with the Largest Worst-Case Delivery Delays

Change in P95 delivery delay when conditions shift from Low to High risk



Operational Drivers Affecting Typical Delivery Delays

Change in median delivery delay when conditions shift from Low to High risk



Key Findings

Port Congestion and **Route Risk** consistently drive the largest increases in delivery delays across both worst-case and typical scenarios, indicating structural operational risk.

Weather Severity primarily impacts worst-case delays, suggesting it is a contingency risk rather than a day-to-day driver.

Traffic Congestion does not materially increase delays and may reflect effective buffering or adaptive routing behavior.

Recommendations

Prioritize mitigation strategies for Port Congestion and Route Risk (capacity planning, routing policies, contingency buffers).

Treat Weather Severity as a risk management concern rather than a primary optimization lever.

Avoid over-investing in traffic congestion mitigation without more granular evidence.