



## KAFD METRO STATION RIYADH, SAUDI ARABIA

Buro Happold were appointed as the engineering partner to Zaha Hadid Architects for the Design of the KAFD Metro station in Riyadh. As part of this team, Buro Happold Smart Space undertook a passenger flow assessment based upon information provided by the client and developed by the design team.

The passenger flow study comprised four stages: Demand analysis; Scenario definition; and Static and Dynamic analysis. The demand analysis and scenario definition outlined the scope for the modelling work, while the static analysis provided an ongoing dialogue with the architects to ensure the station was designed appropriately to meet the anticipated passenger flows. International Standards were applied to key station areas, including platform widths, run-offs, gatelines and vertical circulation.

As the design developed, dynamic modelling was undertaken using Legion to verify the static analysis and ensure that

no unforeseen issues were present in the design. Overall the dynamic modelling helped the architect with the finer points of station design, indicating areas which were close to capacity in future year scenarios, as well as areas which may be under-utilised.

CLIENT  
Zaha Hadid Architects

DURATION  
Ongoing

SERVICES PROVIDED BY  
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Smart Space – People Flow & Space Analysis