Gaining Insight into the User Experience with Pedestrian Modelling

We work with our clients to develop a range of models to help make informed decisions.

Pedestrian Modelling is a valuable tool for existing buildings that enables the team and all stakeholders to visualize movement patterns under a range of scenarios.

This allows us to better understand and improve the user experience while ensuring safe and intuitive movement for day-to-day scenarios, emergency scenarios, and unique situations, such as construction staging or physical distancing in response to a transmittable virus.

Building Improvements

- **Renovations:** Test design options to determine relative performance of each in terms of travel times, crowding, and life safety.

- **Revenue Optimization:** Model existing buildings and test proposed changes to movement patterns to quantify foot traffic throughout. Drive foot traffic to the highest value areas with revenue-generating opportunities.
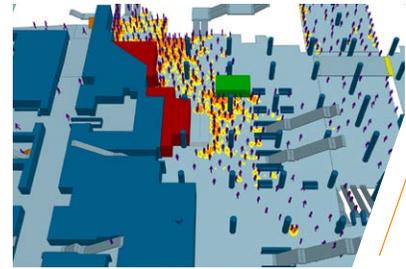
Existing building renovation, transit station.
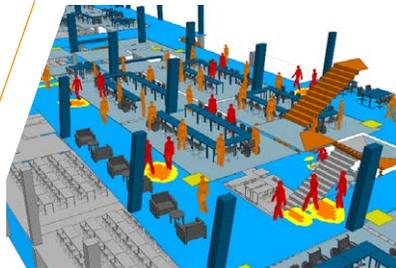
Post-pandemic scenario testing, institutional building.

Scenario Testing

- **Post-Pandemic:** Proximity analysis of existing building typology to determine if post-pandemic mitigation measures have the desired impact.

- **Fire Emergency:** Quantify fire evacuation times and find opportunities for improvement.

- **Special Events:** Determine if levels of crowding and areas that experience crowding for a temporary, high-volume event are acceptable.

Construction Engineering

- For each construction stage, determine and visualize the impact on pedestrian movement caused by construction hoarding or a change in available routes.

- Determine if evacuation times are still acceptable.
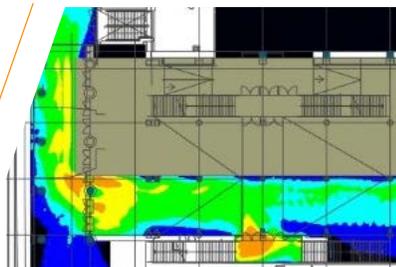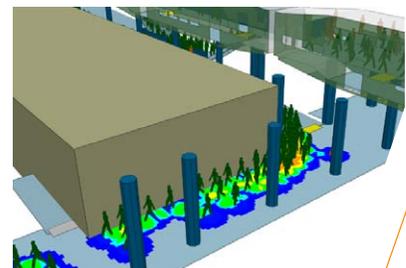
Construction hoarding impact on pedestrian movement.

Data Collection

Pedestrian models are only as strong as the quality of their input. For desktop studies, we work with the building owner to make reasonable assumptions for high-level testing of options. For more detailed studies we partner with a third-party data collection firm to create a monitoring program and collect the necessary data.

For more information, please contact

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