



Smart Cities Crowd Management

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GSMA Smart Cities Programme

Position operators across the value chain as a key partner for smart cities implementations.

Encourage cities to build direct strategic relationships with mobile network operators.

Provide operators and cities with information to drive operator centric smart city opportunities.



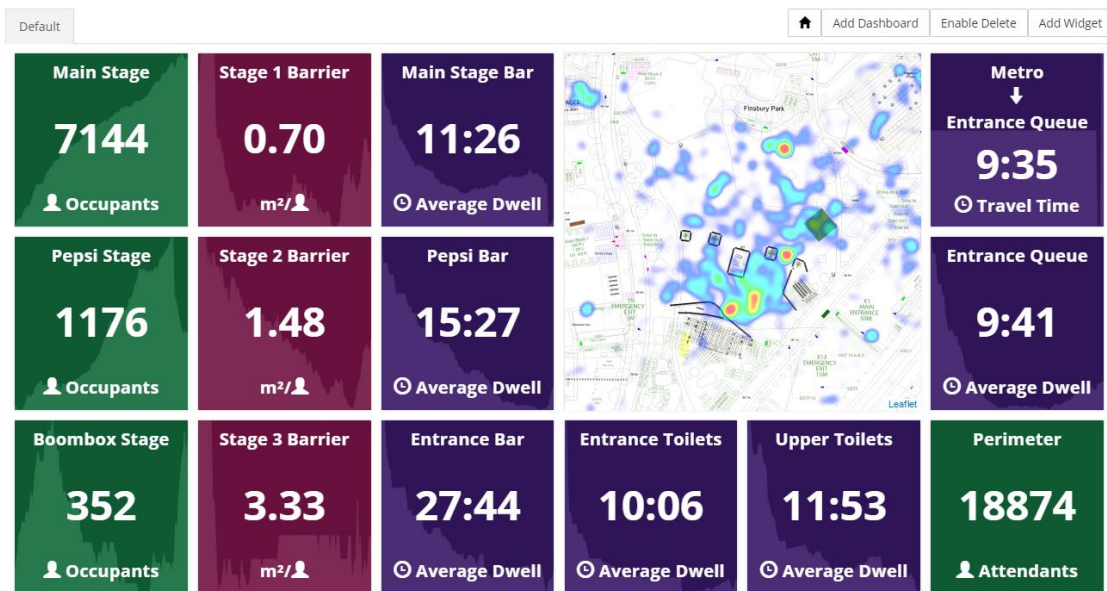


Crowd Management

- Crowd Management technologies using real-time and historic location data sets are applicable across many city services
 - Entertainment Events & Festivals
 - Transport Management & Capacity Management
 - Infrastructure Planning
 - Retail
 - Stadiums
- Mobile operators well placed to enter this market as they have geo-location data available to them.



Example use case – Music Festival crowds



- Real time data allows accurate location tracking and highlights of trends or issues
- Network data allows wider view around site – when people are arriving, loading on local transport etc.
- IoT Sensors give depth of local insight



Example use case: Transport loading



Time	Destination	Expected
15:35	LONDON EUSTON	On Time
Calling at: Kings Cross, Denham Golf Club, Denma		
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15:12 55		

- Real-time Data from transport system eg Ticketing, IoT Sensors, cross- referenced with historic + location data = accurate loading information by carriage
- Machine learning
 - predictive loading can be calculated for different stations and days of week. Historic trends, weather conditions etc can be used to predict loading.
- Intelligence can be used by transport operator to improve loading & make better use of existing capacity rather than adding new infrastructure.



Crowd Management & Mobile Operators

- Crowd Management offers a new revenue stream for mobile operators based on location data analytics
 - Customers in both Commercial & Government sectors
- Mobile operators uniquely placed to obtain location data
 - No additional infrastructure needed
- Many smart cities services involving movement and location can be wrapped up into one offering from mobile operators and their partners
 - Covering both people & transport
- Many operators investigating the potential through pilots.

A photograph of a young man with dark hair and glasses, smiling broadly while holding a smartphone. The entire image is covered with a semi-transparent red filter. Overlaid on the lower right portion of the image is the website address www.gsma.com/connectedliving in a white, bold, sans-serif font.

www.gsma.com/connectedliving