

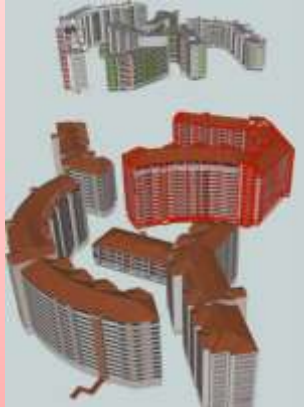
Sustainable Urban Design

Mark Freeburn



Elements of Urban Design

DATA



ACCESS

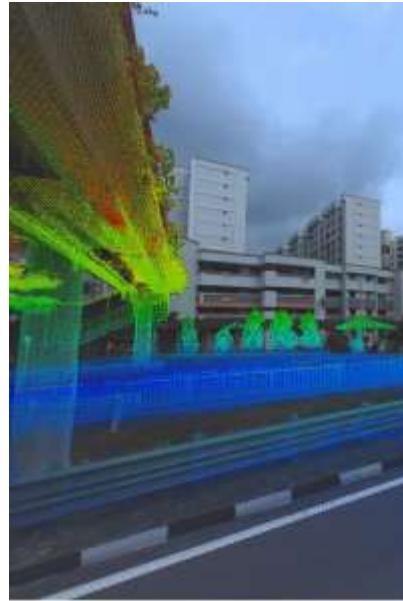
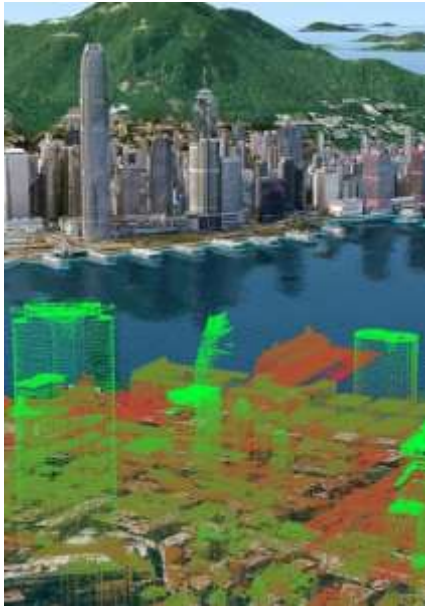


PEOPLE



Start at the Source - Data

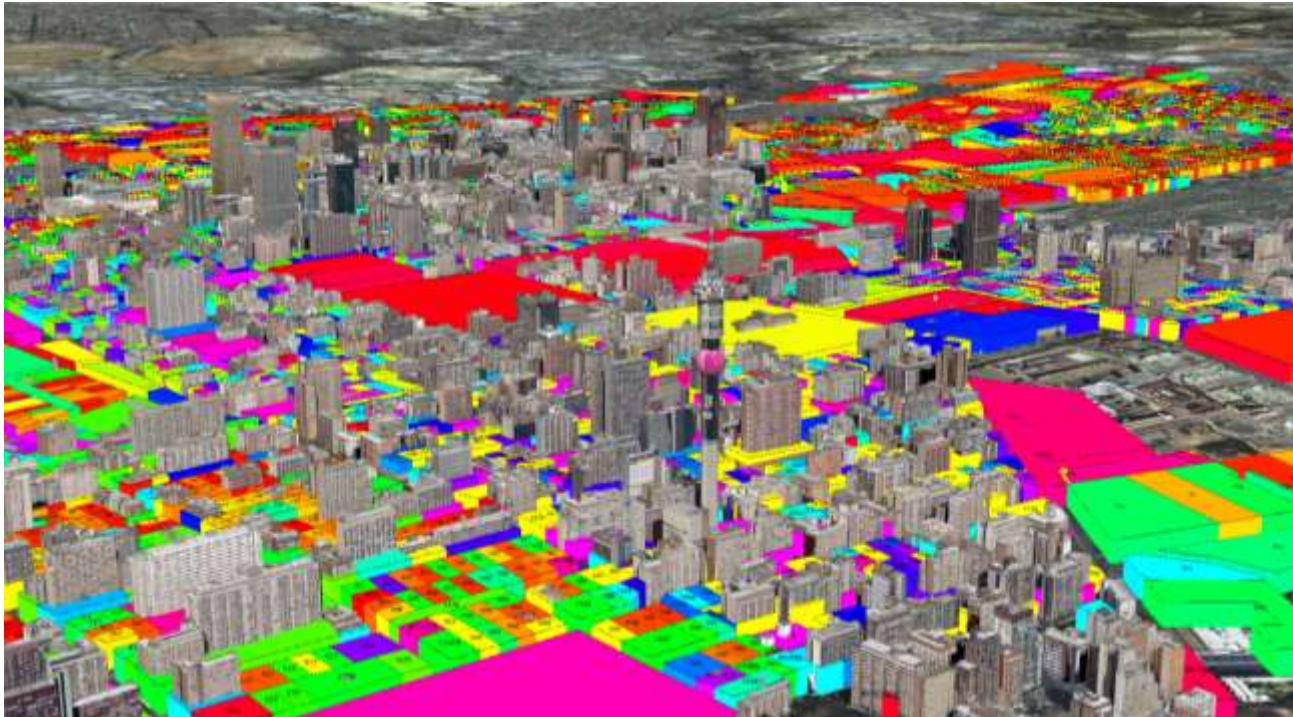
- But the virtual reality we are building is richer, more complex, maybe even more real than reality



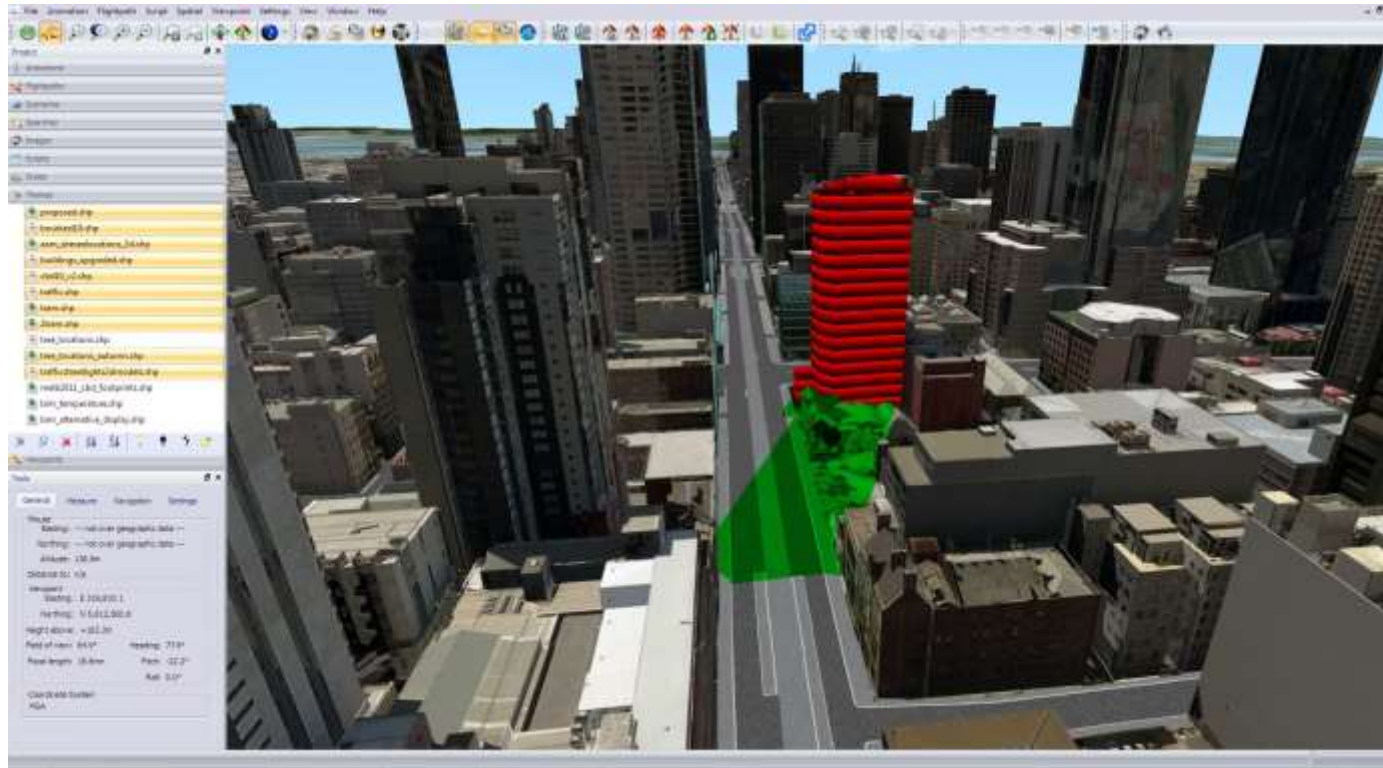
Start at the Source - Data



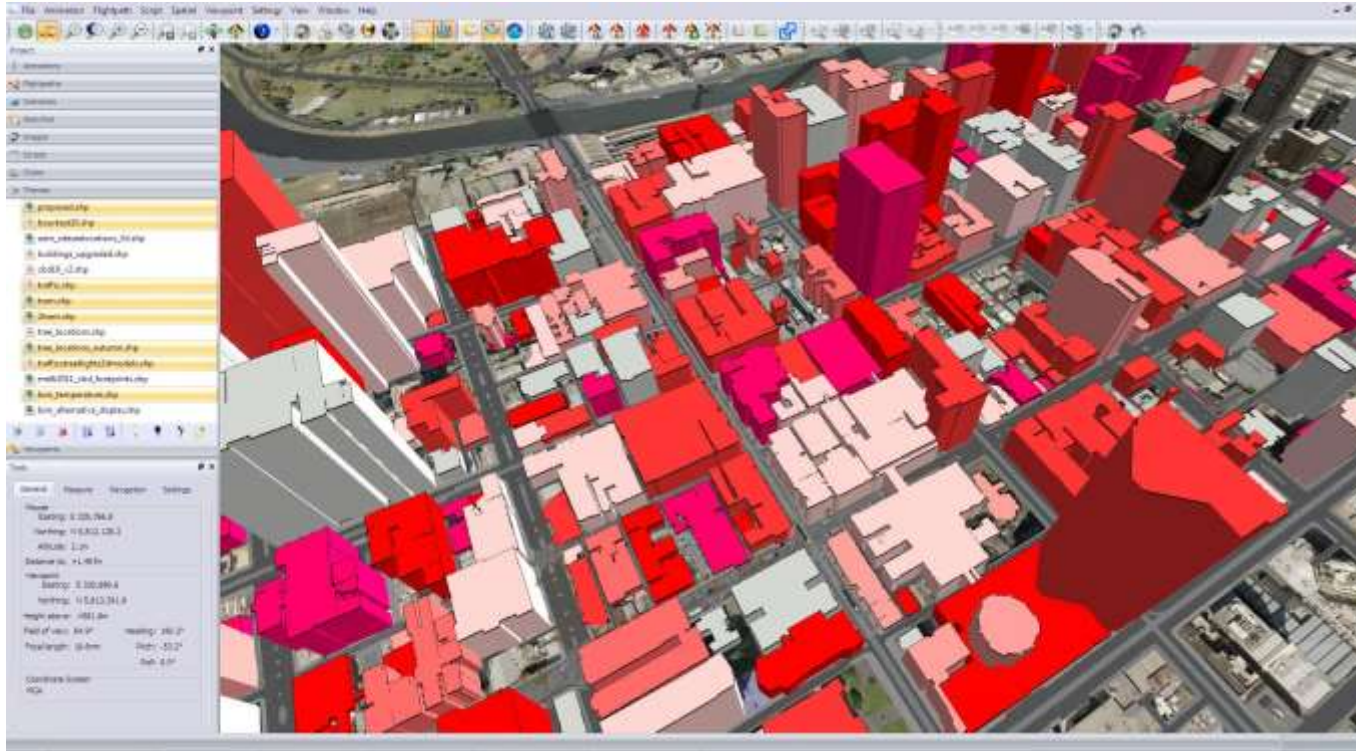
Regulatory planning



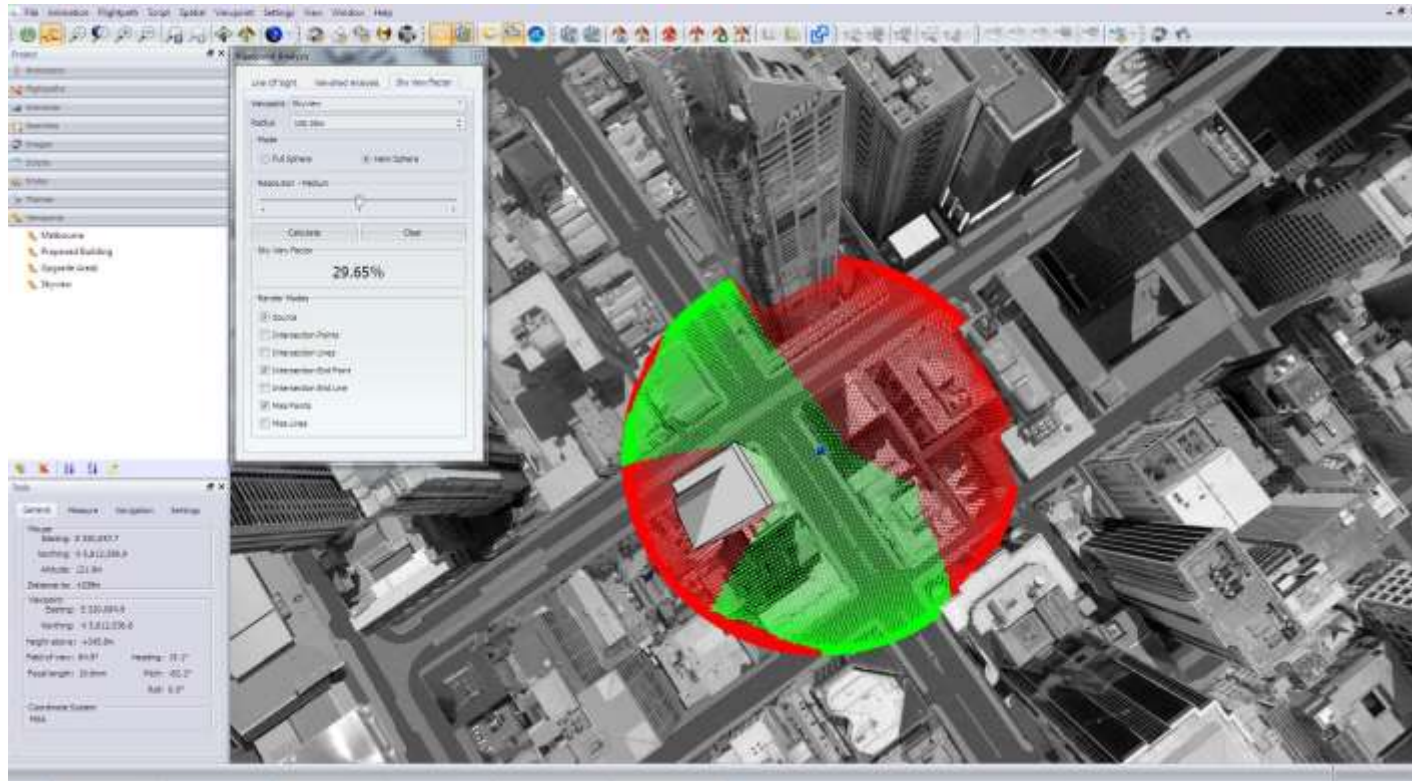
Floor height analysis



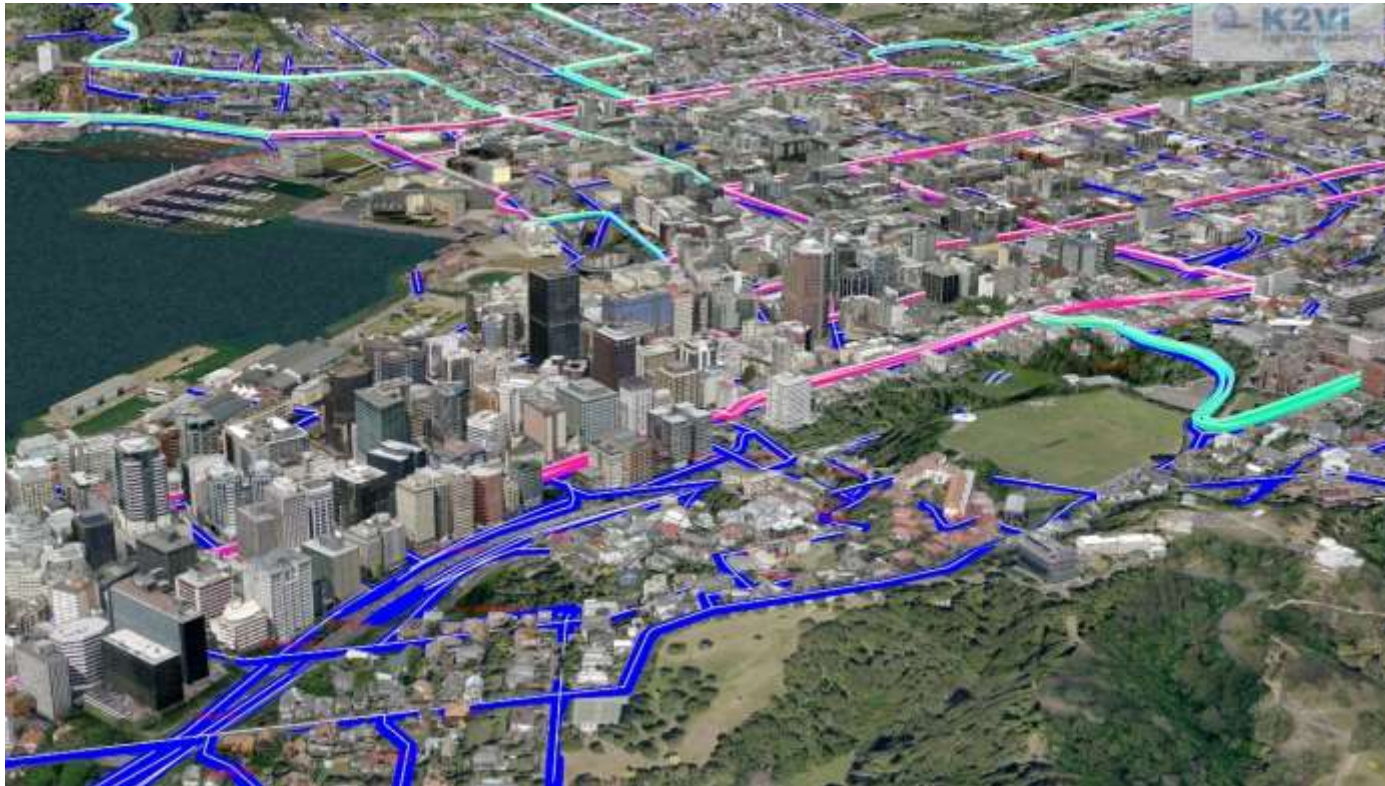
Energy loss/consumption



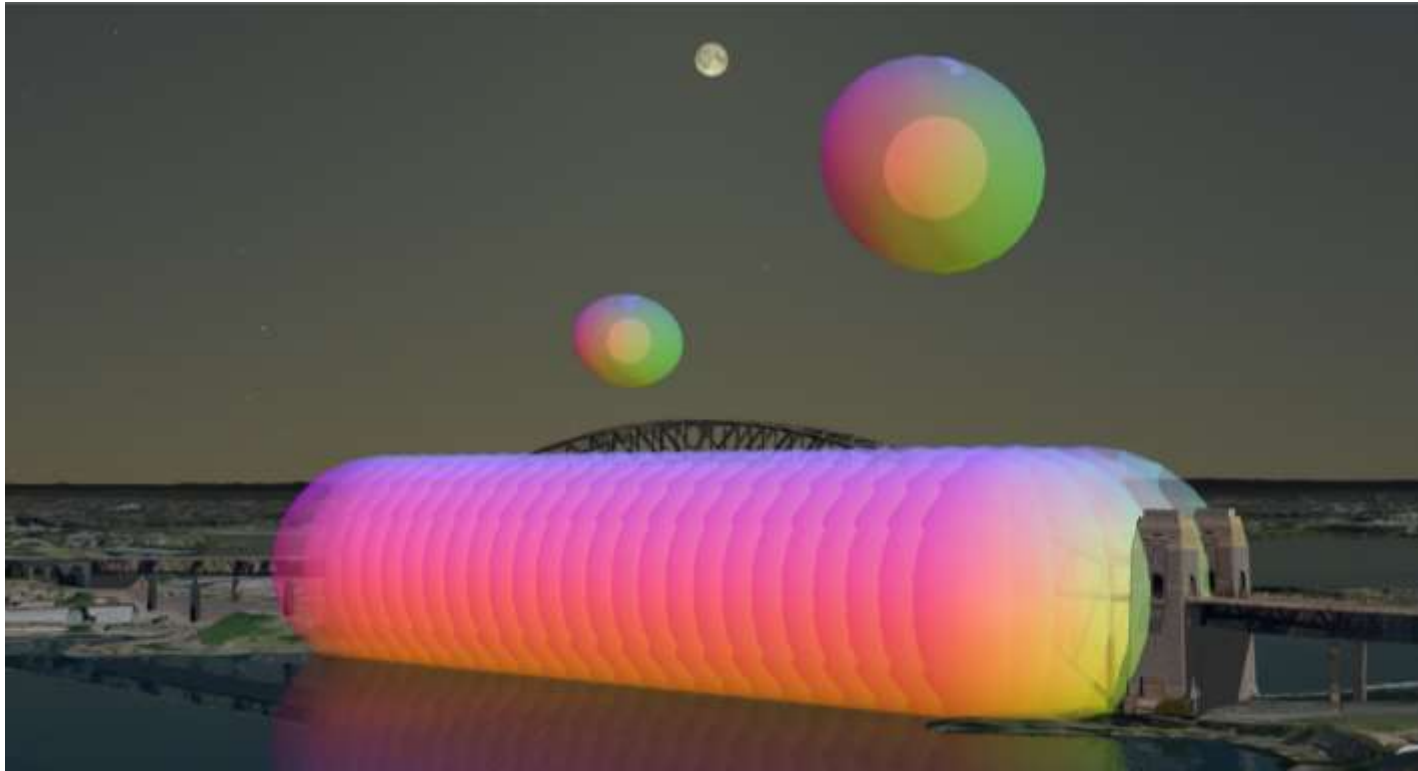
Solar potential assessment



Transport planning



Safety planning



Disaster planning



BIM as the Virtual World

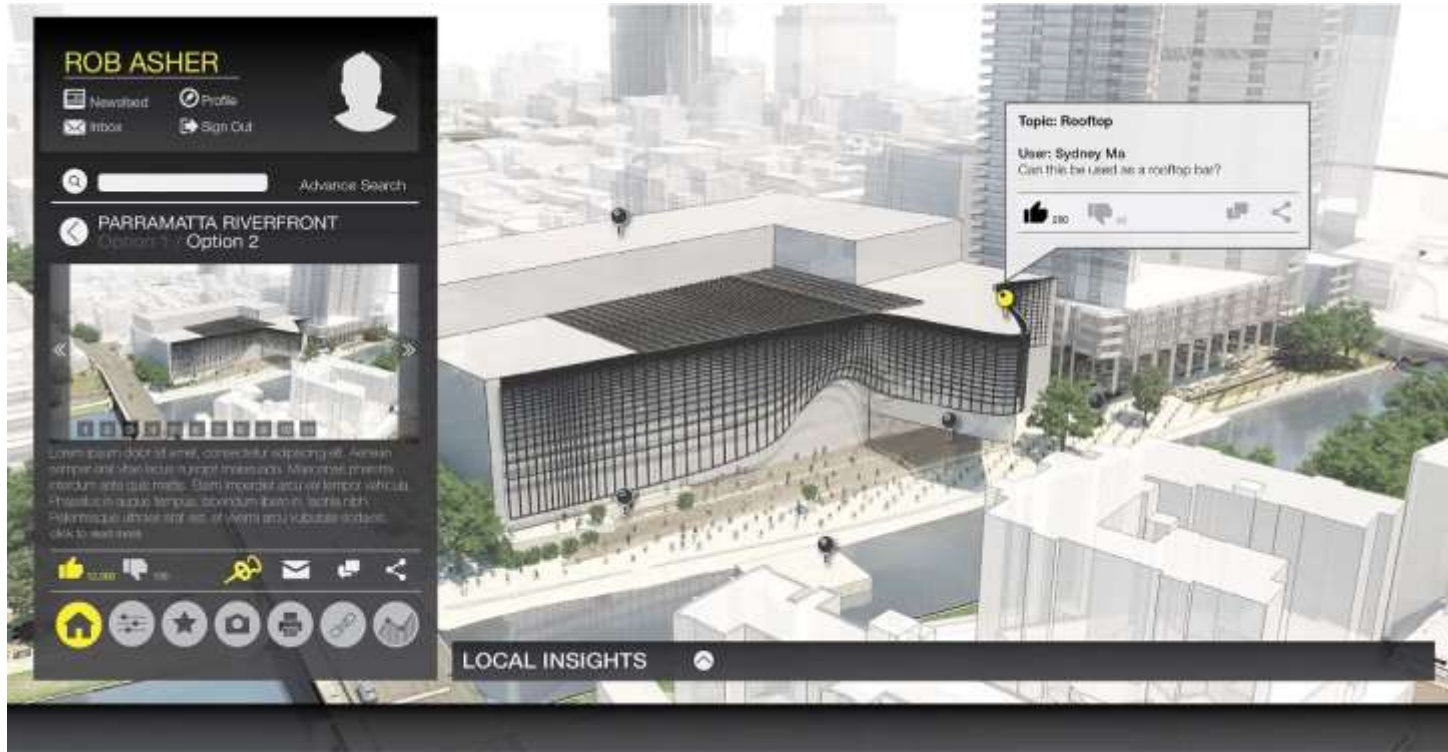
- It asks us, as the creators, and the community as the user, to share a common understanding
- We are all created equal in the virtual world and we can use this equality to help address some of the sociological problems that society has yet to solve in the physical world.

BILL GATES, *The Road Ahead*

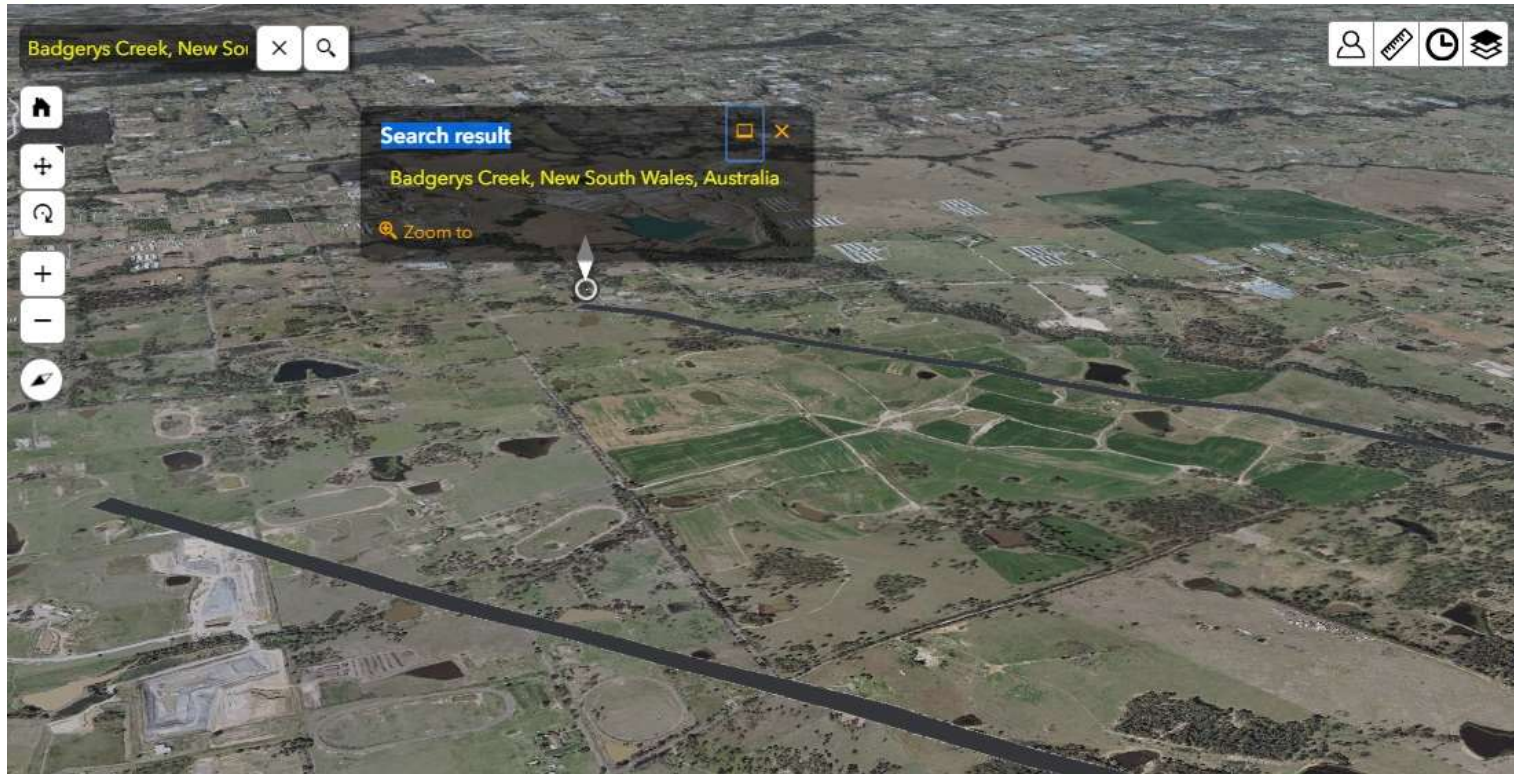
Urban Pinboard



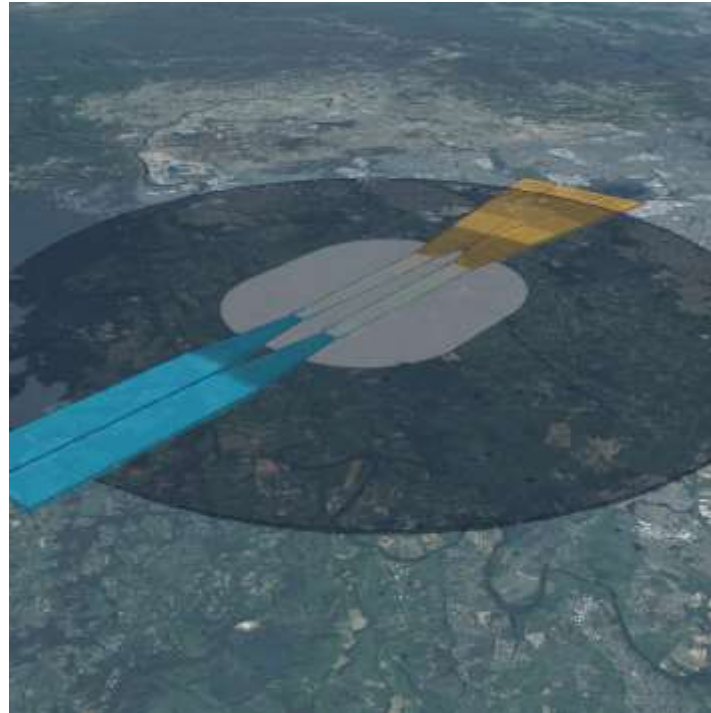
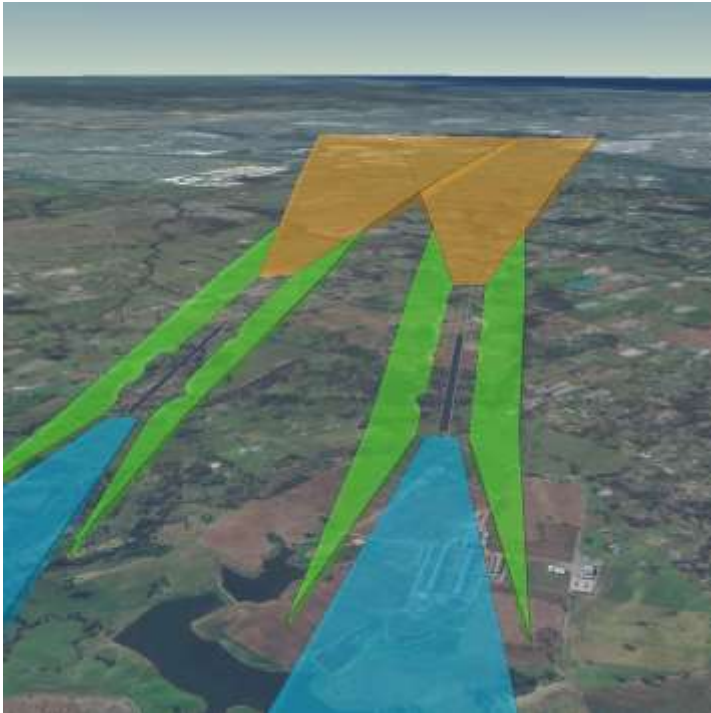
Urban Pinboard



Virtual Sydney



Virtual Sydney



Virtual Singapore

