

URBAN STRATEGY

Data driven urban innovation
for integral interactive urban
solutions

WHY INTEGRAL INTERACTIVE URBAN PLANNING?

Trends

- › Ever growing need for integral views on city development projects, which is complex and time consuming
 - › SUMP
 - › MIRT/MER
 - › Integral city development agenda (compacting city area's)
 - › Hotspot issues
- › Growing availability of city data for use in complex integral issues

Challenges

- › Integral view from the start
 - › Parameters in time and space
 - › Simultaneous parameters
- › 25-50% faster in time and effort needed by avoiding numerous processing sequences
- › Future proof in sense of new models, inputs



TNO'S APPROACH

Features

Open

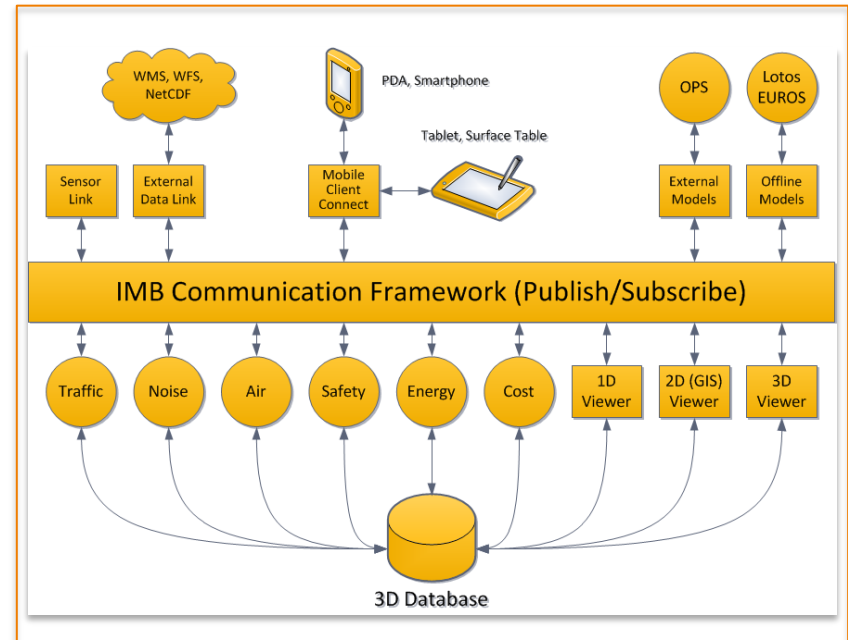
- › Modular build to enable easy add-on of input models, datasources and predictive models

Parallel

- › Insight in effects of interventions
- › Near realtime calculation







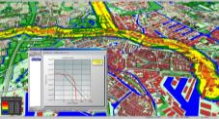


Visual

- › 2,5D approach
- › Accessible across devices



CURRENT MODULES IN URBAN STRATEGY

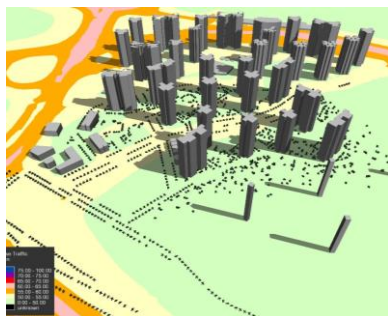
› Integral view on air quality, noise pollution, traffic flow, safety risks

<p>AIR POLLUTION (INDUSTRY) ›</p> 	<p>AIR POLLUTION (TOTAL) ›</p> 	<p>NOISE TRAFFIC POLLUTION ›</p> 	<p>TRAFFIC FLOW ›</p> 	<p>TRAFFIC ›</p> 	<p>SAFETY RISKS ›</p> 
<p>SAFETY RISKS (PIPELINE) ›</p> 	<p>SOLAR POTENTIAL ›</p> 	<p>ENERGY CONSUMPTION ›</p> 	<p>›</p>	<p>›</p>	<p>›</p>

CASES

SHENZHEN (2015)

Provide integral insight in effects of design choices for a new city development area.



GOTHENBURG (2012)

Determine how different transportation solutions affect the city's capacity, noise and air quality.



ROTTERDAM (2010)

Determine effects of redevelopment of Merwehaven, Vierhavens en Waalhaven



DUURZAME STAD (2010)

Simulating scenario's for a greenfield sustainable city

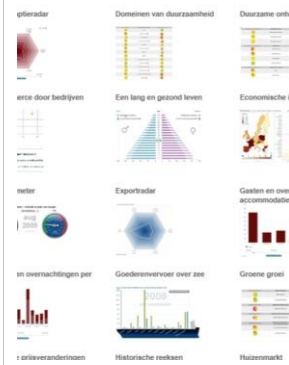


ROADMAP

MORE INSIGHT BY ADDING INPUTS

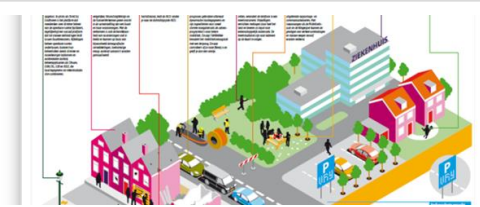
Case driven

Ex. CBS laagregionale datasets



ADDING REAL TIME DATASTREAMS

Mobile phone data
City sensing systems



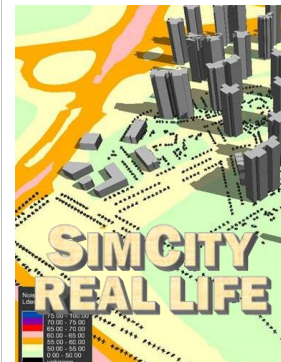
EXPANDING PREDICTIVE MODELS

Case driven

Ex. VISSIM

STREAMING ANALYSIS

Provide real-time interactive planning support based on real-time data



› CONTACT



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