



Emerging risk: connected, complex, concentrated

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What is an 'Emerging Risk'?

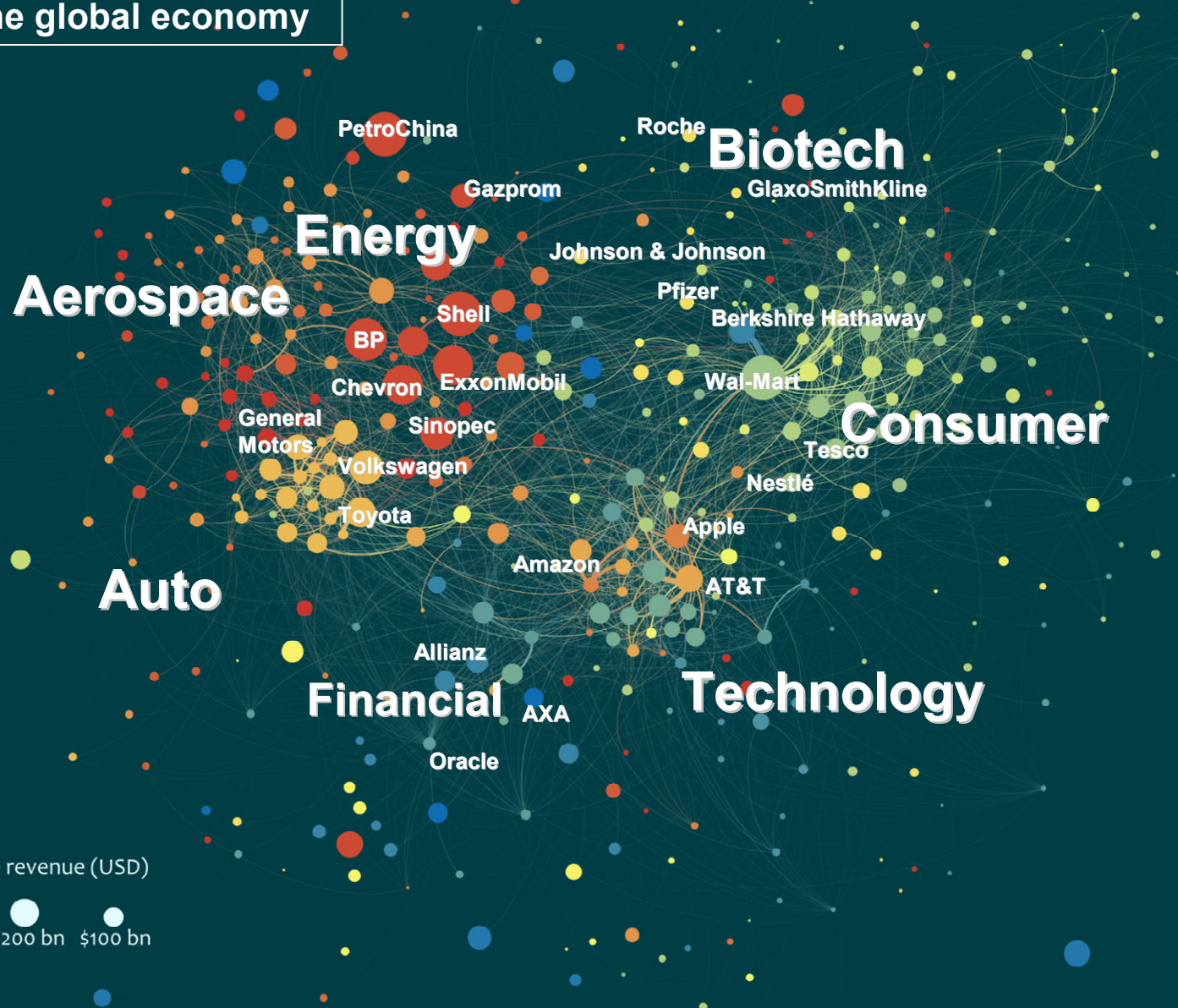
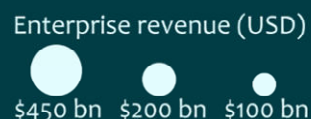
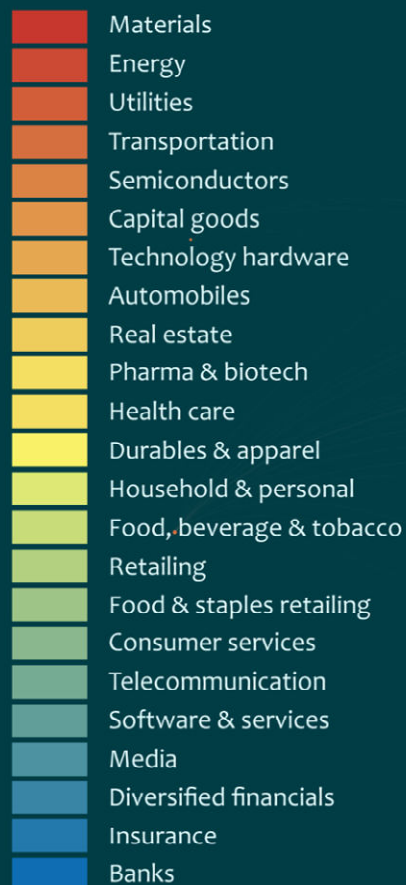
- ▶ Lloyd's defines an emerging risk as: *an issue that is perceived to be potentially significant but which may not be fully understood or allowed for in insurance terms and conditions, pricing, reserving or capital setting*
- ▶ The defining feature of an emerging risk is high uncertainty concerning the essential features of the risk (likelihood and impact)
- ▶ The aim of emerging risk management at Lloyd's is to *reduce uncertainty* through research and scenario development



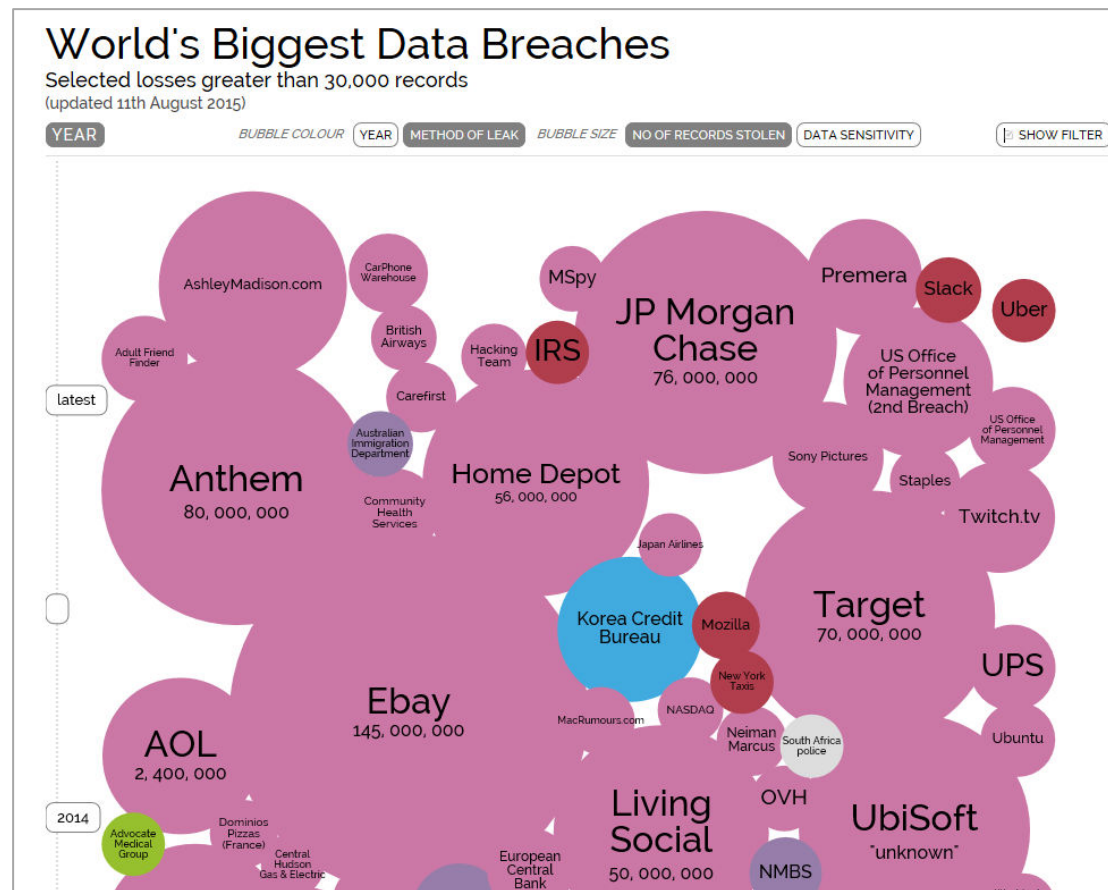
Connected risk in a globalised world

LLOYD'S

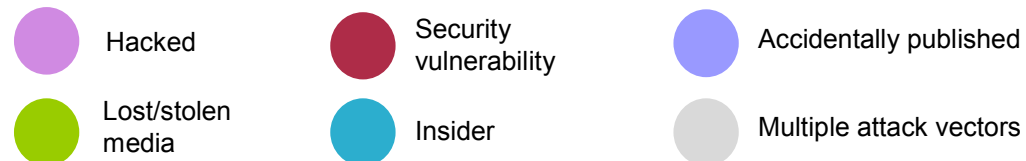
Enterprises driving the global economy



Cyber Risk



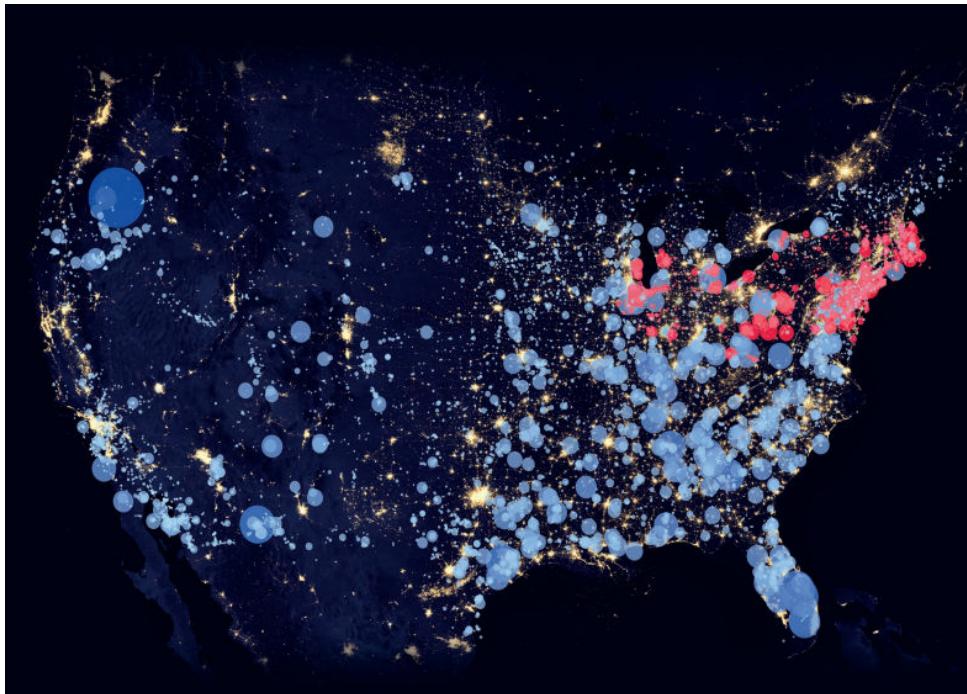
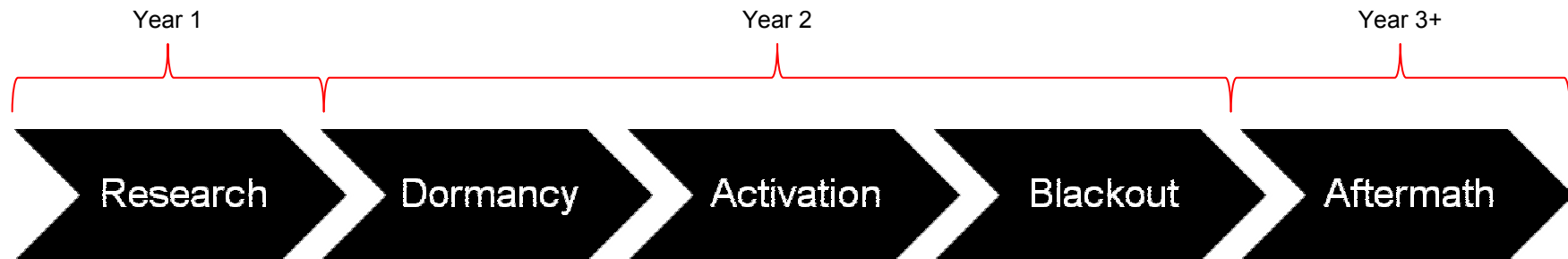
<http://www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks/>



FireEye Cyber Threat Map

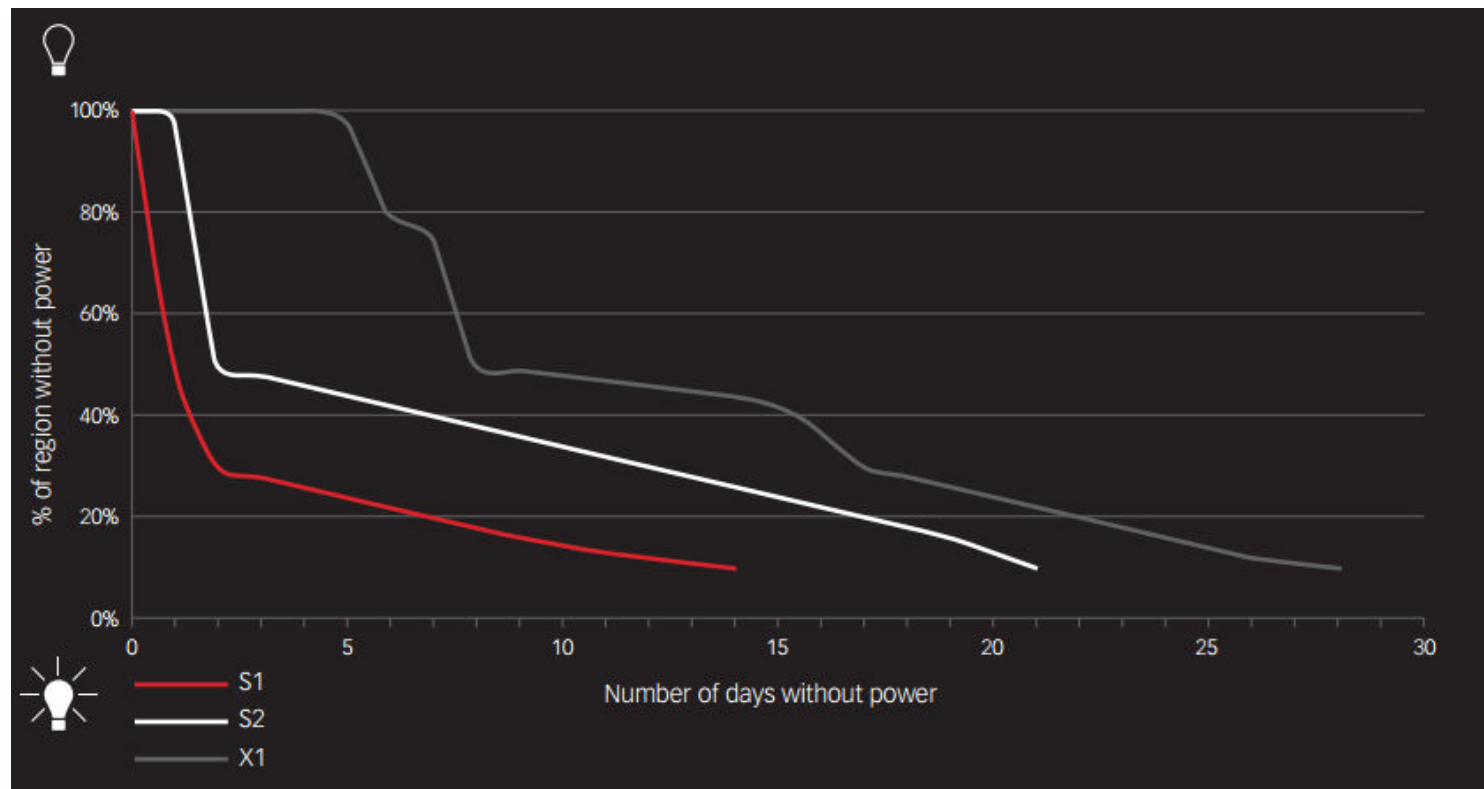
Business Blackout

www.lloyds.com/businessblackout



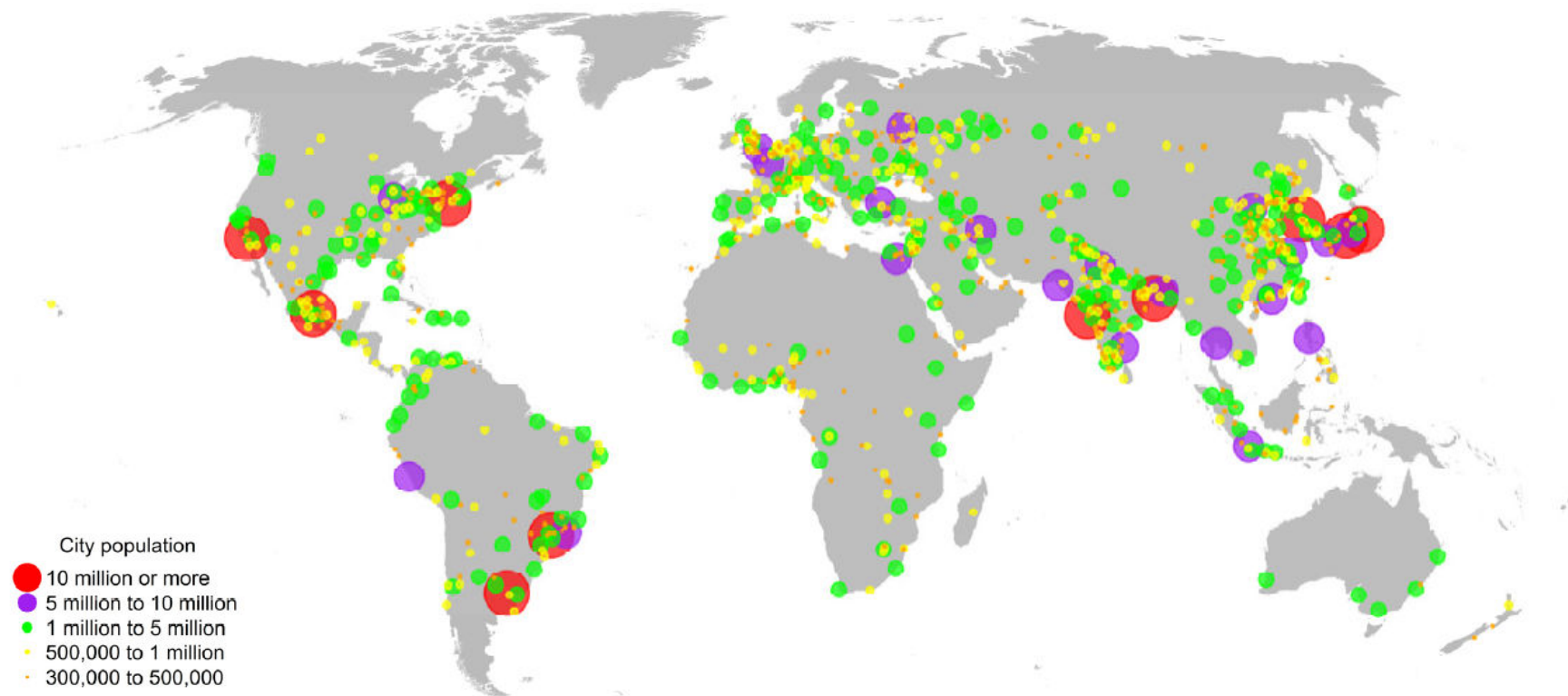
Business Blackout

Scenario	Outage duration, weeks (to 90% restoration)	City-Days	Number of damaged generators	Percentage of generators vulnerable to contagion
S1	2	3.78	50	10%
S2	3	8.08	50	10%
X1	4	13.83	100	20%



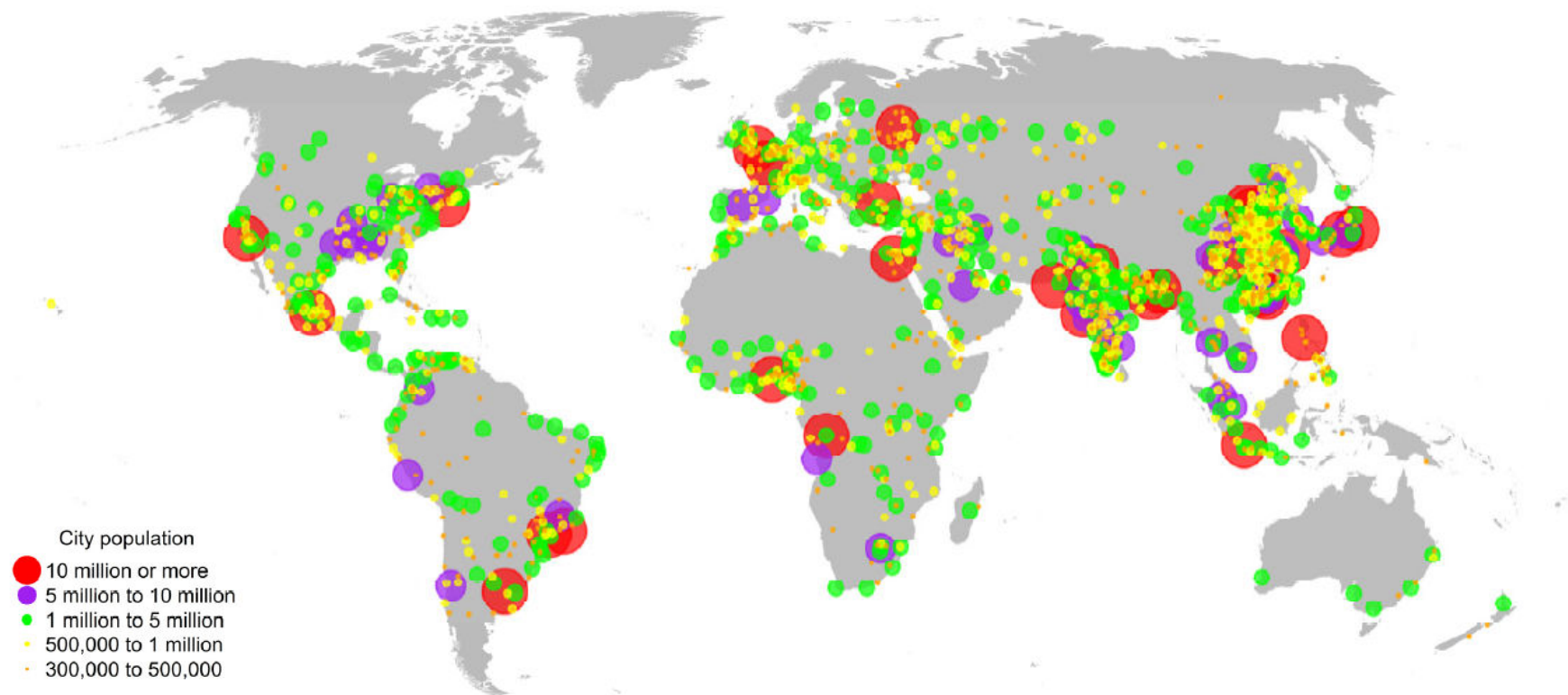
World cities population: 1990

Source: United Nations *World Urbanization Prospects 2014*



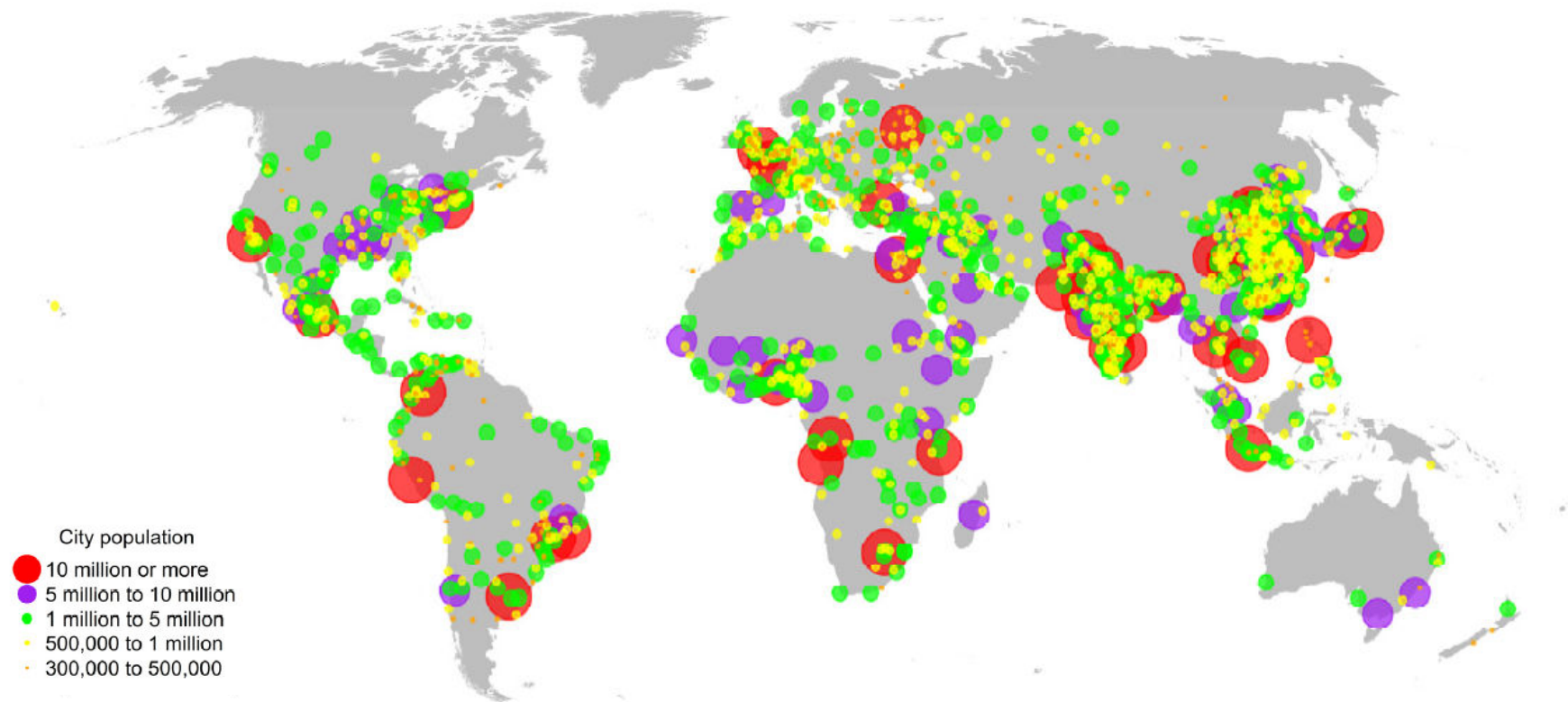
World cities population: 2014

Source: United Nations *World Urbanization Prospects 2014*



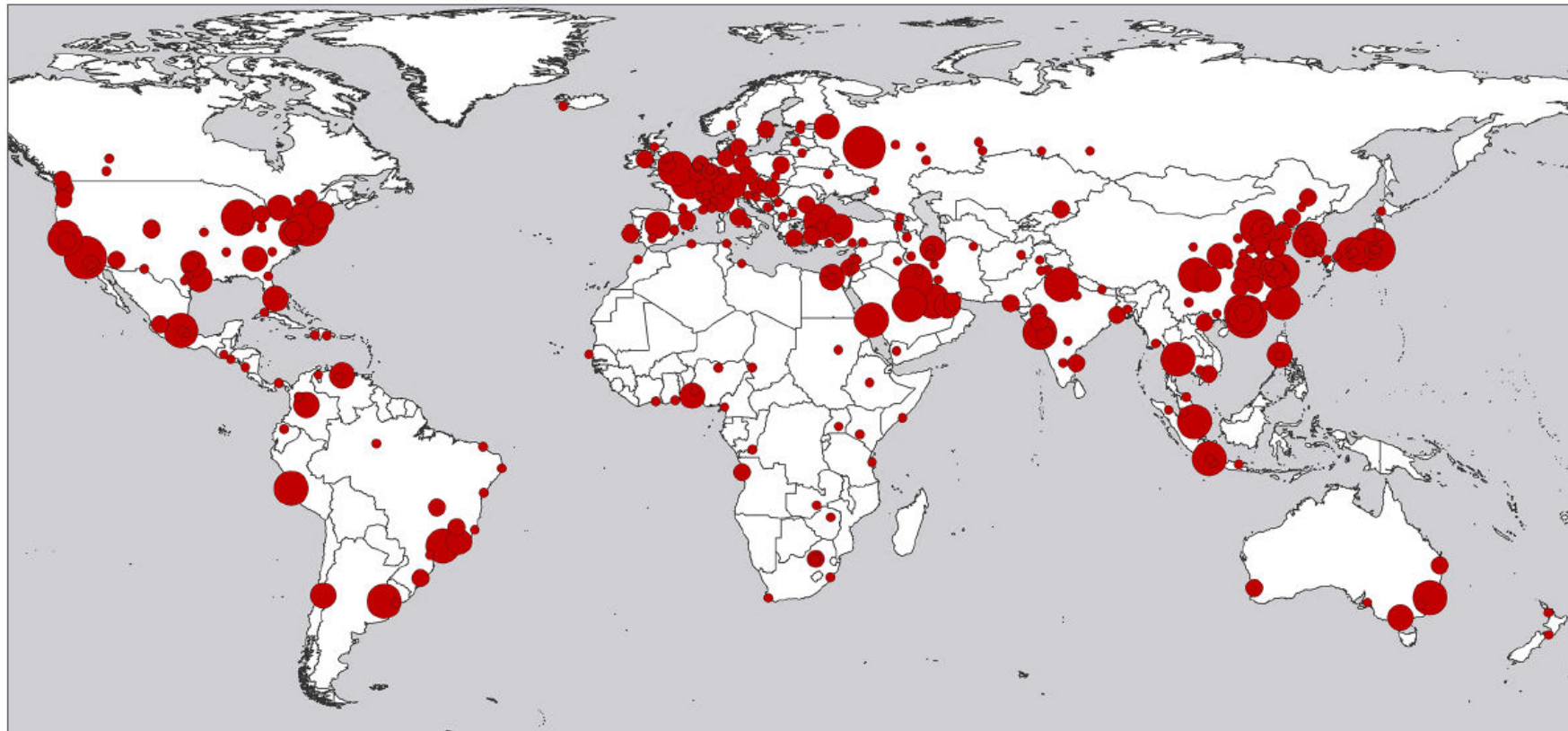
World cities population: 2030

Source: United Nations *World Urbanization Prospects 2014*

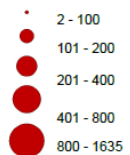


City GDP: 2025

www.lloyds.com/cityriskindex

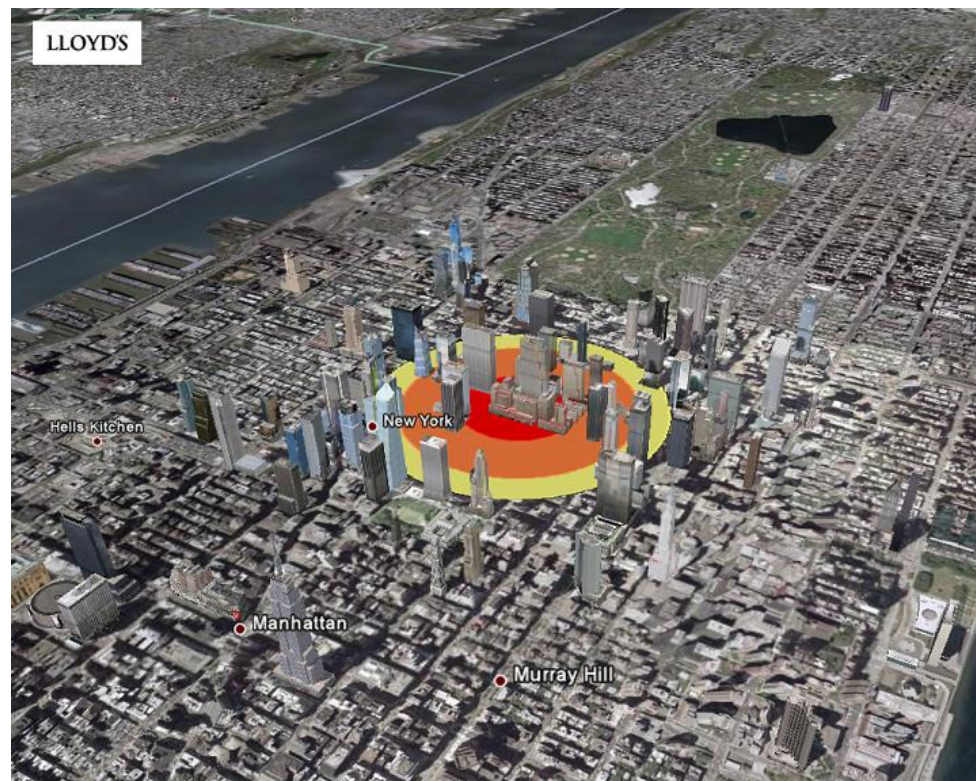


City GDP (\$US Bn)



Plausible but extreme

- ▶ Emerging risks require expert judgment and imagination applied to quantitative and qualitative assessment
- ▶ Cognitive bias is a major influence
- ▶ Success will be defined by our ability to measure and manage the emerging connectivity of risk



Lloyd's Realistic Disaster Scenario
High impact terrorist attack, Rockefeller Centre, New York City



www.lloyds.com/emergingrisks