

es difícil hacer predicciones,

es difícil hacer predicciones,
especialmente sobre el futuro

Yogi Berra

if the average U.S. household replaced their 5 most used lights with compact fluorescents then each would save \$60 a year and U.S. greenhouse gas emissions would be reduced 7%. if the average person drove a hybrid vehicle then each year 16,000 pounds of if North Texas grows from 6.4 million to 12 million acres (3 million acre-feet (3.7 billion cubic meters). if and by 2050 larger than the United States' and as large as China (BRICs) continue then together their economies will produce 1.3 to 2 million persons and per capita floor area will produce 31.5 million sq m (340 million sq ft). then 36 states in the U.S. will be short of water. by 2050 then past trends suggest that 72 million new homes are needed in the U.S. if Seattle adds 1.2 million jobs and 1.7 million more people then Seattle will add 8.4 million person trips per day.

Creating Blueprints for Change



The City in 2050

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Demographics Growing Populations

World population is projected to rise to 9 billion by 2050, with seven of every ten people living in urban areas.



Climate Change Climbing Temperatures

Cities that currently experience heat waves are expected to be challenged by an increased number, intensity, and duration of heat waves during the course of the century.



Demographics Regional Migrations

Economic competitiveness will "push" and "pull" migration between regions.



Climate Change Severe Weather

Changing weather patterns place higher burdens on infrastructure, such as power lines, sewer systems, levees, and coastal evacuation routes.



Demographics Shifting Demographics

Demographic shifts in age, ethnicity, and household composition will create new markets and drive tensions between "haves" and "have-nots."



Climate Change Rising Seas

Many millions more people are projected to experience floods every year due to sea level rise. The numbers affected will be the largest in the densely populated, low-lying mega-deltas of Asia and Africa.



Energy Reducing Emissions

The need to reduce greenhouse gas emissions creates dynamic market conditions in the energy sector.



Water Vulnerable Sources

Many semi-arid and arid areas such as the Mediterranean Basin, western USA, southern Africa, and northeastern Brazil are projected to suffer a decrease of water resources due to climate change.



Energy Peaking Oil

Rising gas prices have reduced vehicle-miles traveled in the U.S. for the first time in 30 years.



Water Diminishing Reserves

The availability of clean sources of water complicates the economic growth of communities and regions worldwide.



Energy Security Risks

Seventy percent of oil consumed in the United States is imported from other countries.



Water Pollution Runoff

Persistent waterborne pollution knows no political boundaries.



Infrastructure Deferred Maintenance



Underinvestment and deferred maintenance can result in tragic consequences.

Infrastructure Communication Networks



Interconnected global systems create new economic opportunities, but introduce operational risks.

Infrastructure Unsustainable Patterns



Both capital and operational costs are higher for infrastructure in low-density communities.

Capital Markets Concentration of Capital



Institutional investors and niche players grow in importance and define larger segments of the market.

Capital Markets Competition for Capital

City	Investment	Investment	Investment	Investment	Month	Value	Value	Value	Value
US	3818	3795	1527	710	MAY	9.06	9.53	2.91	
UK					DEC	8.89	10.48	2.87	
FR					JAN		10.97	2.65	
DE	665	3665	1357	100	FEB		11.27	2.91	
US						(7.45)	(0.42)		
UK					MAY	1.957	2NDL	HIGH	LOW
FR					SEP	5425	5470	5435	5360
DE					OCT	5550	5550	5500	5475

14:31 CORRECTED - UPDATE 3-APR-01. acknowledge mistakes. index change
 14:31 US WEEKLY CRUDE STOCKS OFF 1.7 MLN BBLs -- ETA
 14:30 APT-IL S. WEEKLY CRUDE IMPORTS UP 1.4 MLN BPD TO 10.32 MLN BPD



Capital Markets Assessing Value and Risk



The speed of the marketplace and new economic inputs make the assessment and pricing of risk more difficult.

Metro Metrics

Vancouver's 2008 Average Annual Metro Metrics

Population 2.25 million
50% urban; 50% metropolitan
1.6% annual growth
52% non-English as first language
33% are creative professionals
70 languages spoken

Murders 62 per year
Smoking Banned in all bars and restaurants
Last Call 2:00 am
Vehicles 3 minutes of idling allowed
Homeless 30% are Aboriginal persons
Homes \$500,000 average price

Land 28% of regional land is developed
50% of developed land is residential
84% of growth is outside of Vancouver City

Location 38 miles from U.S. border
Governance 21 municipalities
30% voter turnout of eligible voters
Landfill Waste 641 kg per capita

Households \$49,600 average annual income
18.5% of income spent on transportation
Schools 36% children walk to school
Recreation Ski, hike, sail on same day

Port \$43 billion in trade
82 million tons of cargo
3 day average container dwell time
Energy 22% Hydroelectric
49% Natural Gas
22% Gasoline

GHG Emissions 41,013 metric tons from government sources
50% of that from goods & services
6.3% per capita reduction (1991-1999)
Economy 11% of British Columbia GDP is arts and culture
3% largest film industry in North America
4.1% unemployment (2006)

Airport 872 international flights per week
Fixed-rail rapid transit to downtown (2009)
Climate Warmest city in Canada

The City Wild

Weaving together regional water management, habitat protection, and recreation, the Xochimilco park outside Mexico City has put Mexican landscape design on the international map.



Creating Blue + Green Change
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The City Wild
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Water, Power, Light.

The 214-turbine King Mountain Wind Ranch in Texas has a 278.2-megawatt (MW) capacity, of which 76.7 megawatts are purchased and used by the city of Austin to power 55,000 homes.

Getting Around



The proposed City Car is a stackable electric two-passenger vehicle that could maximize scarce urban parking. Innovative transportation alternatives can enhance mobility and save money.

Whole Buildings

An architectural rendering of two modern residential towers in Milan, Italy, known as the Bosco Verticale (Vertical Forest). The buildings are characterized by their facades being almost entirely covered in lush greenery, including various trees and plants. The balconies are filled with vegetation, creating a dense, forest-like appearance. The towers are set against a clear blue sky, and the overall scene is brightly lit, suggesting a sunny day. The buildings are positioned on a city street, with other urban structures visible in the background.

The Bosco Verticale (Vertical Forest) in Milan, Italy, includes two residential towers whose facades will be completely covered in a variety of flora and utilize on-site wind power.

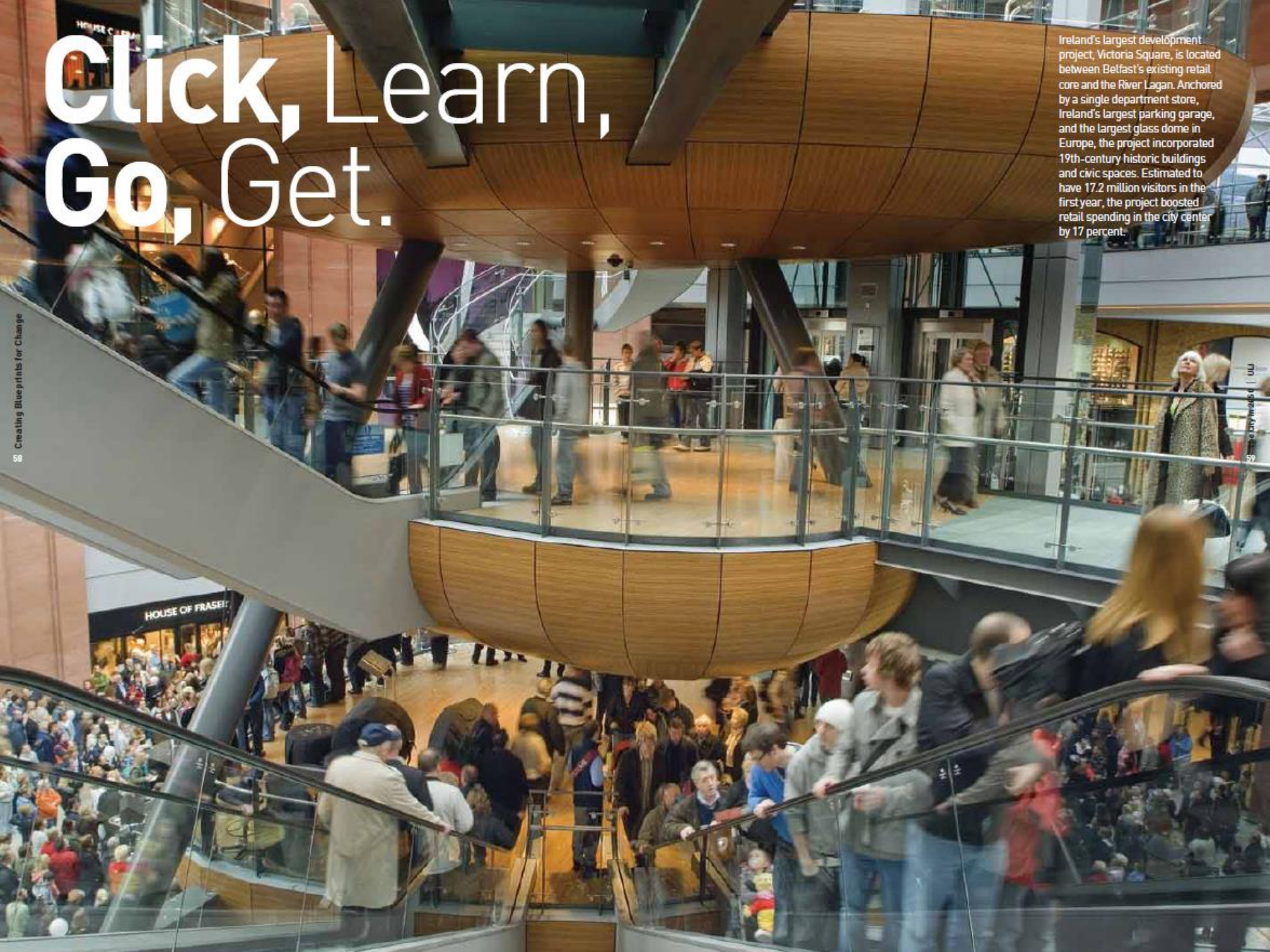
Full-Spectrum Housing



Chimney Pot Park in Salford, England, was earmarked for demolition but then adaptively transformed into high-density terraced housing.

Click, Learn, Go, Get.

Ireland's largest development project, Victoria Square, is located between Belfast's existing retail core and the River Lagan. Anchored by a single department store, Ireland's largest parking garage, and the largest glass dome in Europe, the project incorporated 19th-century historic buildings and civic spaces. Estimated to have 17.2 million visitors in the first year, the project boosted retail spending in the city center by 17 percent.



Plan It. Build It.

Located in San Francisco Bay, the redevelopment of Treasure Island aims to remake the former Navy base as a LEED-ND certified mixed-use community. The redevelopment plan calls for nearly 60 percent of the 500-acre (81-ha) site to remain open space for recreation facilities, wildlife habitat, and local farms.



How will we live, work, and play in 2050?



Age 45

I will balance my day job with volunteer work helping new immigrants living in the neighborhood.

I will be on the global medical research team for an international university consortium and travel to Abu Dhabi every six months for business strategy meetings.



Age 14

I will go on a student exchange program to Hyderabad, India.

I will live in the same suburban community my parents grew up in, but now we have another family living in the apartment above the garage.

I will walk to school.



Age 36

I will share my apartment with two college students.

I will pick up vegetables from the community garden on my way back from the high-speed rail station.

I will have just completed my second PhD, thanks to my parents' wind energy income.



Age 30 and 4

I will drop my son off at day-care and return home to work.

I will fly on a business trip once a year to participate in the global staff retreat.

I will spend weekends walking with my son down to the town center where his 110-year-old great grandmother lives.



Age 68

I will retire and start a company that provides job re-training counseling.

I will work out of my garage, but conduct meetings at the neighborhood business center.

I will use my "wrist watch" to call the hydrogen-fueled personal mobility shuttle to get me to the golf course.



Age 91

I will finally sell that old electric-hybrid jalopy to the automobile recycling center!

I will live in a mixed-generation housing community that was developed in conjunction with the new regional clinic.

I will spend Wednesday afternoons with friends going on electric go-cart safaris in the regional park.

Gracias!

@uwebrandes