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Think Piece

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TRANSFORMATIONAL CHANGES

Demographics

- The world's population is expanding exponentially, and is increasingly urbanized. In 2009, the world's urban population (those living in cities or densifying suburbs) exceeded its rural population for the first time in history.

World's Urban Population

Year	Total Pop	% in Urban Areas
1950	746 million	30
2014	3.9 billion	54
2050	6.4 billion	66

- Nearly 90 percent of global growth will be concentrated in Asia and Africa by 2025.
- U.S. population is expected to grow by 10 percent (32 million people) by 2025.
- Age. In 2000, 10 percent of the world's population was over age 50. By 2050, 21% will be over age 50.
- Wealth. Globally, the middle class is projected to increase by 1.5 billion people. Unprecedented wealth characterizes those at the top, with an estimated 1,600 billionaires scattered throughout the world. At the same time, nearly 2 billion people live in slums and an additional 100 million are homeless. The Great Recession will diminish potential for upward mobility among Gen Y, possibly for decades.
- Women. Labor participation rates have increased steadily worldwide since World War II. Women are also increasing as a proportion of college graduates, professional memberships, and leadership positions in all sectors. Women and people of color have made strides, but still lag in representation in leadership roles.
- Immigration. Global trends and natural population growth and decline mean that industrialized northern hemisphere countries will grow increasingly diverse, ethnically and racially.

Technology

- Ubiquity of data means expanding opportunities to make data-driven decisions. Companies, agencies, and organizations will need to invest in tools that help make sense of the mountains of data available.
- Constituents and stakeholders demands for transparency, access, and input into decision-making will increase. Organizations must prepare to address emergent issues with a quickness not previously required.
- Successful leaders of the 21st century will be characterized not by how they access information, but by how they differentiate it from the exponentially multiplying volume of non-relevant information.
- Self-driving vehicles. Early adopters likely to be transit agencies, vehicle fleets. Europe & Asia likely to lead. Several companies (Tesla, Google) and research institutions are producing personal driverless cars.
- Buildings as energy generators. Cost of solar is rapidly dropping. Now competitive—without subsidies—in much of Europe and parts of the U.S. New revenue opportunities using rooftops and parking lots.
- Water. Lessons learned from energy solutions will be applied to water supply and quality. Waste reduction will be key.

Health

- Global health and wellness will increasingly influence development. Health is influenced by food and water, air quality, exercise, access to health care, transportation, housing, education, and whether the environment is safe and promotes wellness.
- Obesity affects 1 of 3 of adults in the U.S. and 1 of 10 worldwide. Chronic diseases now outpace infectious diseases in every region except Africa, where rates are also rising. Chronic diseases are responsible for two thirds of deaths worldwide.
- Many health challenges are directly related to transportation choices, land use patterns, infrastructure, and accessibility. Urban populations face growing health threats due to physical inactivity and unhealthy habits related to food, alcohol, and tobacco.
- Land planning can promote walking and biking. Safer streets and transit systems can facilitate more active means of getting around.
- Design of buildings can improve the health of occupants. Increased daylight, better ventilation, low VOC materials, and accessible stairs that encourage their use over elevators all make a difference.
- Cleaner energy sources can combat air pollution.
- Safety from terrorist attacks and their aftermath remains a concern in many places.

CROSS CUTTING ISSUES

Climate Change

- Risk exposure to climate change will be a focal point for real estate investment. Awareness of risks and market volatility induced by climate change will penetrate into corporate social responsibility, international finance institutions, and regulatory compliance. Mitigation and adaptation will segment the market into winners—those who build resilience into their portfolios—and losers—those who are inadequately prepared and lack a cohesive strategy.
- As the frequency and severity of weather events increase and resultant damages are better understood, risks will be more accurately quantified, enabling managers to make better decisions with investments.
- In the developing world, extreme weather events are less costly in economic terms but far more costly in terms of human life. As urbanization and a growing middle class sweeps through Southeast Asia, higher demand for insurance products will follow.
- While no single event can be attributed to climate change, a worsening of extremes—from droughts to extreme precipitation—can be seen across the globe. The volatility of these extremes is compounded by concurrent changes in the background, like rapid urbanization (concentration of value) and sea-level rise (risk to high value assets) to produce major economic losses.
- Recent disasters in Southeast Asia, New Orleans, Haiti, Christchurch, and Sendai have elevated attention to community preparedness and resilience. Superstorm Sandy reinforced the connection to economic impacts of disasters in the real estate sector and amplified calls for better long-term land use planning and investments in resilient infrastructure.
- Tens of billions of dollars of expected annual costs in the near term due to lost productivity, energy demand, agricultural yields, and property loss are documented.

Leadership

- Global issues demand leaders who can work in dynamic, contested arenas with public, private, and nonprofit stakeholders across geopolitical, economic, and cultural boundaries.
- Leaders need the knowledge and skills to develop creative solutions under tight constraints and increased public scrutiny.
- Tomorrow's leaders will be characterized by flexibility and empathy, while remaining true to the organization's core values and finding ways to circumvent unpredictable impediments.
- Decision-makers must address complexities and interrelationships in an integrated, holistic context, within regional collaborations to face a multitude of challenges.
- Innovation requires both depth of understanding and breadth of perspective. Diverse teams outperform homogeneous teams every time. Recent studies show that companies with more diverse executive teams were also top financial performers.

Infrastructure

- Rapid urbanization in Asia and Africa and intensified urban development in developed countries will put stresses on infrastructure.
- In post-industrial countries, aging populations and the preferences of Millennials will shape demands for infrastructure.
- Of the private sector respondents surveyed for ULI's *Infrastructure 2014*, 86% rated infrastructure quality as "very important" when making investment decisions, second only to consumer demand.
- Infrastructure faces an old struggle: how to pay for it. Maintenance and basic upgrades remain a particular conundrum. *Infrastructure 2014* survey respondents rate "the public's willingness or ability to pay for infrastructure" as the most important factor shaping infrastructure and real estate investments over the next ten years.
- The pace of Asia's transit expansion astonishes; Latin America strives to catch up; and major European cities (Paris, London, and Copenhagen) have major rail expansions underway or planned. Self-driving trains put high-quality, 24-hour service within financial reach.
- The booming bike-sharing systems, pioneered in Europe, are now available in 600 cities in 52 countries. China dominates with 650,000 bike-share bikes throughout its major cities.
- Cutting-edge cities are creating seamless mobility services, integrating rail, bus, car-share, and bike-share systems. Helsinki aims by 2025 for an integrated, mobility-on-demand system accessed by smartphone that will out-compete driving one's own car for all urban trips.

Education

- Education is both a tool and a real estate sector.
- Jobs of the future are mostly in the science, technology, engineering, and math (STEM) fields.
- Education is the key to upward mobility, but the cost of education is a barrier for many.
- Online education is increasing. In the fall of 2010, an estimated 6.1 million students took an online course, up 10 percent from the previous year.
- Dissatisfaction with k-12 education is leading to innovations. The Khan Academy, founded by hedge fund analyst turned education entrepreneur, provides thousands of free online education resources, over 100,000 practice problems, over 6000 micro lectures on YouTube. By 2013, these resources were used by 10 million students a month, and lectures watched almost 500 million times.
- At the university level, online learning has become a mainstream tool, but experts note that there is still educational value to the campus experience.
- Germany's successful model for vocational training, which coordinates with industry to appropriately educate future employees, is a trend to watch.

Rapid Urbanization

- While every continent will urbanize further, the global South will urbanize even faster and reach majority urban before 2050. (The Americas and Europe are all at least 80 percent urbanized today; Africa and Asia are still majority rural.)
- Nearly half the world's urban dwellers still live in smaller conurbations of less than 500,000 people.
- Some cities have experienced population decline in recent years, mostly in low-fertility countries in Asia and Europe or in regions suffering from economic contraction or natural disasters.
- Urbanization will remain a driver of increasing real estate demand, particularly in emerging markets like Brazil, China, and India, and rapidly developing economies like Mexico, Poland, and Turkey.
- Rising energy costs and traffic congestion will lead to higher demand for walkable locations or mixed-use zones served by transit.
- Two options: plan for growth or try to fight it. Attempts to stop growth in the developing world generally backfire, resulting in situations like lack of roads, piped sewerage, and water mains, resulting in epic traffic jams, polluted groundwater, and unstable land. Communities that limit growth will face soaring real estate prices and the ensuing problems they bring: lack of workforce housing, a dearth of young professionals entering the top of the income curve, increased homelessness.
- Demand is increasing for affordable, higher-density housing to meet the needs of young people, new families, and empty nesters who value place and experience over square footage. At the same time, local governments will want more density for a broader and larger tax base to better fund infrastructure, schools, and public safety.

INDUSTRY SECTORS

Industrial

- Industrial development will be driven by changes in the supply chain and distribution network. As e-commerce continues to grow, demand for industrial space, especially big distribution centers will grow. "Big-box" distribution centers of 1 million square feet or larger, will be more common. Technological advances in fulfillment are increasing the demand for warehouse space, influencing not only building size requirements but also the location and build-out of facilities.
- In anticipation of the Panama Canal expansion's expected completion in 2015, many seaports have invested millions in infrastructure improvements to accommodate larger ships and to capitalize on increased cargo volumes.
- Rooftops will be used to generate income via solar panel, wind energy devices, and communications installations. (Industrial real estate owners have long allowed cellular companies to lease rooftop space for cellular antenna installations, but the need for large footprint solar installations and wind turbines provides a far bigger opportunity.)
- 3D printing will alter how products are made, warehoused and delivered. More products and parts will be made on site, eliminating the need for warehousing.

Housing

- Over the next decade, demographics, technology, climate change, and urbanization will affect both demand and design.
- Economic inequality presents the challenge of a shortage of safe, decent, affordable homes.
- Since the Great Recession, there has been a 10% increase in multigenerational households. As boomers age, traditional retirement communities will need to adapt. More focus on urban lifestyles with transportation options.
- Planned communities are increasingly providing “soft infrastructure” including activities, communication networks, transportation.
- Increased focus on green building and sustainable land planning.
- In some markets, micro units offer a solution to affordability.

Resorts

- Budget and affluent travelers will be the strongest drivers of the leisure property sector, while the market for medium-priced properties will be more tepid. Gen Y and retiring baby boomers will demand more affordable options, affecting price points, amenities, and design. On the other hand, expanding affluence will fuel development at the upper end.
- Active retirees will continue to increase, but the second home market will decline until the Gen X bulge ages and grows more affluent.
- The expanding middle class in Asia and Latin America brings new opportunities for resort development.
- Europe remains a strong destination for leisure and cultural travelers.
- Climate change will affect where resorts are developed, how they are operated, and in some cases which succeed or fail.
- Demographic shifts will affect where resorts are developed and what they offer, with a growing cadre of millennials and Asian travelers driving change.
- Travel from China increased by 26% in 2013. China is now the leading country for total spending on travel. New and expanded resorts in Asian and Pacific Rim destinations will benefit from this travel.
- Travel from Europe is increasing, especially from Eastern Europe.
- Travelers from Latin America will affect destinations within Latin America, Florida, the Caribbean, and Europe.

Office

- Office markets are changing as Gen Y influences the work environment, preferring a more collaborative work style.
- The Great Recession focused attention on reducing costs through space reduction.
- Office space demand will be influenced by downsizing trends, the ability of office buildings to be retrofitted to meet current and future demands, urbanization, buildings becoming obsolete—either by physical characteristics or location.
- The paperless office reduces space requirements.
- Technology allows the freedom to work anywhere anytime, further redefining the workplace.
- The open office has become the norm (even while research is negative).

Retail

- Online shopping has grown at a rate of 15-20% over the past five years. Smart phones and tablets allow people to shop anywhere, with access to a world-wide array of goods.
- People still like to shop in brick and mortar stores. A recent study by A.T. Kearney reports that 95% of U.S. retail sales involve an in-store experience.
- Shoppers increasingly expect entertainment and social experiences along with shopping.
- While some retailers are shutting stores, or shrinking footprints, some online-only retailers are adding physical outlets. Amazon will open its first brick and mortar store this year in New York City.
- Latin America and China are the fastest growing online markets while the U.S. is still the largest.
- Mixed-use development with housing, office, and entertainment venues are proliferating from major markets to second and third tier locations, both urban and suburban.
- Gen Y is choosing what to buy based on consensus voting among family and friends through a quick photo and text message votes.
- Retail and the new urban centers offer an opportunity for casual interaction and community building. Food is no longer taken as a hasty food court experience but an opportunity for gathering for discussions, wine tastings, cooking classes etc. The notion of the neighborhood pub or piazza has come to retail globally.
- As much as 40% of existing retail facilities in the U.S. will either be shuttered or repurposed over the next 20 years. Smaller markets will see ever shrinking retail options.
- India, China, and Brazil will continue rapid expansion of mega-malls, mixed-use, and other urban shopping types.
- Large companies (Walmart, Target, Macy's) will further expand.
- Drones and other fast delivery methods will push developers and retailers to creatively enhance shoppers experience. Mall services will expand in areas of health & wellness, beauty, education, lifestyle and hobbies.
- Gen Y holds the key to retailers' futures. Their spending patterns will be monitored as they form households and move into their ownership years.
- Baby boomers will continue to be important spenders, with increased leisure time, interest in education, health & wellness, desire to age in place.