

Blurred Lines, Disruptions and the Future of Real Estate



Norm Miller, PhD
Ernest Hahn Professor
University of San Diego

Contact: Nmiller@sandiego.edu



Blurred Lines, Disruptions and the Future of Real Estate



This talk was first given in August of 2017 at MIT and since then, in several other forums from New Zealand to Canada. Feedback from colleagues has been incorporated in this on-going process of continuous re-thinking an important topic: how we will all live , work and play in the future?

Norm Miller is a Professor at the Burnham-Moores Center for Real Estate in the School of Business at the University of San Diego. Prior to this he was a Professor and Founder of the Real Estate Program at the University of Cincinnati. He has worked extensively with trade groups like NAIOP and CCIM , and has consulted for the DOJ, FDIC, CoStar and continues to work with Collateral Analytics in a research capacity. See www.collateralanalytics.com He is the Vice President of the Homer Hoyt Institute, a think tank for real estate based in N. Palm Beach, FL. See www.hoyt.org He founded the Journal of Sustainable Real Estate, see www.josre.org and his personal website is www.normmiller.net

Part 1: Inevitable Trends That Will Affect Design, Management and Value of CRE

Trend	Implication
Longer life spans	Strained retirement systems and the need to work longer
Decline of US Share in Global Economy	Weaker dollar and less ability to dominate trade talks
Fiscal Crisis by 2030 in the US	Great recession in the US paying for past debt sins
Less Immigration into the US for 4 years or so	Weaker tech sector, farming crisis, good for Canada
Climate Change	Artificial tax payer land subsidies with 1/4 th the required flood insurance , higher cooling costs, insurance costs, travel delays., more video conferencing and hyperloop. Northern US and Canadian farms improve productivity. More urban farms
Battery design 4 fold improvement	Changes everything from EVs to drones to robots
Lighter composite materials and 3 D printing	Better designs with more bio-mimicry, bespoke parts, more natural light, less waste. Modular construction off site see Weberhaus example.
Autonomous Cars and Trucks	Disruptive to logistics and transit industry, need to redesign garages and drop off lanes, urban clogging will require tolls for hovering. Note TESLA super charging stations are smart real estate decisions.
AI and machine learning, cheap sensors and instant communications	Augments human decisions and work, low skilled dirty dull jobs disappear Ex: Talking to cars, translation, mammograms, EKGs Facilities management and productivity enhancement, sharing asset use. Cashier service disappears Retailers go for experience or sell no products.
Education	Critical thinking analytical skills, persuasive skills become more important. Many schools and universities are archaic in approach.
Virtual Reality	Enhanced faster decision making. Less social skills, the poor man's way to experience the world.

Implications

Trend or Issue	
Sharing	Co working, WeWork, WeLive, Dreamapartments.com
Tax policies	Encourages renting in US
Housing Affordability	Need density, less parking required, fees prorated by unit size
Environmental and traffic concerns, occupancy cost concerns	More sharing, more mixed use, more video conferencing , more ecommerce, more last mile delivery systems and warehouses, more work stay hotels, more sustainable and productive office space
Autonomous driving	Fewer but larger bulk warehouses and more last mile warehouses, huge drop off lane increase by buildings with less on site parking, hotel sleeper cars.
AI, sensors and machines	More self service at retailers and hotels, drone taxis, security and safety monitoring equipment investment, every component of a building connected
AI, 3D printing, ecommerce, and all of above	Note trade will not stop as we still need raw materials but final production may shift
We need less of	Gas stations, urban parking, retail, libraries,
We need more of	Data centers, senior care, access lanes and urban shared vehicle spaces, 3D printing centers, last mile warehouses and pick up hubs in our housing.

New Forms of Real Estate



Single Family



Office



Self-Storage
Climate
Controlled

Excess
Retail into
Office and
Service

Retail



Industrial

Data
Centers

Bio-Tech,
Nanotech
Manufacturing

Work
Live
lofts

SF ST
Rental

MF ST
Rental



Lodging



SF Rentals
and MF
Condos

Multi-family



Conclusions

1. **Science and innovation can save us from ourselves and resource limitations**
2. **Don't count on political solutions to a great recession by 2030.**
3. **Homeownership and car ownership will become less important.**
4. **Real estate offices, residential, hotels, retail and warehousing are all morphing into new kinds of adaptable and overlapping uses with higher occupant services and better and safer environments.**
5. **Many traditional uses of real estate will vanish but real estate decisions remain as critical as ever for those remaining! What you do matters!**

Questions? Comments on...

Blurred Lines, Disruptions and the

Future of Real Estate

Please send by email

Norm Miller, PhD

Contact: Nmiller@sandiego.edu

