Adaptive Reuse and Future Proofing in Urban Development: Understanding Trends, Drivers, and Impacts

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Our Panel

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Christopher French
Founder & CEO
District Homes LLC

Geraldine Gardner
Executive Director
Centralina Council of Governments

Bruce Rasher
Redevelopment Manager
RACER Trust
Learning Objectives
Understanding how markets are driving and embracing adaptive reuse
Review the regulatory implications of adaptive reuse and ‘open buildings’
Examine the economic, engineering, and design viability of ‘future proofing’
Why adaptive reuse and future proofing? Why is this important?
54% of the global population, 54% lives in urban areas today. This trend is very likely to continue.
By 2045, the number of people living in cities will increase by 1.5 times to 6 billion, adding 2 billion more urban residents.

By 2050, the urban population will reach 6.3b.
With more than 80% of global GDP generated in cities, urbanization can contribute to sustainable growth if managed well by increasing productivity, and allowing innovation and new ideas to emerge.

Sources: Worldbank Urban Development, google public domain
Of 750 cities analyzed in a 2014 Worldbank study on competitive cities 75% grew faster than their national economies since the early 2000s.
40% of the consumed raw materials are consumed within the building industry.
9.8m tons of CO2 are generated from the production of 76m tons of finished concrete in the US.
44k buildings and 270k homes are demolished annually in the US each year. Demolition produces 4k tons of waste per 50k sf demolished building.
534m tons of construction and demolition debris in the US (2014): 90% from demolition and 10% new construction.
Cities produce 50% of
How are the drivers of adaptive reuse projects changing in the US and Europe?
How is RACER Trust an example of the evolving policy in the U.S. resulting in more adaptive re-use?
What does it mean to make a building or community “adaptable”?
Santa Monica High School (“SAMOHI”)
MRY Architects / HED Architects

Community evolution over time
District Homes LLC
What are the benefits to future-proofing buildings and communities?
Capital improvement

INCREMENTAL RENEWAL CYCLE: Improves with age

DECAY CYCLE: Improves with replacement

AUTHENTICITY GAP: Incremental innovation over time

PERFORMANCE GAP: $$. energy, resources, waste
What are some of the challenges to future-proofing for our industry?
So, how do you overcome these challenges and create the political will and community appetite to embrace the uncertainty around “future proofing”?
How did RACER position its properties for adaptive reuse, recognizing their locations in built-out urban environments?
How does RACER position its properties so that buyers will future-proof their new use or uses of a RACER property?
VISION: RIVERFRONT

WHITE RIVER WESTBANK LOOKING NORTH
Does future proofing mean less standards/rules or more?

Are there compromises to economic viability and health/safety to having this flexibility?
For those of us who would like to pursue adaptability in our projects, where do we start?
“You never stay the same. You either go one way or the other.”

– A-Rod
Disentangling
Identify which elements belong in each Level. Within each Level, disentangle the individual elements.

Prioritizing
Prioritize the disentangled elements by anticipated rates of change within and between Levels.

Strategizing
Develop adaptable frameworks for decision-making based on the prioritized elements.

Analysis
Perform capacity studies to assess the effectiveness of the adaptable frameworks. Refine as needed.
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