## Virginia AIA 100<sup>th</sup> Anniversary

James P. Cramer

Chairman and Founding Principal
Greenway Group
DesignIntelligence





## Virginia Accord

- Responsible job creation (3 initiatives)
- A constructed environment that contributes to the well-being of future life, not its erosion (4)
- A commitment to public health(3)
- A commitment to systems of mass transit reducing environmental impact and energy use (3)
- Responsible land development (4)

## AIA Virginia Vision

Through a culture of innovation, the Society empowers its members and inspires the creation of a better environment







#### Who we are





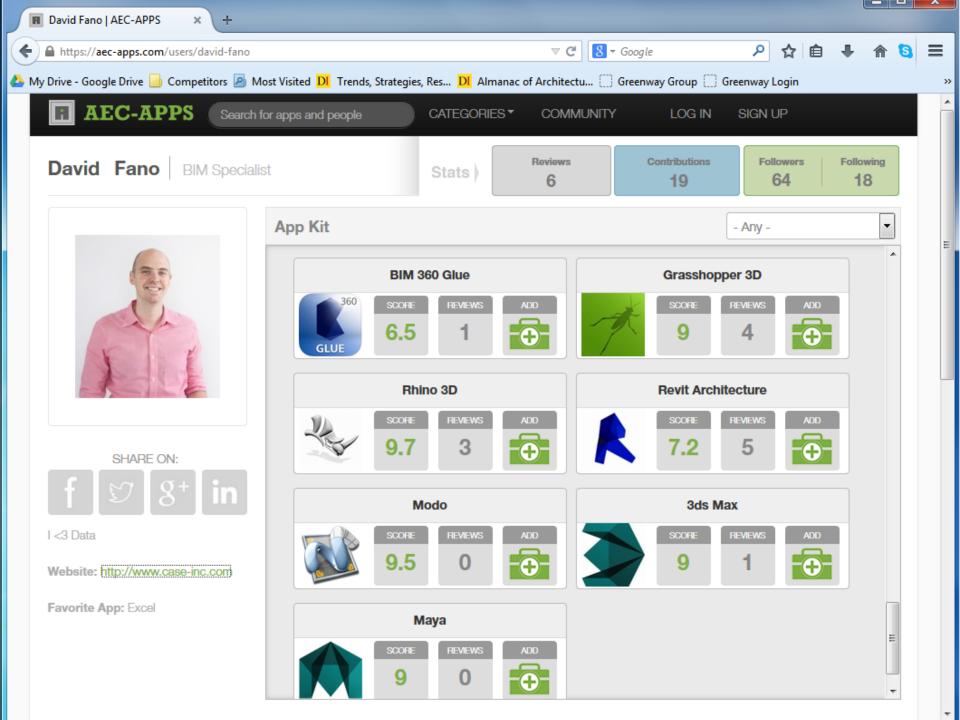
#### Foresight > Disruption



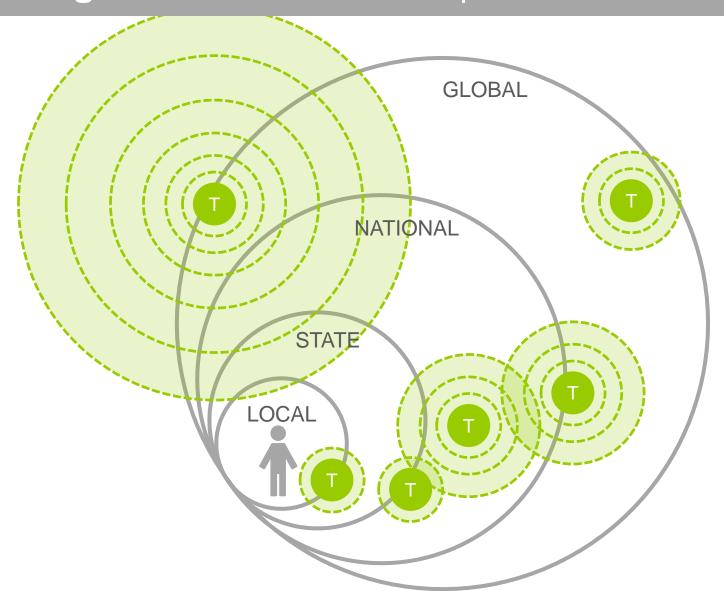


"Are you from the future?"

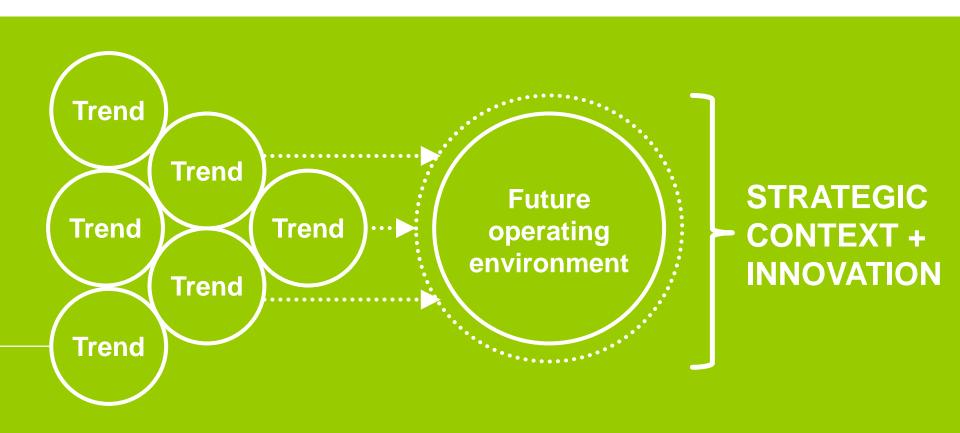




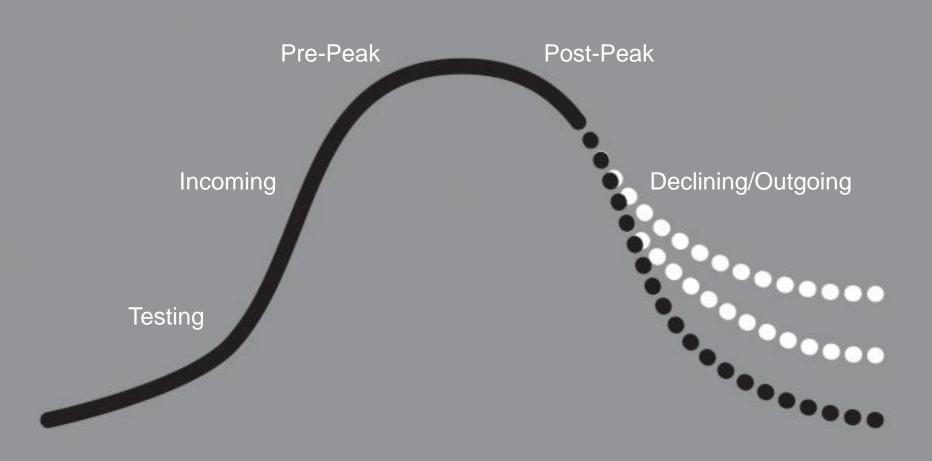
#### **Foresight** > relative scale and impact



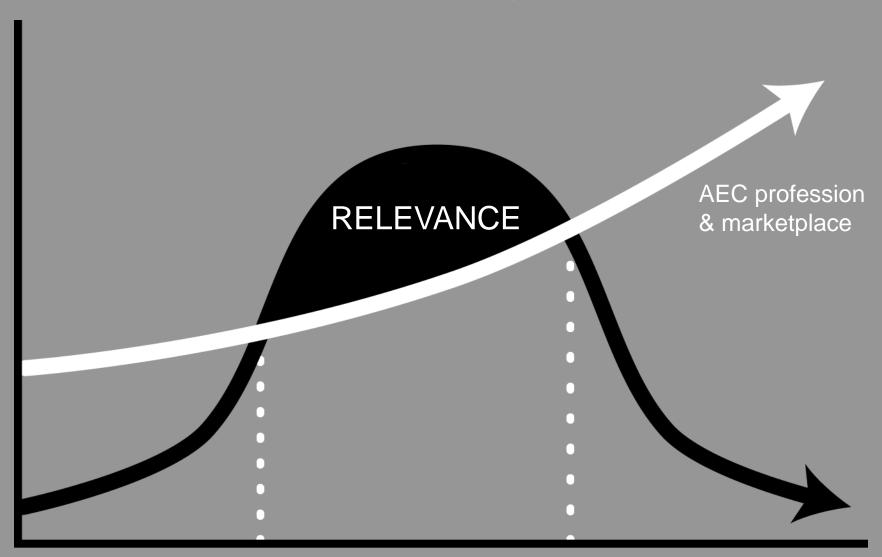
#### **Foresight** > context for business

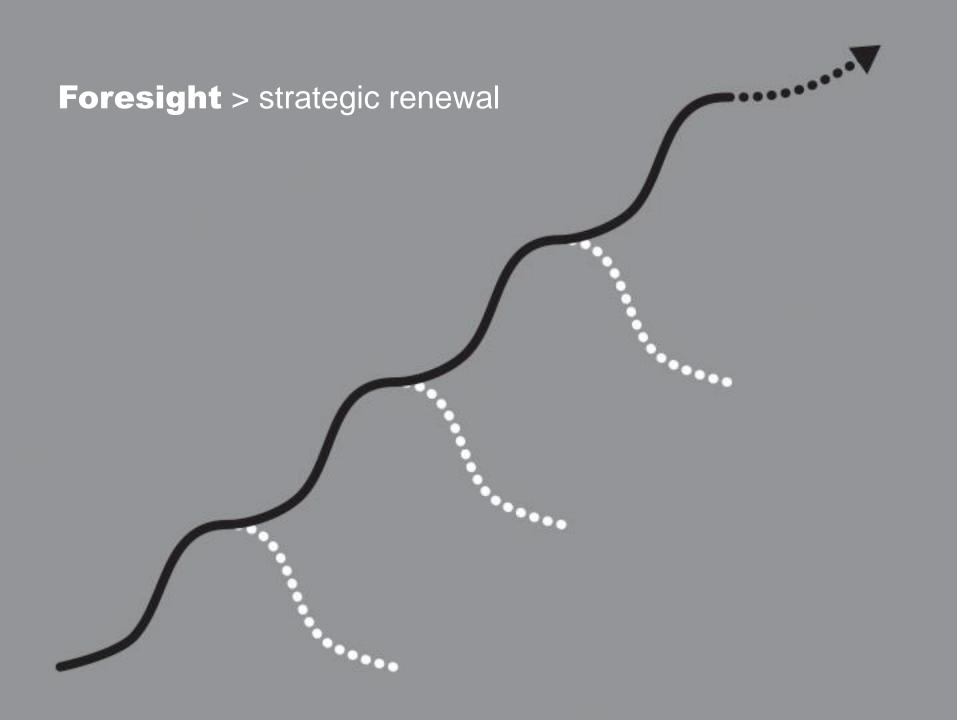


#### **Foresight** > lifecycle analysis

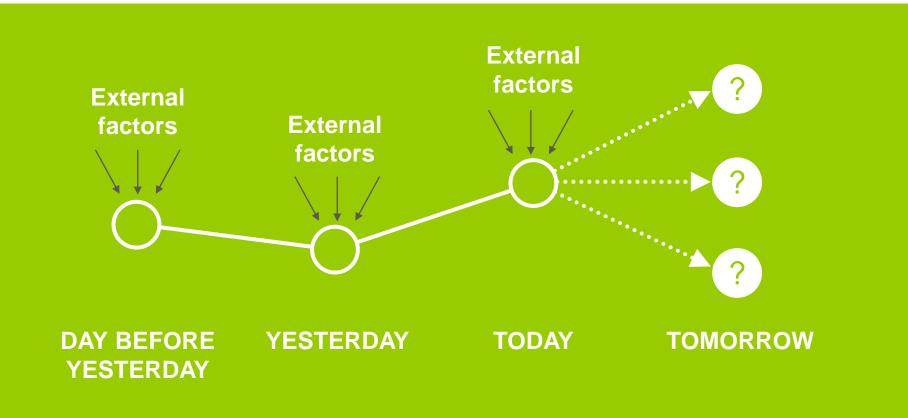


### Foresight > personal career lifecycle

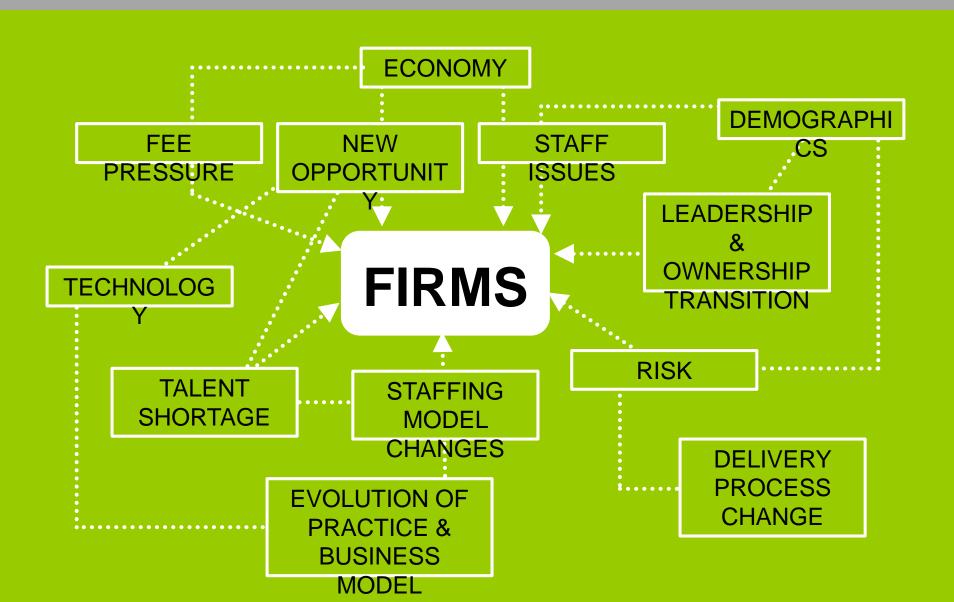




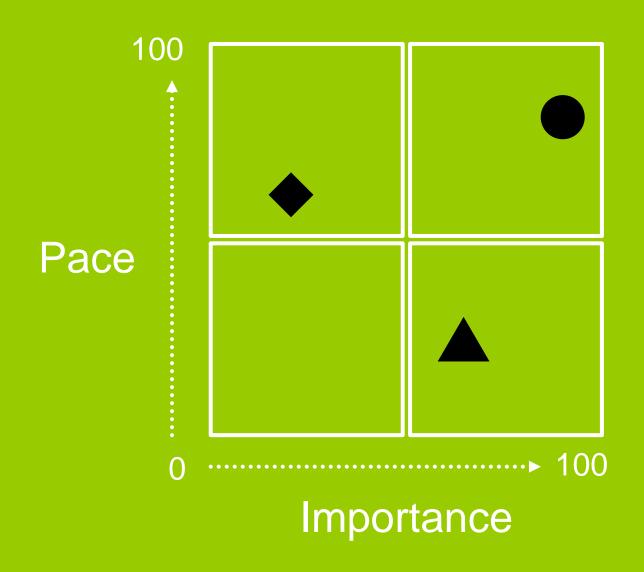
#### Foresight > trajectory & extrapolation



#### **Foresight** > trends affecting firms



#### **Foresight** > How fast? How important?



#### Foresight > Design/Enterprise model



What is the logical sequence?

2 4 ... ...

Linear change

2 4 6 8 10

Accelerated change

2 4 8 16 32

What about this sequence?

2 4 16 256 65,536

What about this sequence?

8 4 6 10 2

```
    8 <u>Eight</u>
    4 <u>Four</u>
    6 <u>Six</u>
    10 <u>Ten</u>
    2 Two
```

#### Foresight > discussion





**BALANCE OF WORLD TRADE** 

CONTROL OF CAPITAL, RESOURCES—FDI

**LOCUS OF OPPORTUNITY** 

Demographic shifts

WORK-FORCE DIVERSITY 1

TALENT
ACQUISITION &
RETENTION

LEADERSHIP & OWNERSIP TRANSITION

Global economic power

2

#### Urbanization

ECONOMY, ENVIRONMENT, PUB. HEALTH

CONSUMPTION HABITS

**DEMANDS ON AEC** 

5 MEGA TRENDS

4

Resource scarcity/ climate change

EXPANDED
DEFINITION OF
SUSTAINABILITY

**RESILIENT DESIGN** 

PUBLIC HEALTH/PUBLIC INTEREST DESIGN 5

Technology

WORKPLACE & JOBSITE TECHNOLOGY

COMMUNICATION & MARKETING

CONSUMER EXPECTATIONS & HABITS

#### **Foresight** > AEC profession changes

Shrinking Markets Baby boomer leadership Solo artist and silo disciplines Percentage fees Firms working locally and regionally Stable professions Linear processes Mixed media tech Design as material art Construction as wasteful industry **Evolutionary innovation** Command and control artists Earnings at 7% Generalist practices

Growing but erratic markets/fragmentation

Generation X and even Y

Leadership
Integrated expert teams

Value-based fees

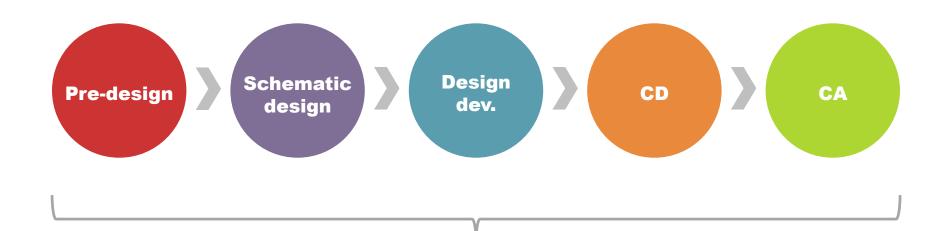
Firms working regionally and globally

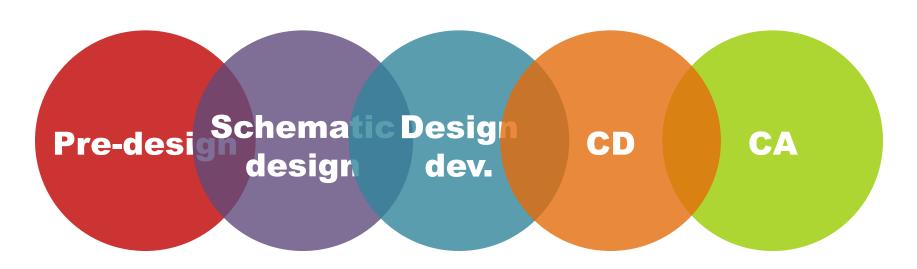
Dynamic entrepreneurial profession

Simultaneous processes
BIM dynamic sharing with AI
Design as organic science
Construction as lean and clean

Revolutionary disruptive

#### **Evolution** > design & delivery process



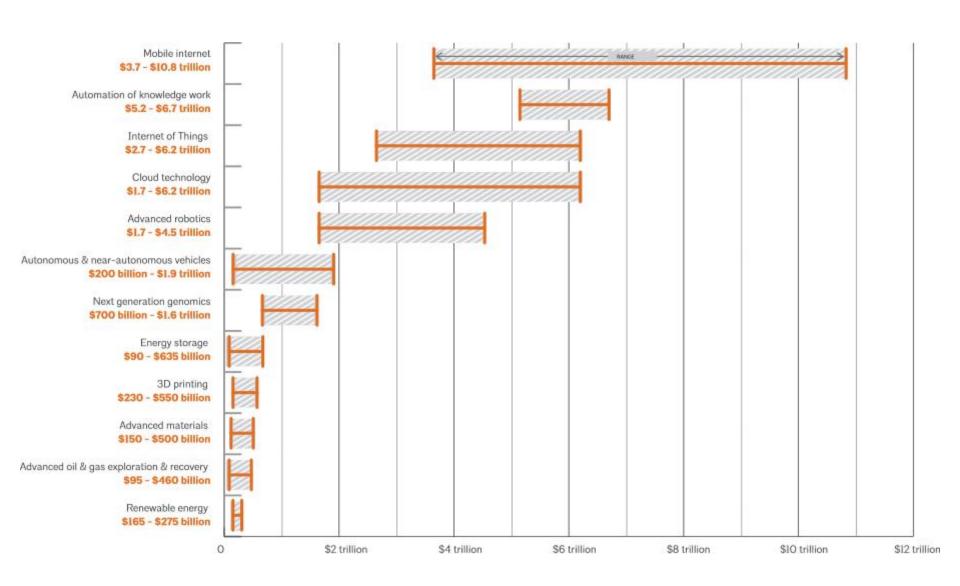


#### **Technology** > tech-enabled trends

- 1. Mobile internet
- 2. Automation of knowledge work
- 3. Cloud technology
- 4. Advanced robotics
- 5. Autonomous vehicles
- 6. lofT, Al and algorithm design

- 7. Next-gen genomics
- 8. Energy storage
- 9. 3D printing
- 10. Advanced materials
- 11. Advanced oil & gas recovery
- 12. Renewable energy

#### **Technology** > 12 top trends & economic impact - 2025



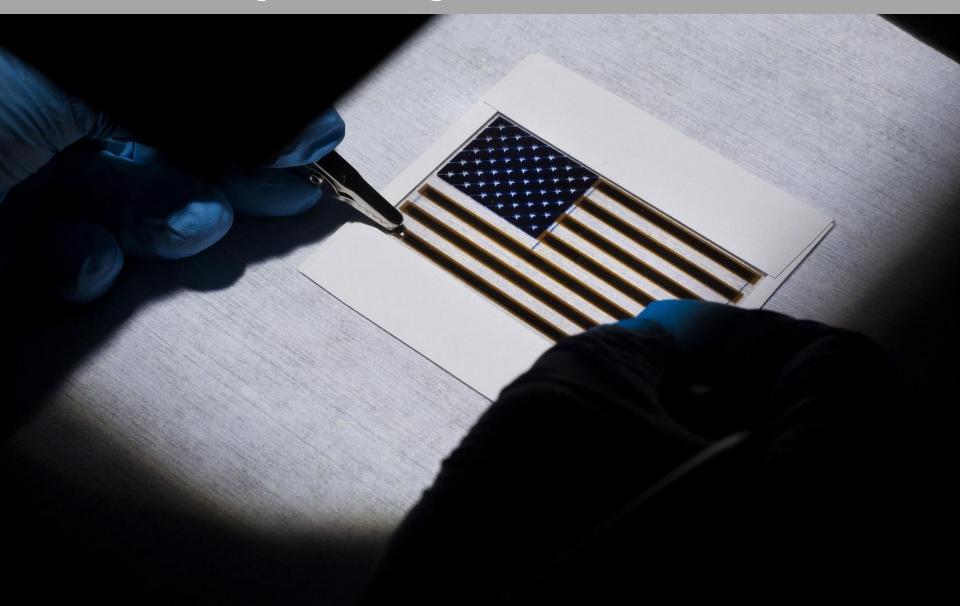
#### Wearable tech > Human Condition Institute



# Meant to reduce OSHA's "Focus Four Hazards"

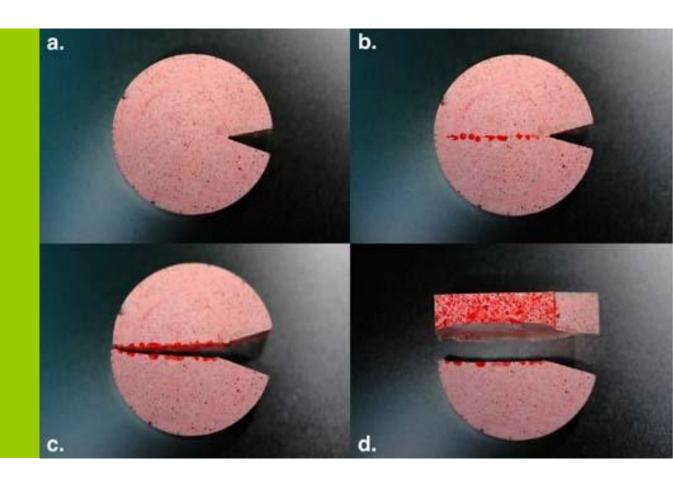
- 1. Falls (36%)
- 2. Struck by (10%)
- 3. Electrocution (9%)
- 4. Caught-in or between (2%)

### **University of Michigan** > decorative solar



#### **Biomimicry** > self-healing polymers

Beckman
Institute for
Advanced
Science and
Technology
University of
Illinois







#### **Trends** > design thinking



#### **Trends** > design thinking



Accelerated change

2 4 8 16 32

Jack Davis, Mayor Euille, Kim Tanzer, Jason Hartke, Richard Jackson, Kennedy Smith, AIA Virginia Leadership, Special Guests and Presenters, Great dialog

**Personal Goals and Commitments** 

#### Self-Defeating and Self-Fulfilling Prophecies

Dystopian visions or optimistic futures inventions?

Strategic, not blind optimism to design a sustainable and healthy communities.

#### Future Ready > Positioning Your Firm to Thrive

## Thank you.