



Seminar July 24th 2024

Democratizing Planning with AI and Digital Twin Technology

Creating Sustainable, Equitable, and Healthy Communities

Presented by: Philip Challinor Architect

The Healthy People Healthy Planet Initiative

Project CHAI**NGE**-building the future around AI

The Green Belt-Bath v Brownfield -Worlds End

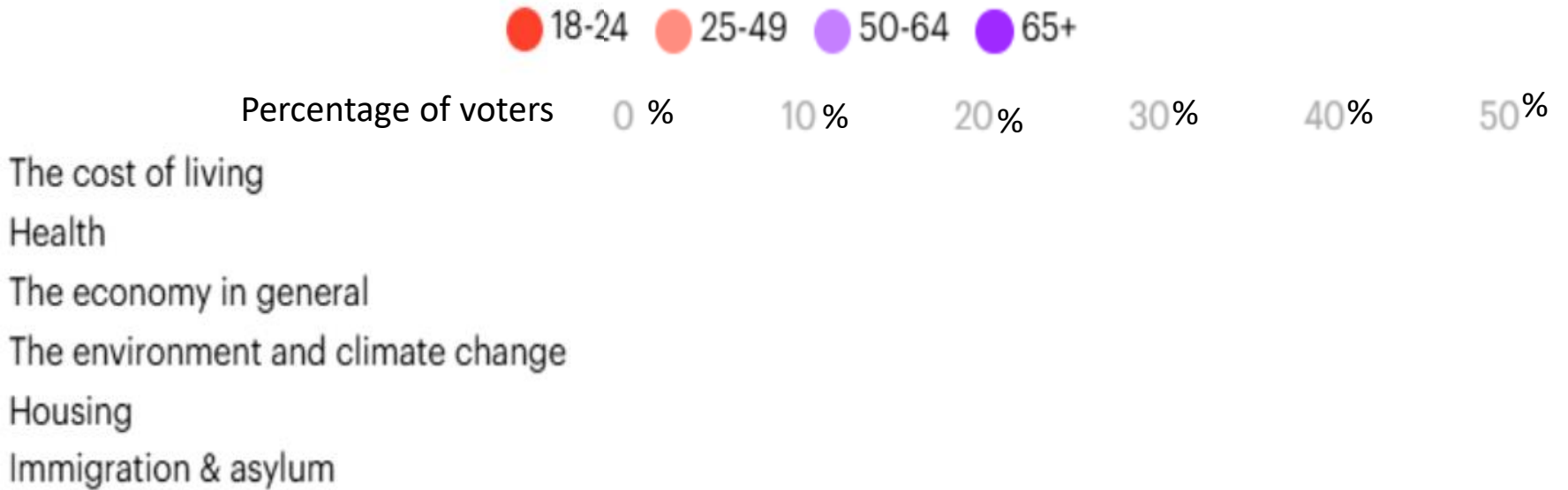
- Housing
- Health
- Environment & Energy

Next steps



Election 2024 (YouGov Survey)

Which of the following will be the most important issues IN DECIDING WHO YOU WILL VOTE FOR

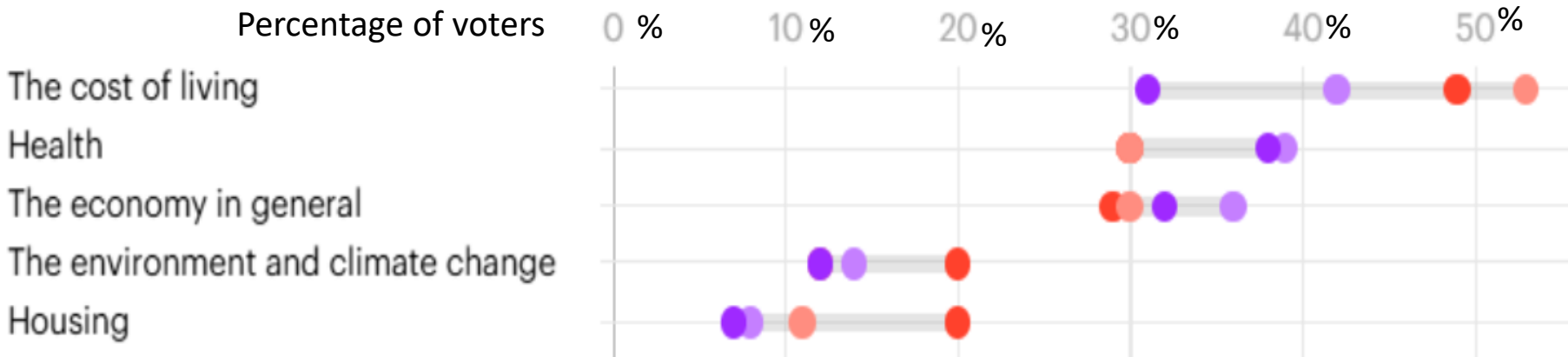




Election 2024 (YouGov Survey)

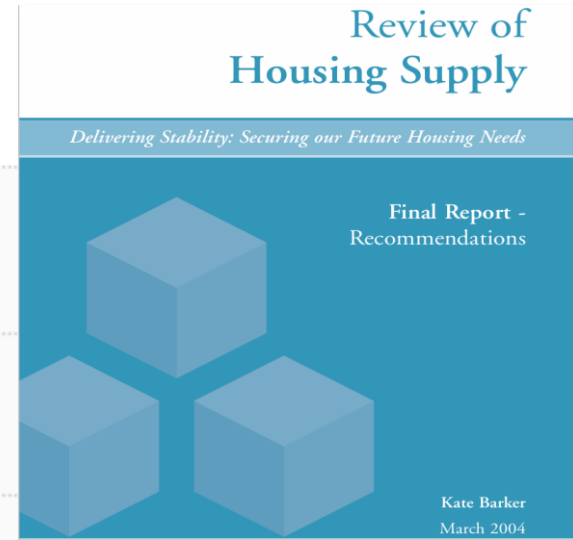
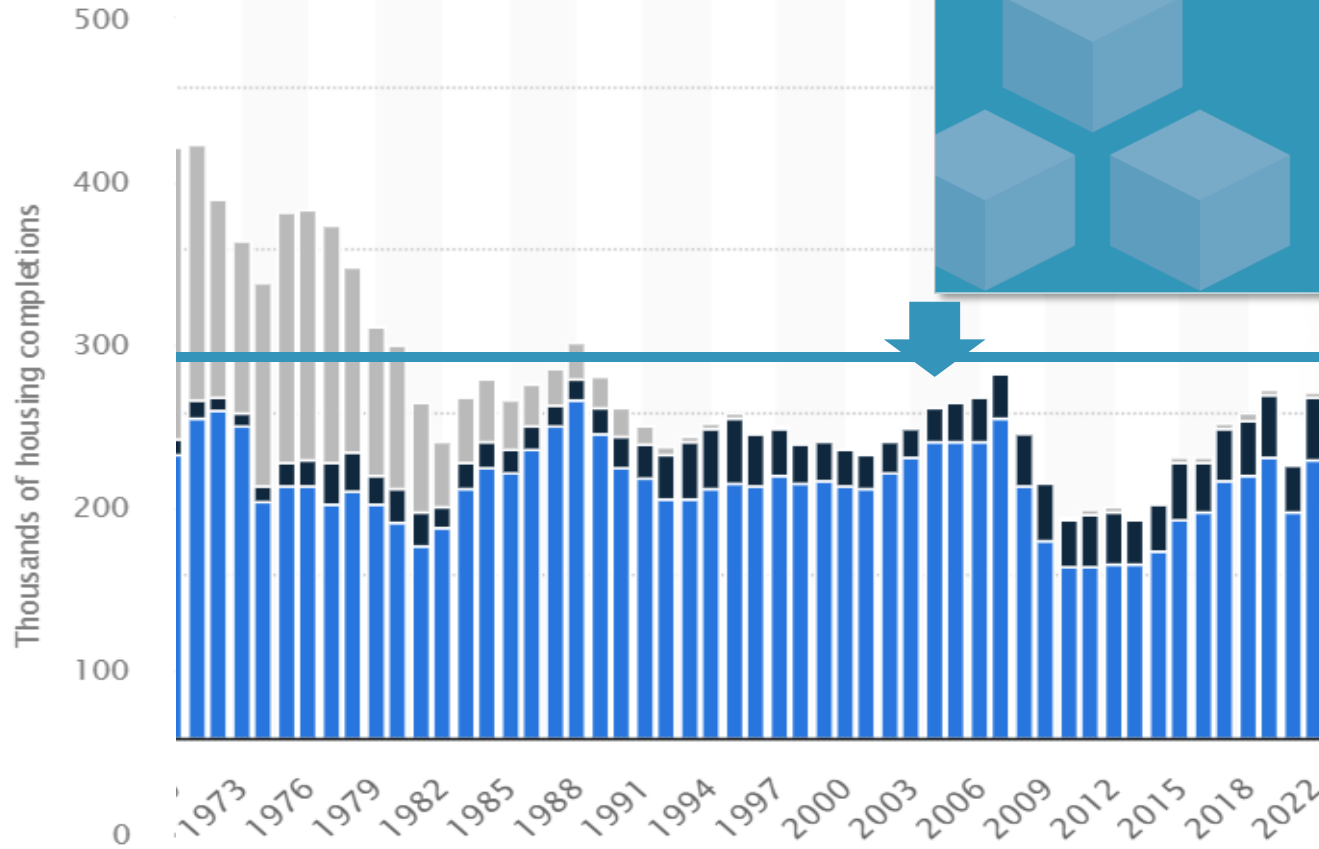
Which of the following will be the most important issues IN DECIDING WHO YOU WILL VOTE FOR

● 18-24 ● 25-49 ● 50-64 ● 65+





UK Housing Completions

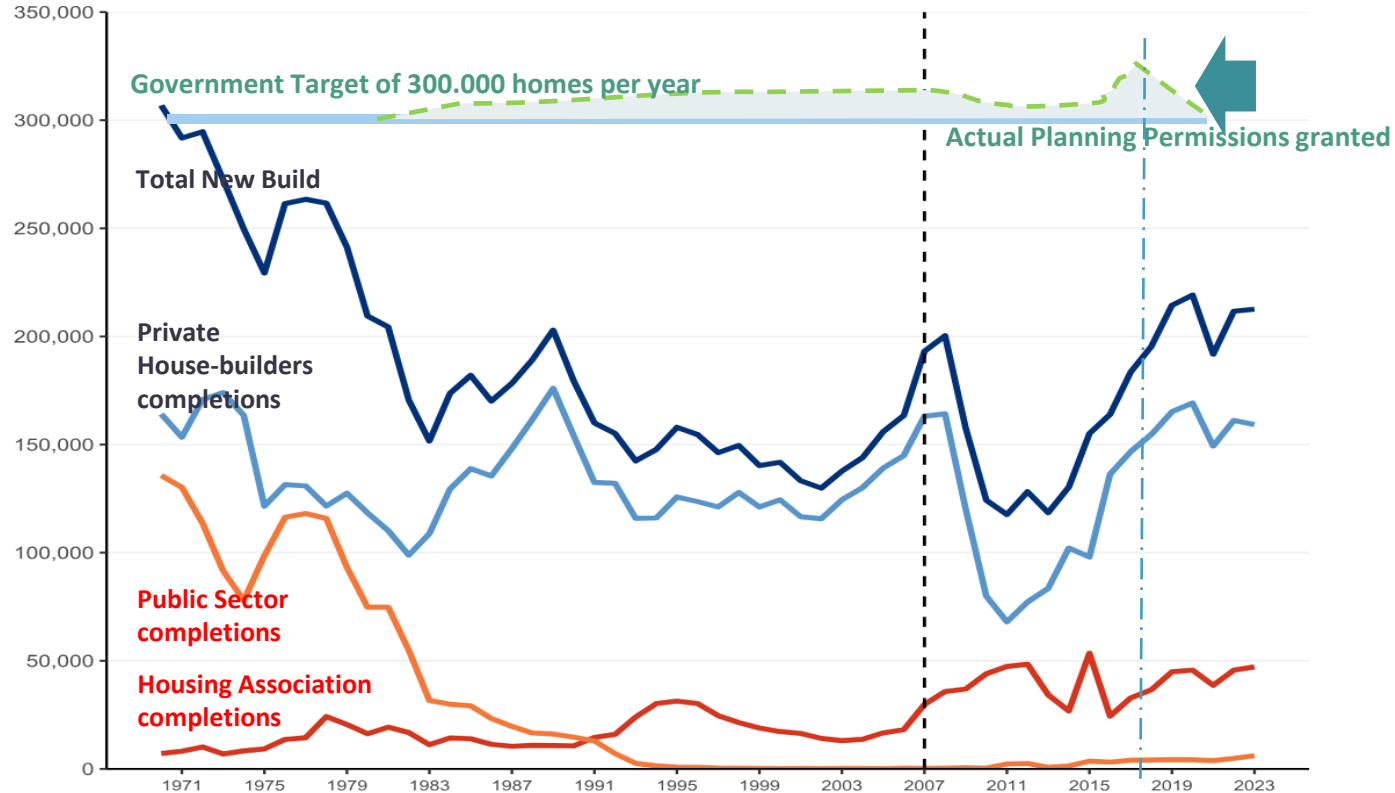


Government target 300,000 homes per year



UK Housing Completions

It's not the number of permissions, that's the problem



Planning Permissions Granted

| Year Ending | Units Granted | % Change |
|-------------|---------------|----------|
| 31-Mar-16 | 270,000 | |
| 31-Mar-17 | 329,000 | 22% |
| 31-Mar-18 | 314,000 | -4% |
| 31-Mar-19 | 327,000 | 4% |
| 31-Mar-20 | 315,000 | -4% |
| 31-Mar-21 | 310,000 | -2% |
| 31-Mar-22 | 302,000 | -3% |
| 31-Mar-23 | 270,000 | -11% |
| 31-Mar-24 | 236,000 | -13% |

Development Options

Green Belt Rural



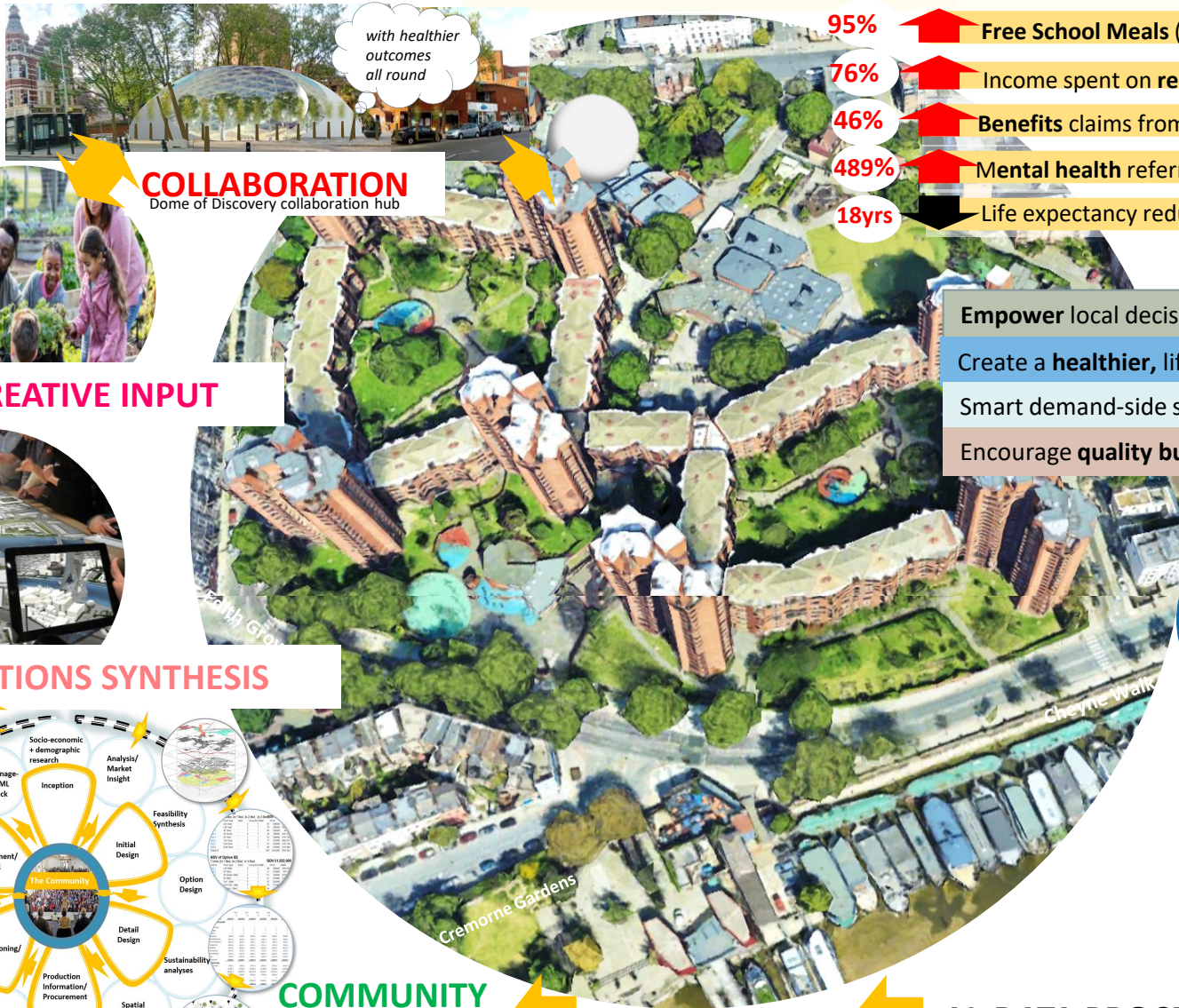
Brown Field Urban





Worlds End Estate Chelsea

AI informed, inspiring creative, community driven **CHANGE** PROBLEMS



with healthier outcomes all round

COLLABORATION
Dome of Discovery collaboration hub

CREATIVE INPUT

OPTIONS SYNTHESIS

COMMUNITY ENGAGEMENT

AI DATA PROCESSING

- 33% ↑ School absenteeism (21.2% in 22/23, 10.9% in 18/19)
- 95% ↑ Free School Meals (50% increase over 5yrs)
- 76% ↑ Income spent on rent 3 times more than rest of UK
- 46% ↑ Benefits claims from 2020 to 2023
- 489% ↑ Mental health referrals in last 2 years to 2,180
- 18yrs ↓ Life expectancy reduction in adjacent streets

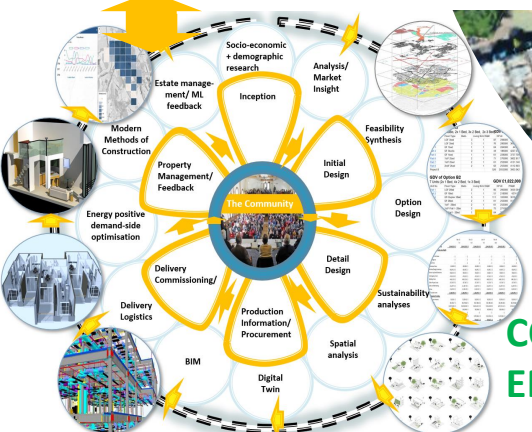
STRATEGY

- Empower local decision-makers with generative tech.
- Create a healthier, lifestyle enhancing, invigorating world
- Smart demand-side systems ensure energy positive homes
- Encourage quality buildings, open spaces & landscapes

DIGITAL TWIN



DATA SOURCES





The AI/ Digital Twin Process

