DESIGNING GREENSPACE FOR HEALTH: THE FUTURE OF CITIES AND HOSPITALS

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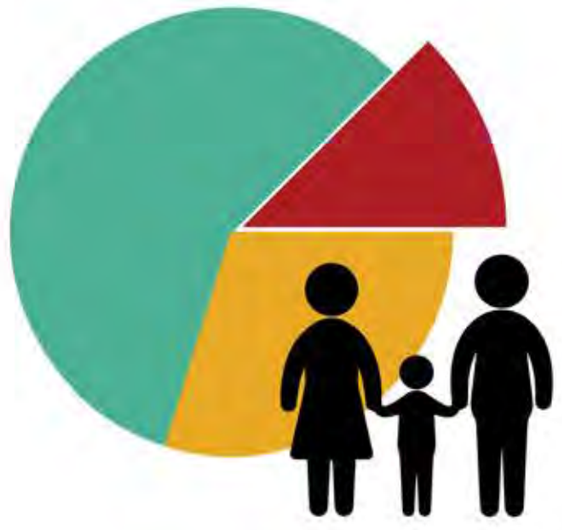
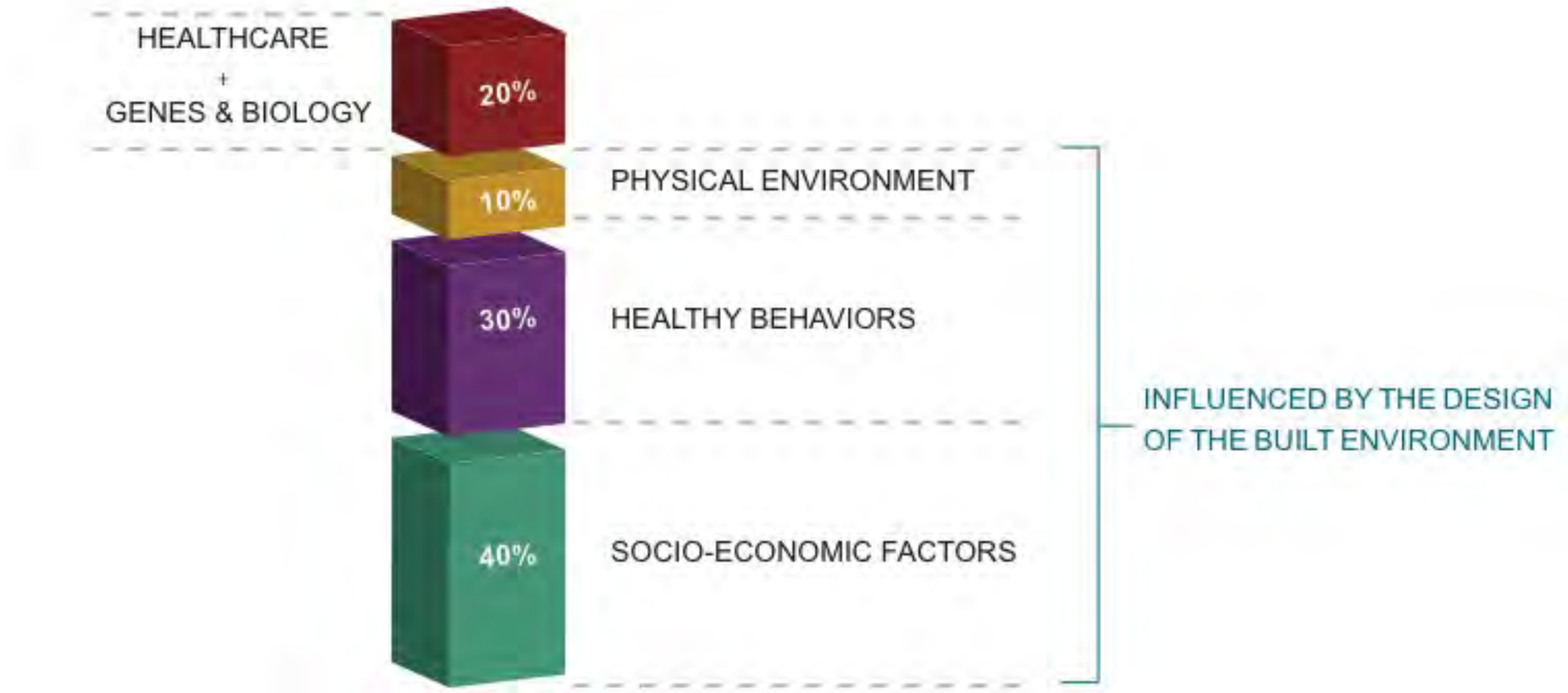
1 HEALTHCARE IS MOVING TOWARD POPULATION HEALTH



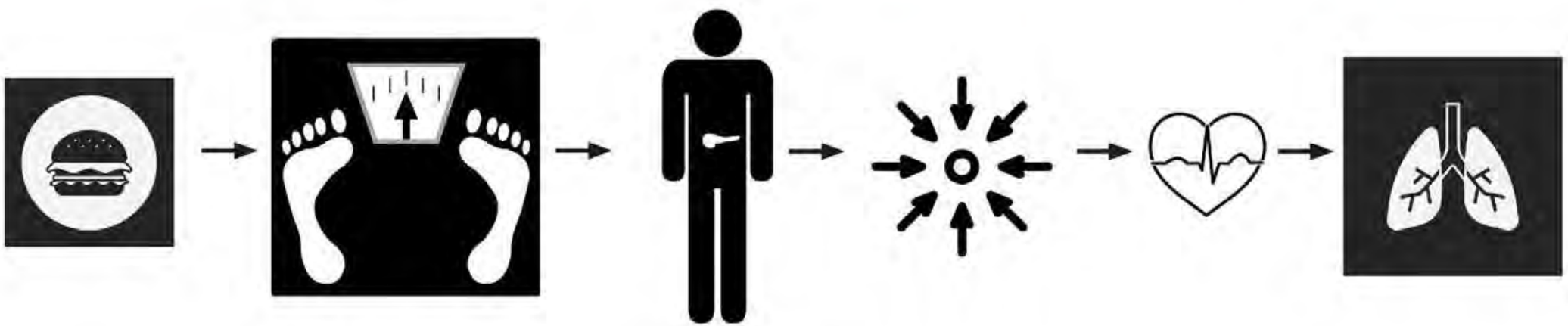
WHAT MAKES US HEALTHY?



2 HEALTHCARE IS MOVING TOWARDS PREVENTION

"we are looking at a massive health problem. The National Health Service is not going to be able to cope financially unless we get a grip on the economics of ***obesity*** *because obesity is the primary driver for the development of* ***Type 2 diabetes.*** *It is a massive promoter of* ***high blood pressure****. It actually increases the risk of* ***heart disease****. It's now coming through as one of the bigger preventable causes of* ***cancer.*** *Enormous financial resources are now being put into this, and nobody is thinking sensibly about the economic benefits of going for a preventive strategy."*

Dr Philip James, President of the International Association for the Study of Obesity



3 URBANISATION

50% TODAY

URBANISATION

3 MILLION PEOPLE MOVE TO CITIES EVERY WEEK – UN HABITAT 09

2.5 BILLION BY 2050

70% BY 2050

URBANISATION

RAPID &

UNPRECEDENTED

UNPRECEDENTED HEALTH CONSEQUENCES?

BENEFITS

NEGATIVE

MENTAL ILLNESS

OBESITY

HEART DISESASE

DIABETES

URBANISATION AND OBESITY

MORE HIGH CALORIE FOODS

MORE PASSIVE TRANSPORT

LESS OPEN SPACE

MORE MASS MEDIA

LESS WORK RELATED PHYSICAL ACTIVITY

https://www.hsph.harvard.edu/obesity-prevention-source/obesity-and-urbanization/

THERE IS A GROWING BODY OF EVIDENCE LINKING THE CONDITION AND QUALITY OF OUR BUILT ENVIRONMENT TO OUR HEALTH AND TO THE CHOICES THAT WE MAKE THAT PROMOTE HEALTH

BUT IN THE DEVELOPING WORLD, THE DEMAND FOR LAND TO BUILD AND DEVELOP CAN OUTWEIGH PLANNING PROCESSES, POPULATION HEALTH, AND MORE MEASURED APPROACHES LEADING TO 'GREY CITIES'

GREY CITIES

Pablo Lopez Luz / Population Speak

MAJOR BENEFITS

- Lower BMI, Overweight And Obesity Levels
- Lower Premature Mortality Due To Circulatory Disease
- Lower Rates Of Coronary Heart Disease And Diabetes
- Lower Metabolic Syndrome Rates
- Better Self- Rated Health
- Increased Longevity
- Better Fitness And Overall Health

It even seems to reduce the effect of inequality on health

PREVENTION: OBESITY, DIABETES & HEART DISEASE

GREENSPACE NEEDS TO BE PART OF THE STRATEGY

150 YEARS AGO

VICTORIAN HOSPITAL BUILDINGS

HUMAN HISTORY
NOW

NATURE DEPRIVATION

MENTAL HEALTH GLOBAL BURDEN

10% → 15%

MENTAL HEALTH UK SPENDING HEALTH BUDGET

23%

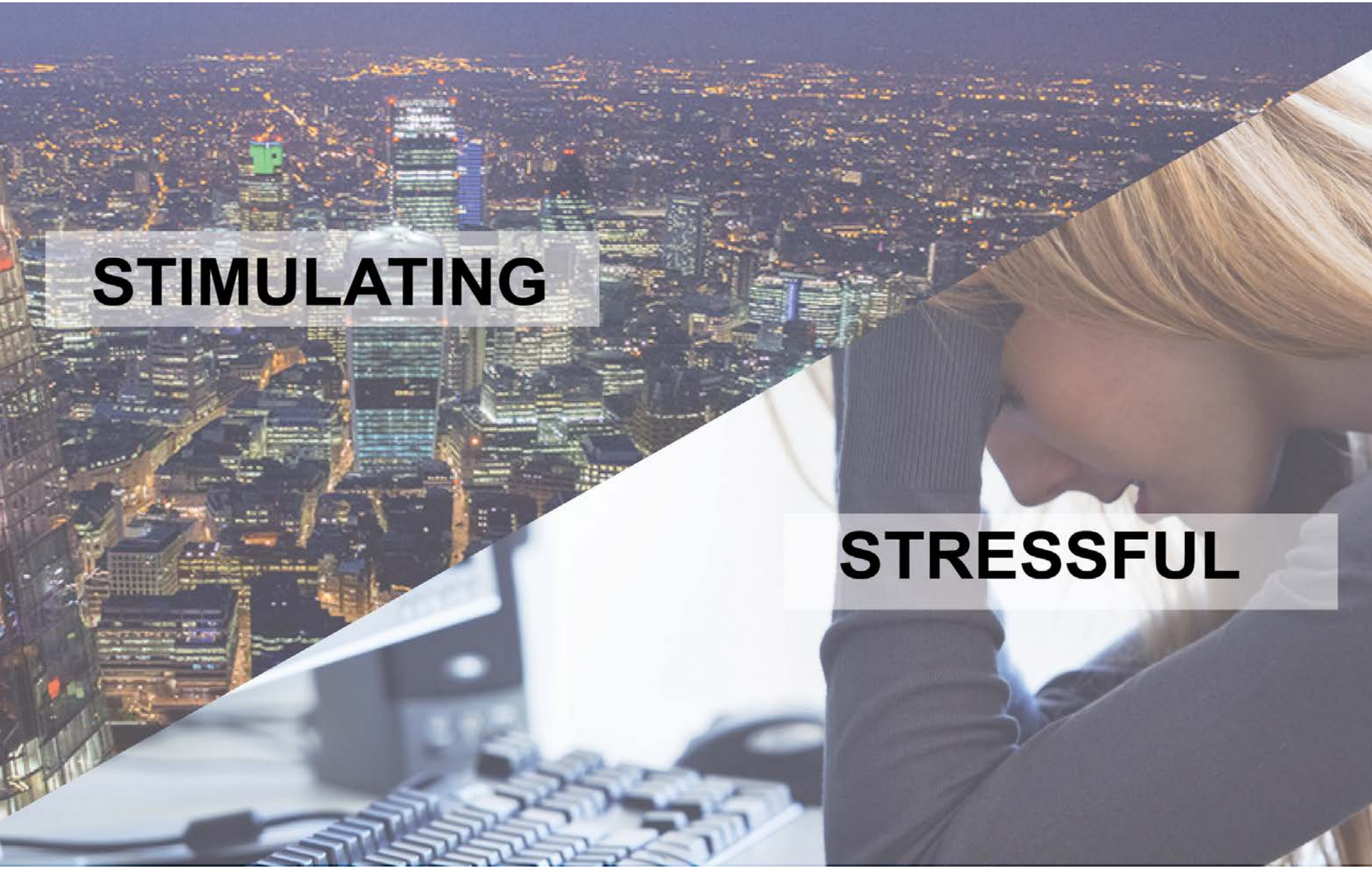
COST OF TO GOVERNMENT/SOCIETY

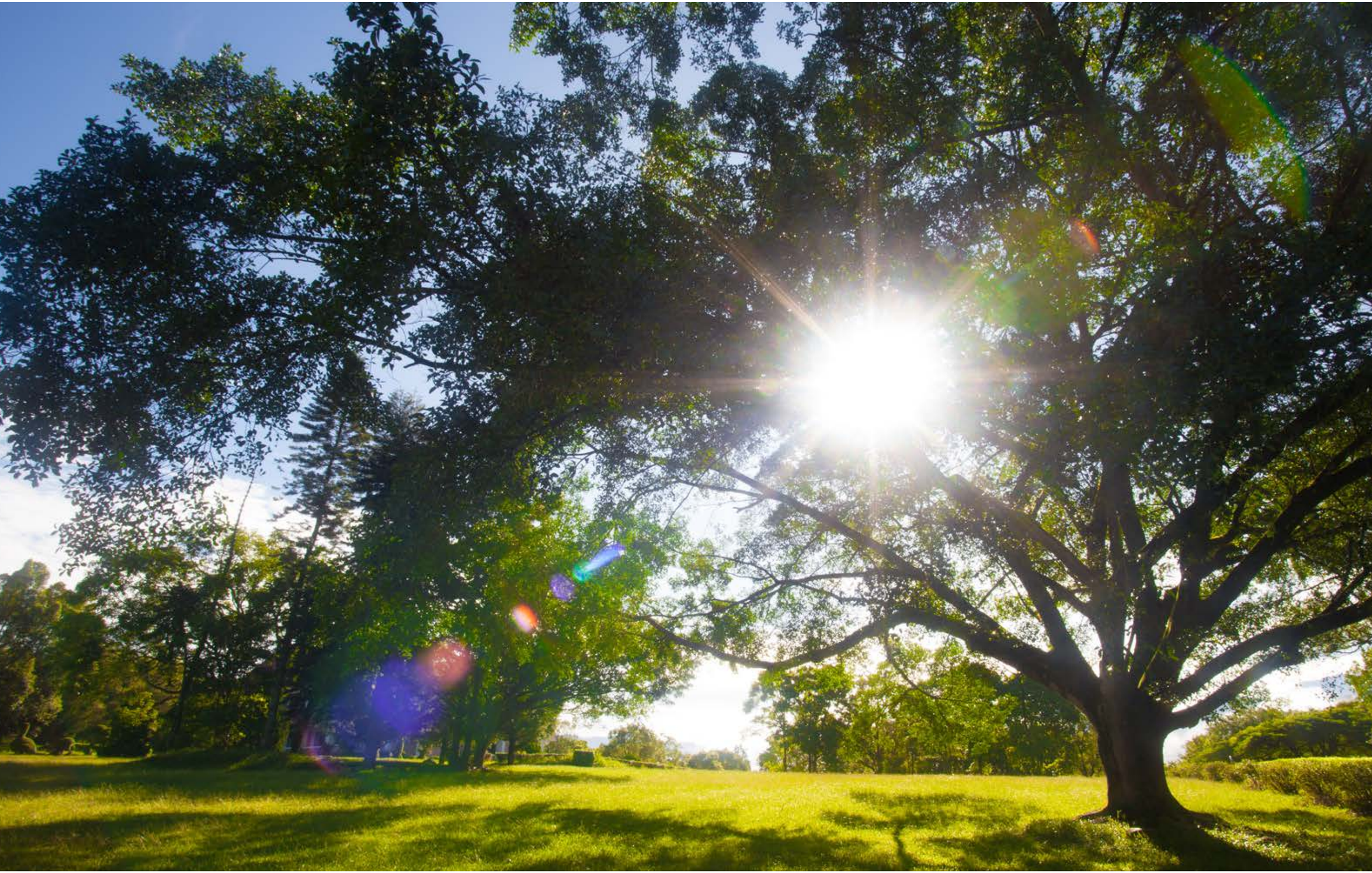
£70-100bn

4.5% GDP

NEGATIVE

STRESS ANXIETY DEPRESSION SCHIZOPHRENIA


STIMULATING
STRESSFUL



WHEN WALKING IN NATURAL ENVIRONMENTS, SUCH AS FORESTS OR PARKS..

+ HEART RATE LOWERS

+ PULSE RATE LOWERS

+ CORTISOL LEVELS DECREASE

+ LOWER SYMPATHETIC NERVE ACTIVITY

+ ACTIVITY IN THE SUB-GENUAL PRE-FRONTAL CORTEX LOWERS

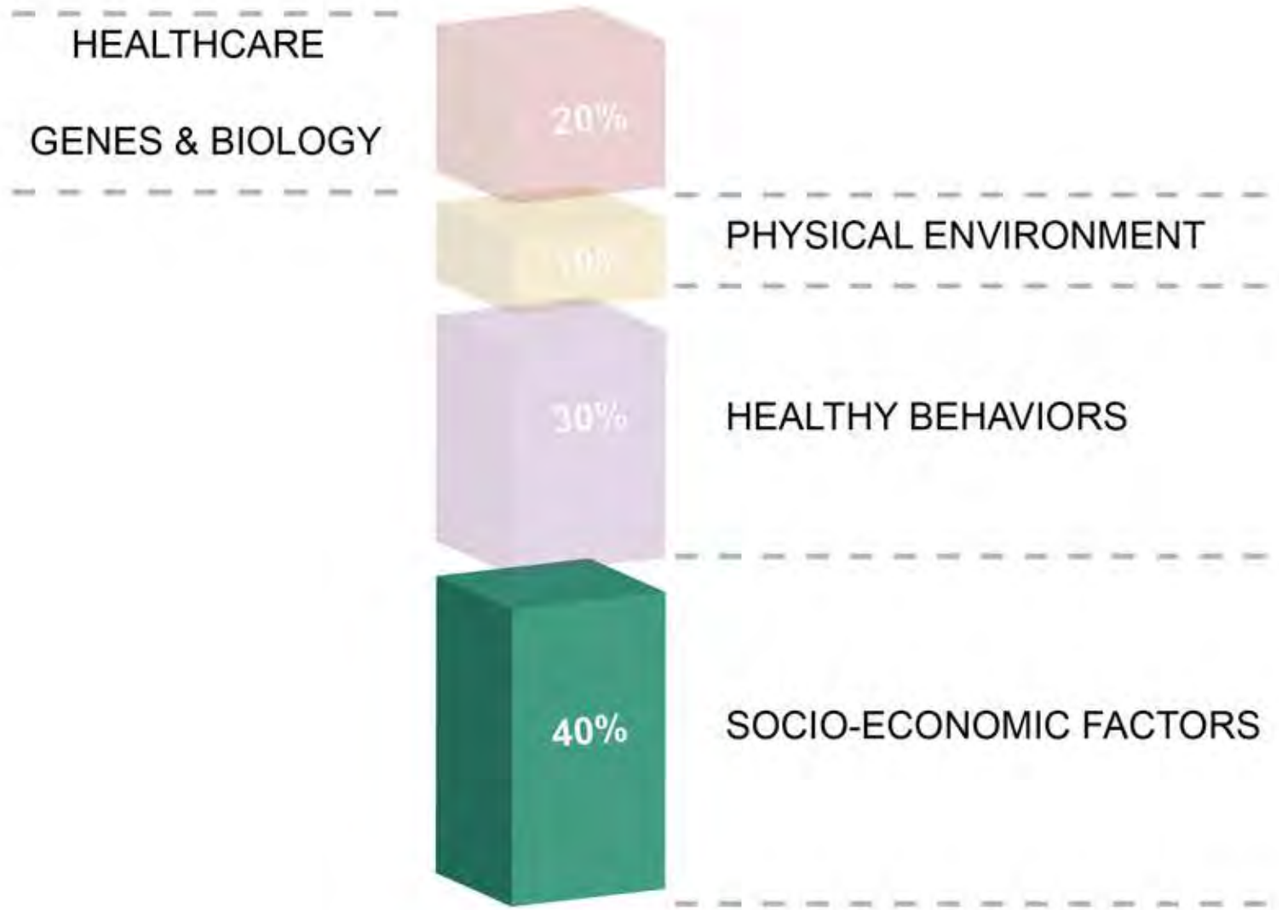
+ WE FEEL CALMER AND MORE RELAXED

+ IMMUNE SYSTEM FUNCTIONING IS BOOSTED: THERE IS AN INCREASE IN BODY'S NATURAL KILLER CELLS

+ OUR ATTENTION IS RESTORED

The effect extends to healthcare - in hospitals, views to natural environments lead to lower medication doses, decreased hospital stays, happier and healthier patients and staff and lower staff turnover

WHAT MAKES US HEALTHY?



BIOPHILIA

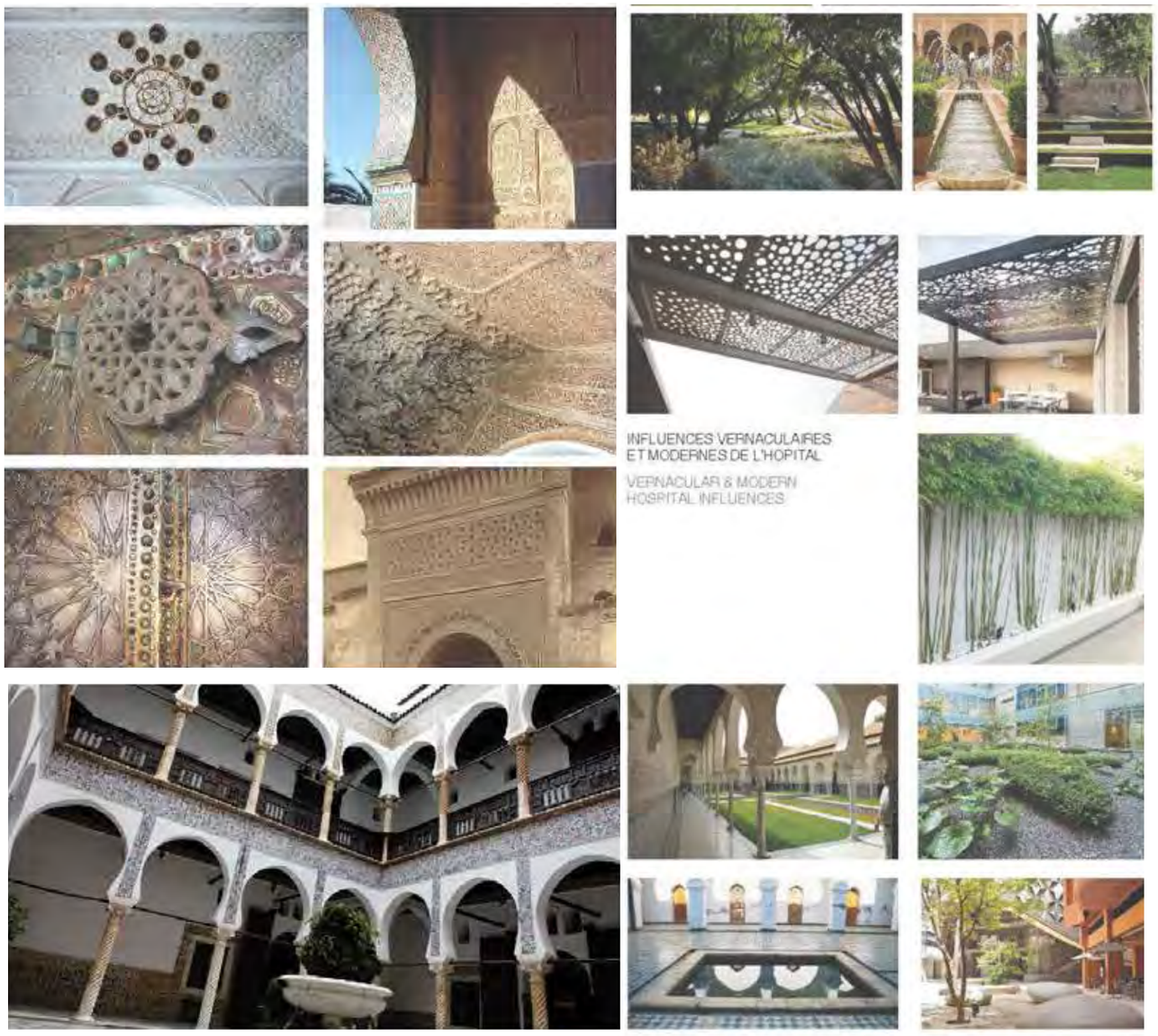
AS MUCH AS POSSIBLE – THERE'S NO UPPER LIMIT

But as a planning principle: access to green space should be within a 5-10 minute walk

DEVELOPING AREAS IN TLEMCEN, ALGERIA

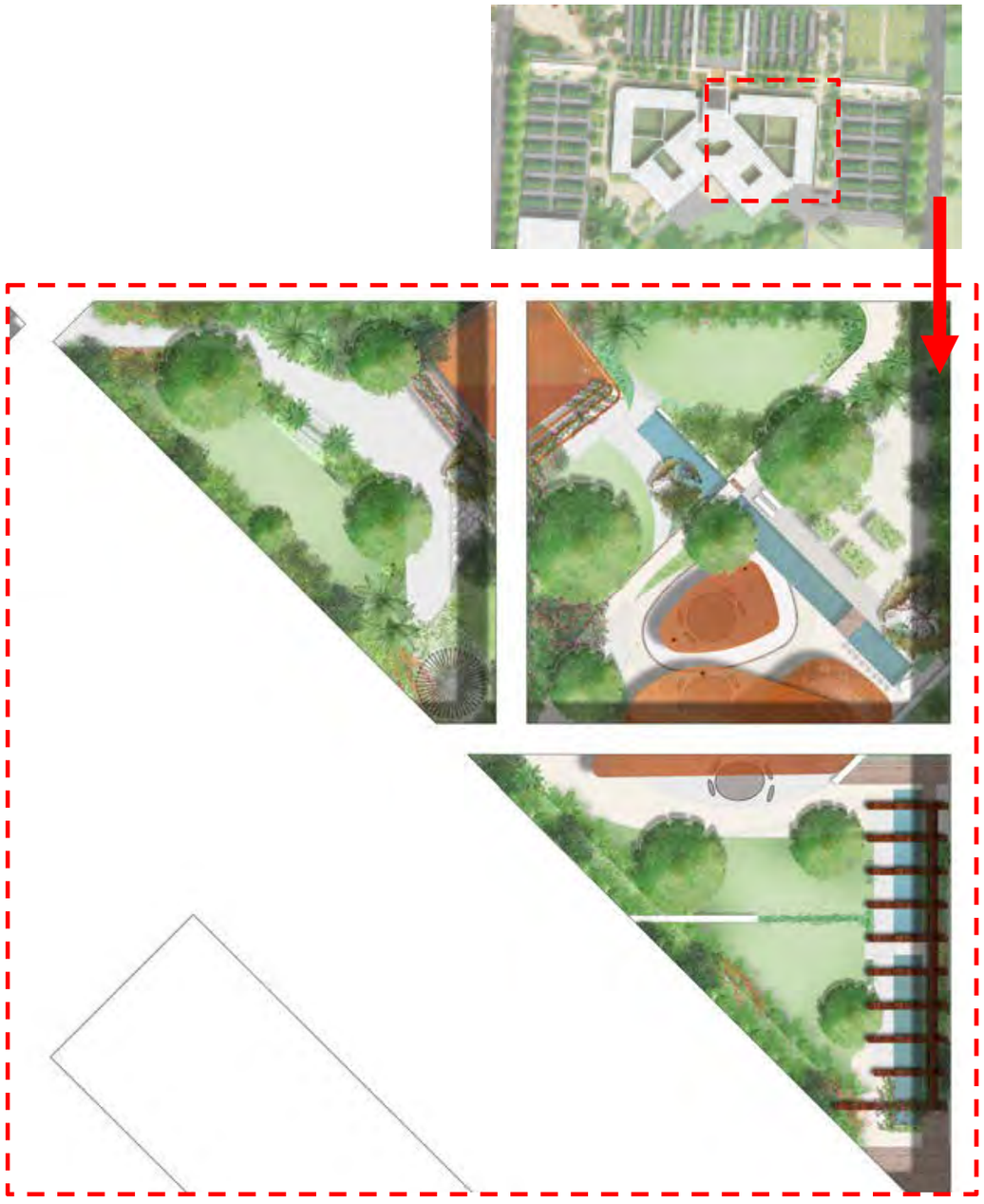
TLEMCEN CENTRE HOSPITALIER UNIVERSITAIRE, ALGERIE

INFORMED BY REGIONAL ARCHITECTURE



INFLUENCES VERNACULAIRES
ET MODERNES DE L'HOPITAL

VERNACULAR & MODERN
HOSPITAL INFLUENCES



WESTERN VIEW

VIEWS FROM ALL WARDS TO PARKLAND

A 30METRE BUFFER OF FORMAL PLANTERS TO THE CARPARK

LINK TO THE UNIVERSITY PLAZA AND THE CHILDREN'S ENTRANCE

VIEW TO THE ORCHARD AND PARKLAND BEYOND