

The Right Tree in The Right Place

For the right reason

Paul Nolan
Director
The Mersey Forest



More from Trees



Health

Investment

Low carbon

Biodiversity

What's it worth?

So what!

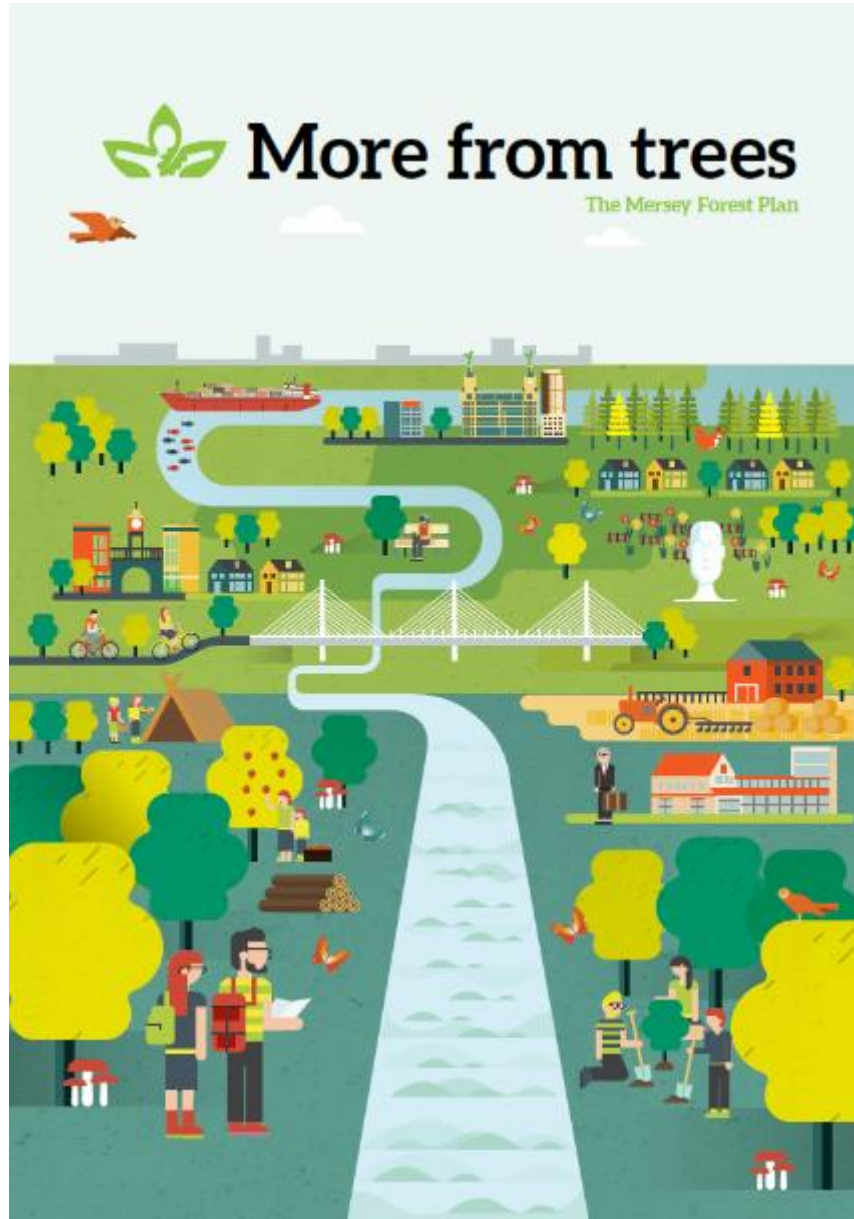
The Mersey Forest





More from trees

The Mersey Forest Plan



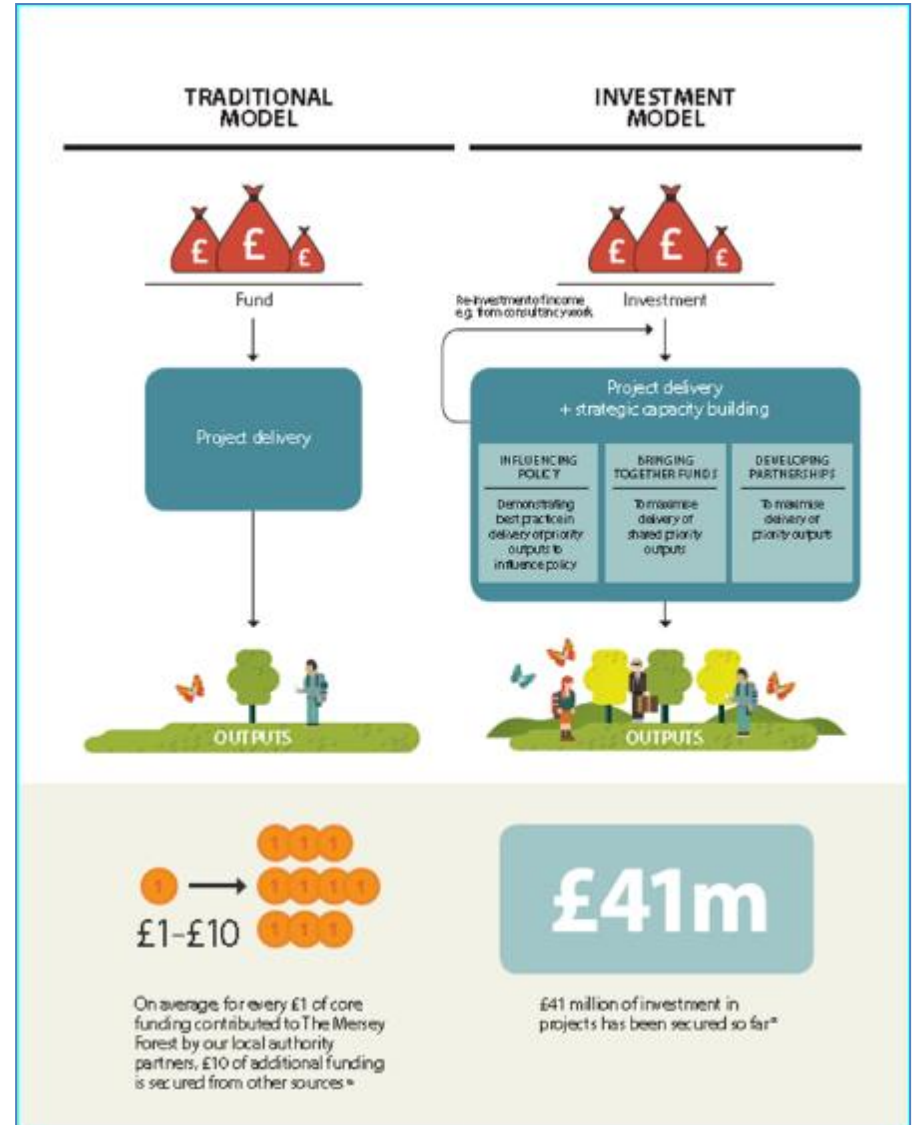
www.merseyforest.org.uk/plan

Our vision is to get 'more from trees'
to help make Merseyside and North
Cheshire one of the best places in the
country to live.



What we do and how


- Land
- Communities
- £
- Communicate
- Research
- Influence policy



Achievements to date

9 million
trees planted

Woodland
cover
doubled,
from 4% to 8%



We've achieved three times
more tree planting than
the England average




For every **£1**
invested, **£2.60** of
GVA and **£10.20** of
total economic
benefits



More from trees and woodland to help keep communities healthy



- 
- “More people more active more often”
 - Passive benefits of trees and woodlands
 - Trees as part of a “Natural Health Service”

Targeted products

- 6 “Products” based in the natural environment
- Specific “dose” for each product
- Target specific conditions e.g.
 - Weight management
 - Adults
 - Children
 - Mild/moderate mental health issues
 - Post operative/treatment recuperation
- Developing robust evidence to enable future commissioning



Natural Health
Service

Mindful contact with nature



Mindfulness
in forests



A new product

- 8 week course developed with clinical psychologists
- Research programme with Liverpool Universities
- Enabling self management and developing coping skills
- Dealing with chronic stress

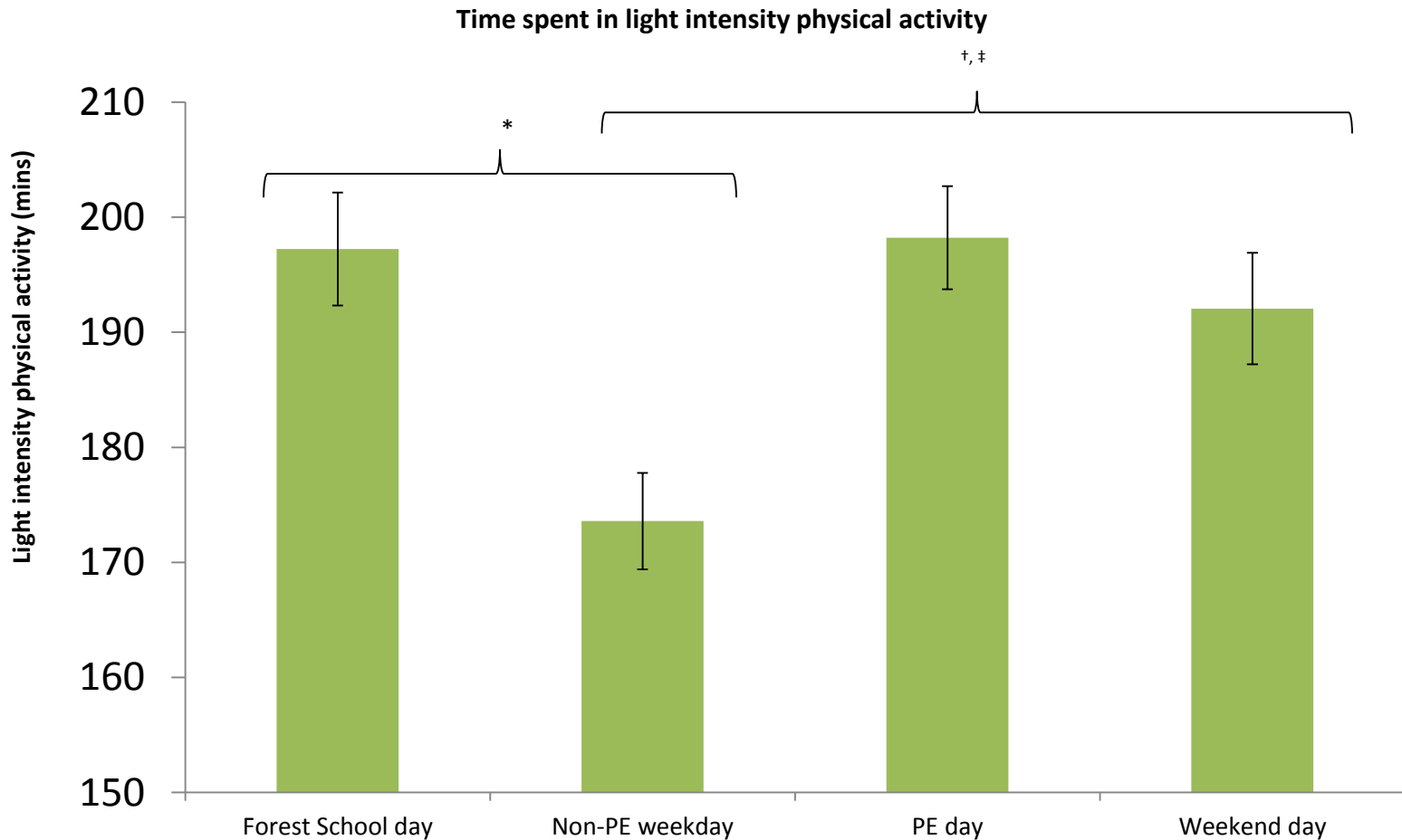
Some results already!



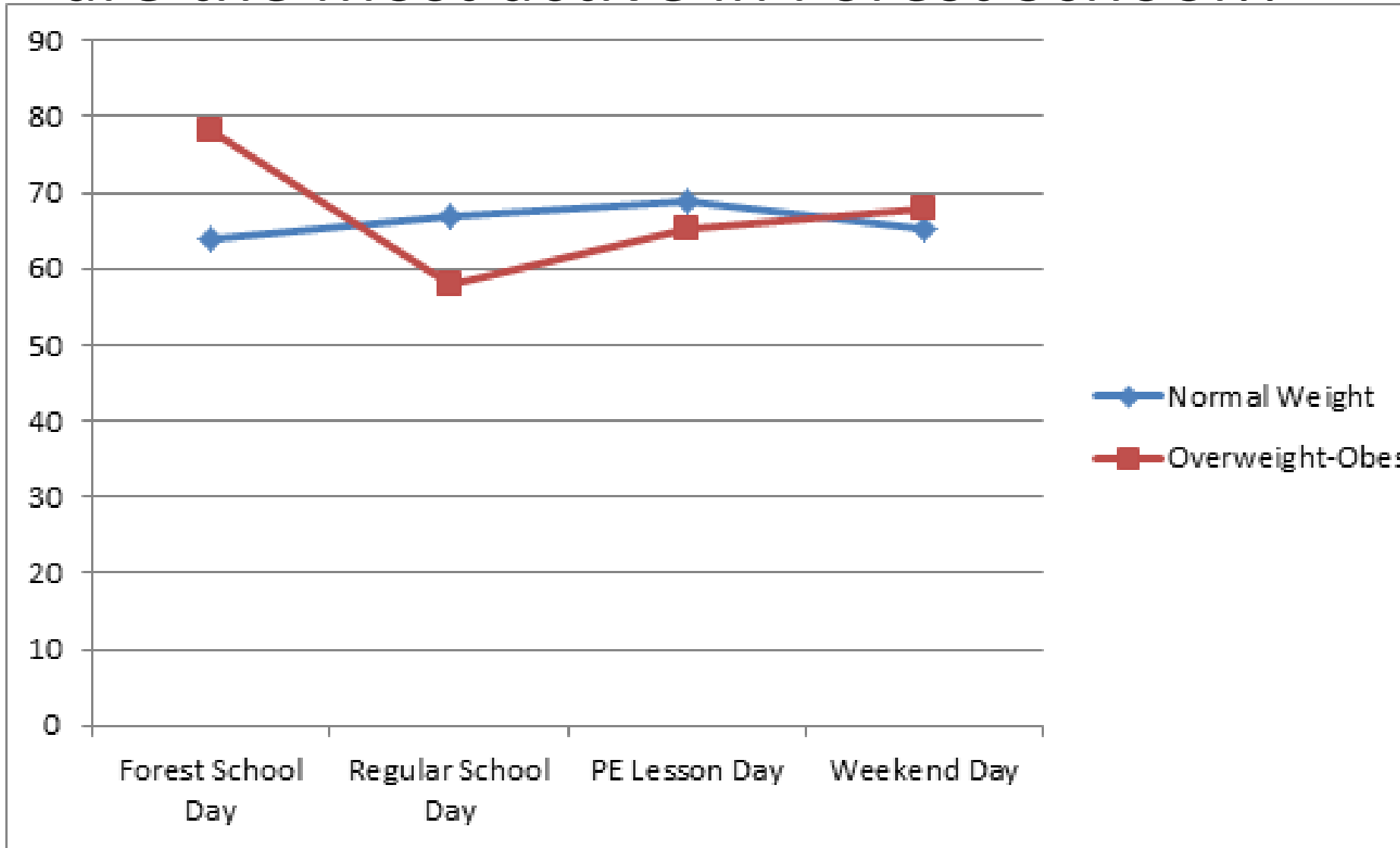
Forest School one of the 6 products



Children are as active on Forest School days as PE days



Children who are overweight/obese are the most active in Forest School!!



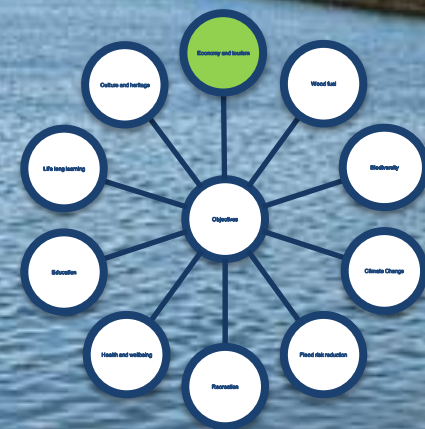
Natural Health Service

Next steps

- 3 year Lottery funded programme
 - 2000 people
 - 2PhDs
- 1 year SIB funding
 - Commissioning of services
 - Long term Sustainability
- Develop Centre of Excellence



“Happy Places” and Investment





Green Infrastructure - Added Value

Mersey Forest



Final Report

November 2014

“In the case study given, even modest benefits such as a 5-6 percent increase in rental value and a shorter void period for the completed properties (around six months) can move development from a loss to profit.”

“Investment experts suggest that the yield can reduce by 0.1-0.2 percent with green infrastructure investment, and consequently, that will have a large impact on value.”

Influencing investment decisions

- **GI increasing land value** - encourages investment generally and allows sites to more easily be brought forward for development.
- **Reducing the time to development /reducing voids**– bringing forward the date at which income is received.

$$IRR = r_1 + \frac{(NPV_1) \times (r_2 - r_1)}{(NPV_1 - NPV_2)}$$

$$NPV = \sum_{t=0}^n \frac{CF_t}{(1+r)^t}$$

Wirral Waters





Aspiration



provide a high quality service.



- 20,000 new jobs
- 14,000 new homes
- Green Infrastructure

But there is a real need for regeneration

- High Unemployment
- Poverty
- Historic lack of investment
- Declining quality of environment
- Ageing population



GREEN STREETS

BY HELPING PEOPLE ACT TOGETHER TO GREEN THEIR OWN STREET, THE PROGRAMME WORKS TO TACKLE A RANGE OF SOCIAL, HEALTH AND ECONOMIC ISSUES.

CHOOSE
Your
SHADE

Feedback

IMPACT	FREQ
WOULD MAKE AREA LOOK BETTER	94.1%
IMPROVE IMAGE OF BIDSTON	85.3%
CREATE WORK MAINTAINING TREES	82.4%
CREATE WORK PLANTING TREES	79.4%
WOULD INCREASE PROPERTY VALUES	44.1%
ENCOURAGE PEOPLE TO SPEND TIME IN AREA	32.4%
WOULD INCREASE FOOTFALL	26.5%
WOULD INCREASE SALES	17.6%
WOULD BLANK OUT MOTORWAY	14.7%



TREES WORK

A Portrait of Birkenhead Business by Len Grant

Williamson Art Gallery and Museum, CH43 4UE 24 October – 23 November 2014



Trees Work animation general.mp4

Next Steps at Wirral Waters

- GI Fund to support more tree planting as part of Business Rate fund
- ESIF bid
- Sustainable Urban Development bid
- Trees now part of all of the promotional/bid material from the developer



Climate Change - Adaptation and Mitigation



7KW
THE COOLING
PROVIDED BY
INDIVIDUAL TREES
- EQUIVALENT
TO TWO AIR
CONDITIONING
UNITS¹¹³

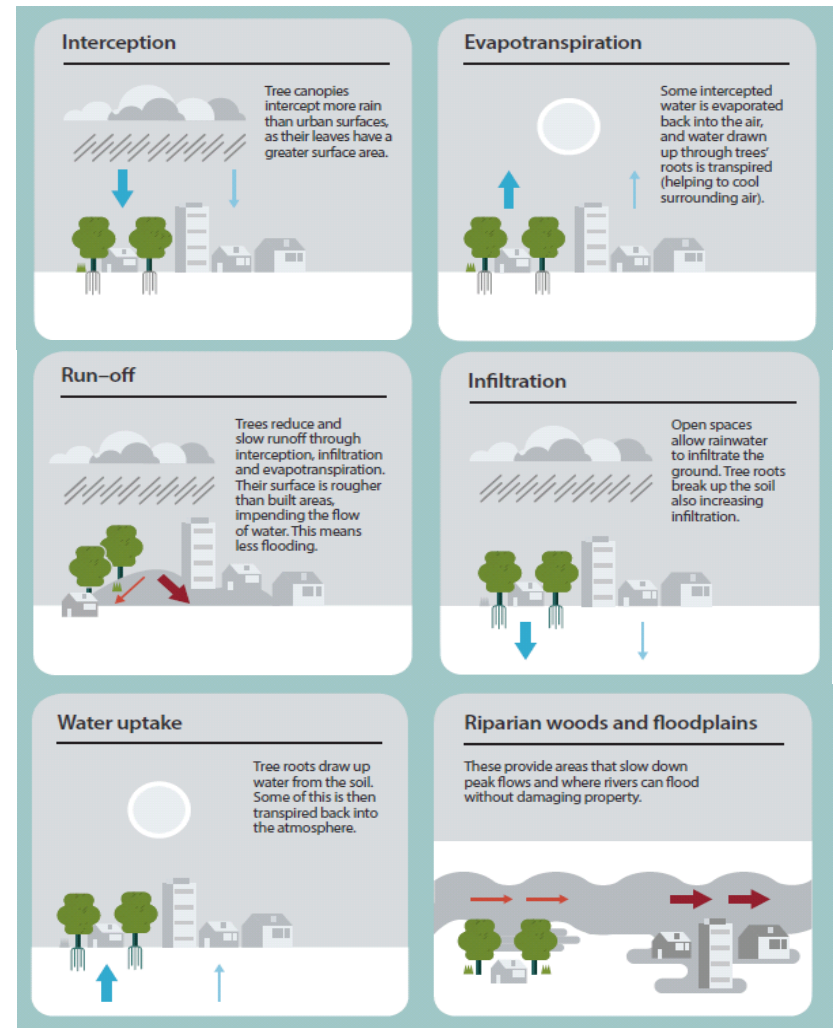
Climate Change Role of Trees & Woodlands

- **Mitigation**

- Carbon sequestration & storage
- Fossil fuel & material substitution
- Reducing car travel

- **Adaptation**

- Temperature extremes
- Flood risk & water management
- Visitor resource
- Species movement

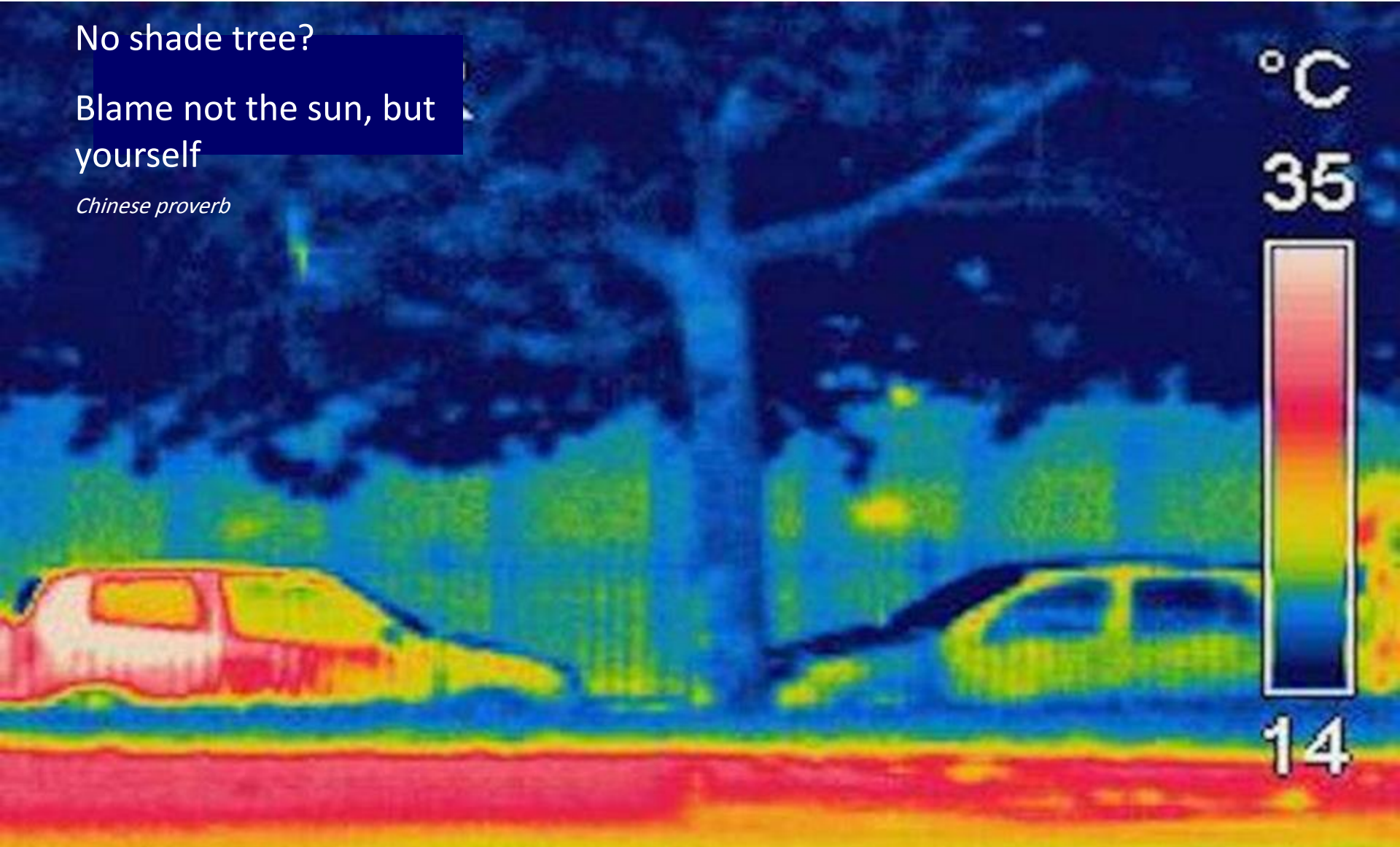


Trees to manage temperature

No shade tree?

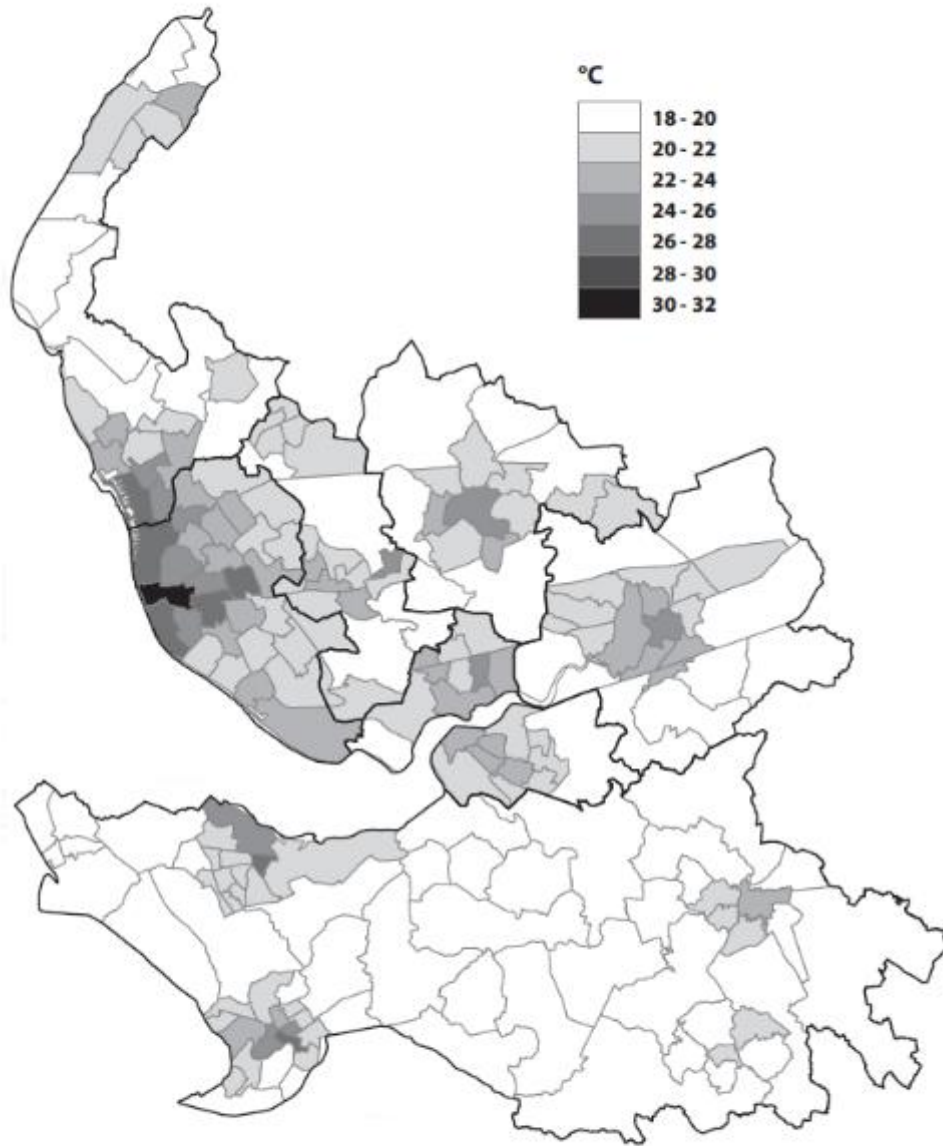
Blame not the sun, but
yourself

Chinese proverb

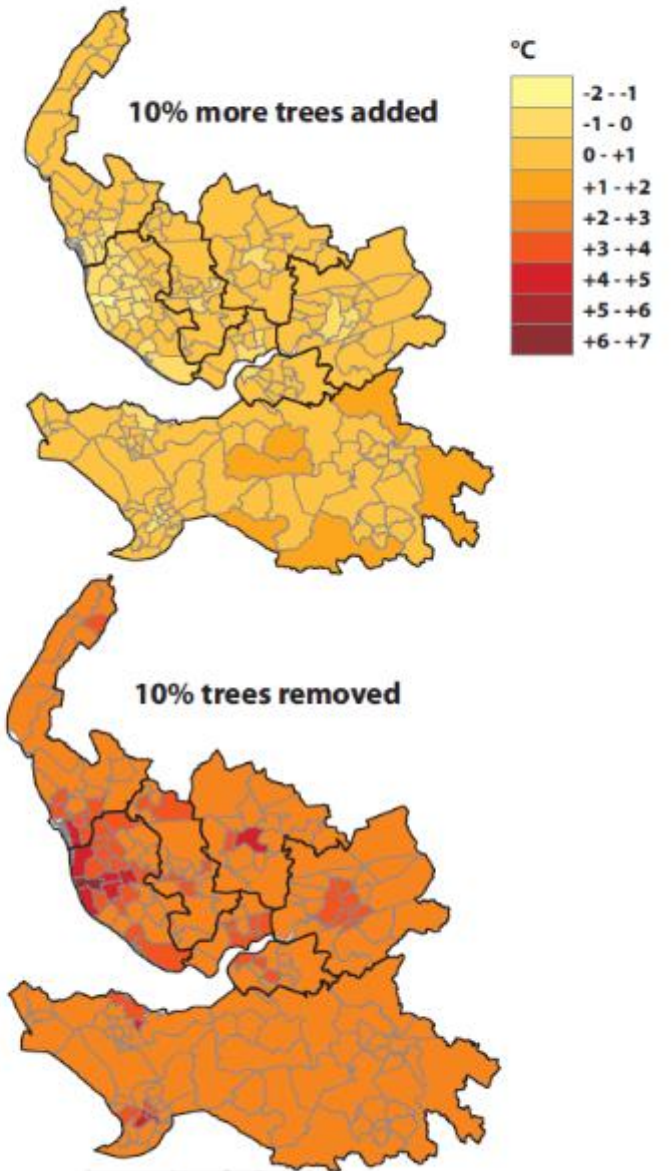


Maximum surface temperatures on a hot summer's day

1961-1990



Change in temperatures by 2041-2060 if:



Mapped at the ward level, the 50% probability level and the 2050s High emissions scenario¹²⁶

Urban Catchment Forestry:

The strategic use of urban trees & woodlands to reduce flooding, improve water quality, & bring wider benefits

www.merseyforest.org.uk/our-work/climate-change/urban-catchment-forestry



Next Steps for Climate Change work in Mersey Forest

- Life+ Project - **Natural Course** – 3 year project
- H2020 – Second stage bid
- ESIF Programme bid with FC and Environment Agency Support



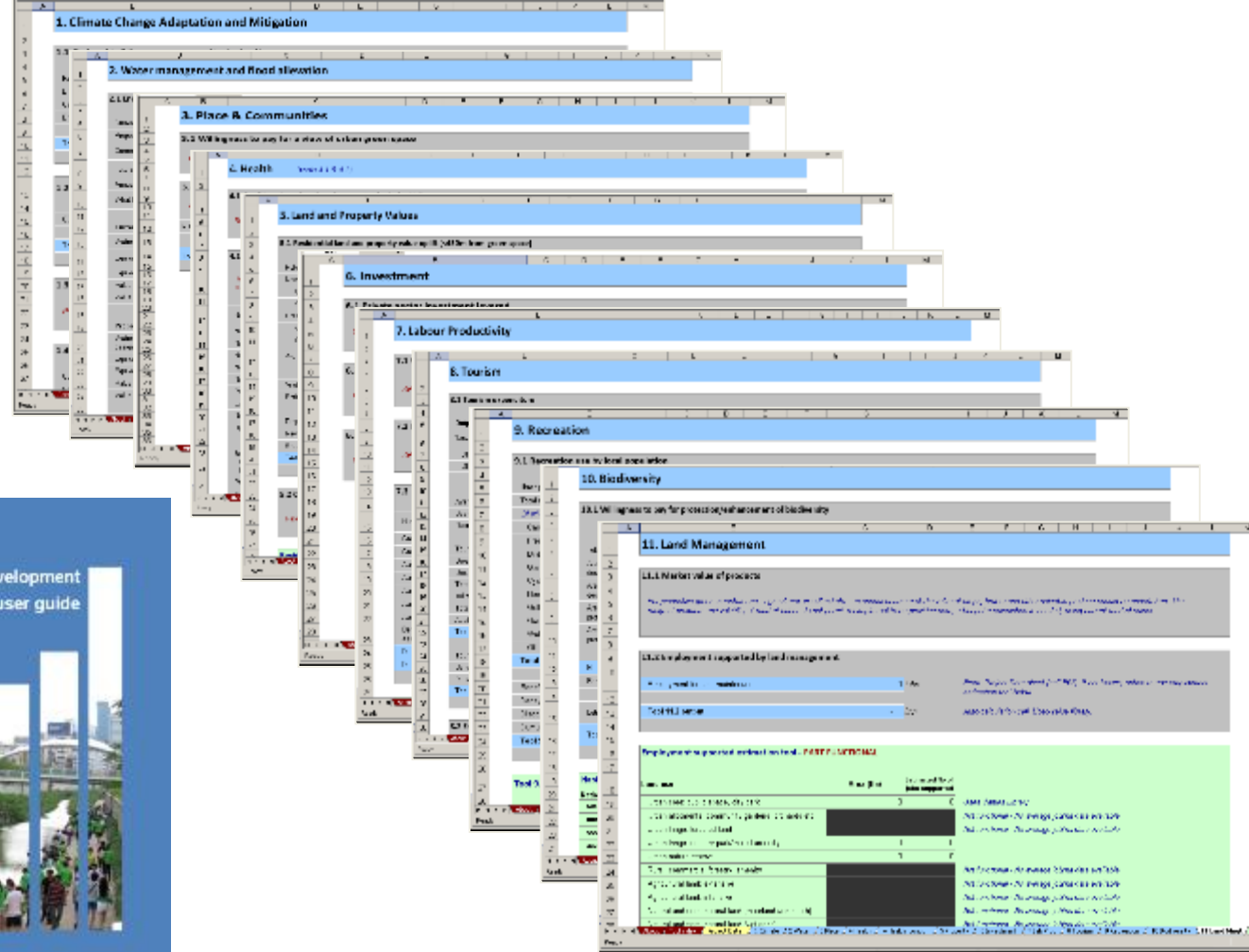
“An area rich in biodiversity is likely to more resilient and provide us with options for management in the future as we face a wide range of challenges; climate, economic, demographic and ecological.”



What's it worth?



www.ginw.co.uk



User Guide

+

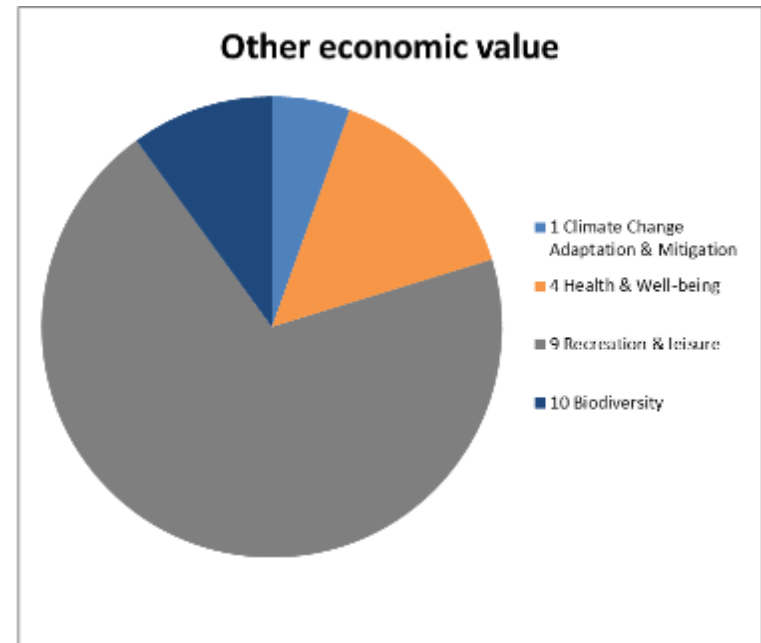
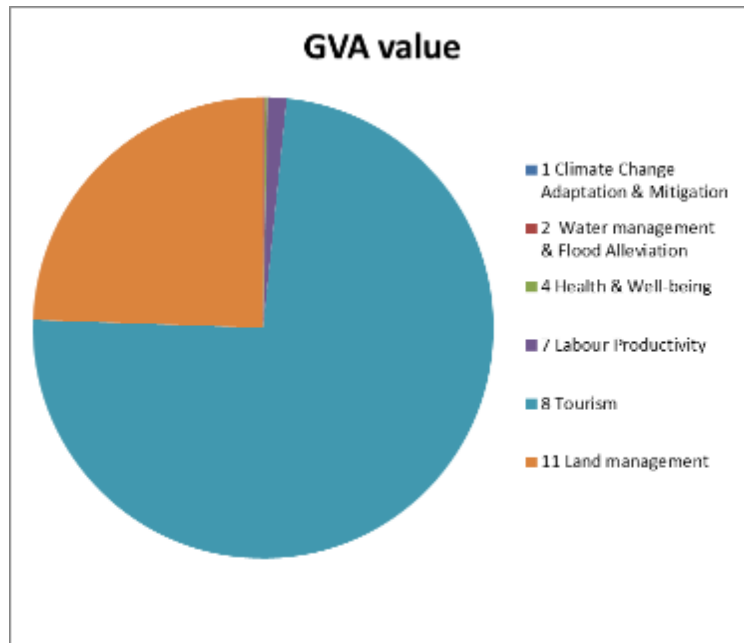
Spreadsheet-based
Calculator

GI - Val Toolkit

BENEFITS	BENEFIT MONETISATION		
	GVA value	Land and property value	Other economic value
1 Climate Change Adaptation & Mitigation	£0	n.a.	£16.5k
2 Water management & Flood Alleviation	£23	n.a.	n.a.
3 Place & communities	n.a.	n.a.	n.a.
4 Health & Well-being	£725	n.a.	£4.5m
5 Land & Property Values	n.a.	£6.9m	n.a.
6 Investment	n.a.	n.a.	n.a.
7 Labour Productivity	£397k	n.a.	n.a.
8 Tourism	£0	n.a.	n.a.
9 Recreation & leisure	n.a.	n.a.	£184k
10 Biodiversity	n.a.	n.a.	£0
11 Land management	£0	n.a.	n.a.
TOTAL ECONOMIC VALUE OF BENEFITS	£398k	£6.9m	£4.6m

Run the numbers for Mersey Forest

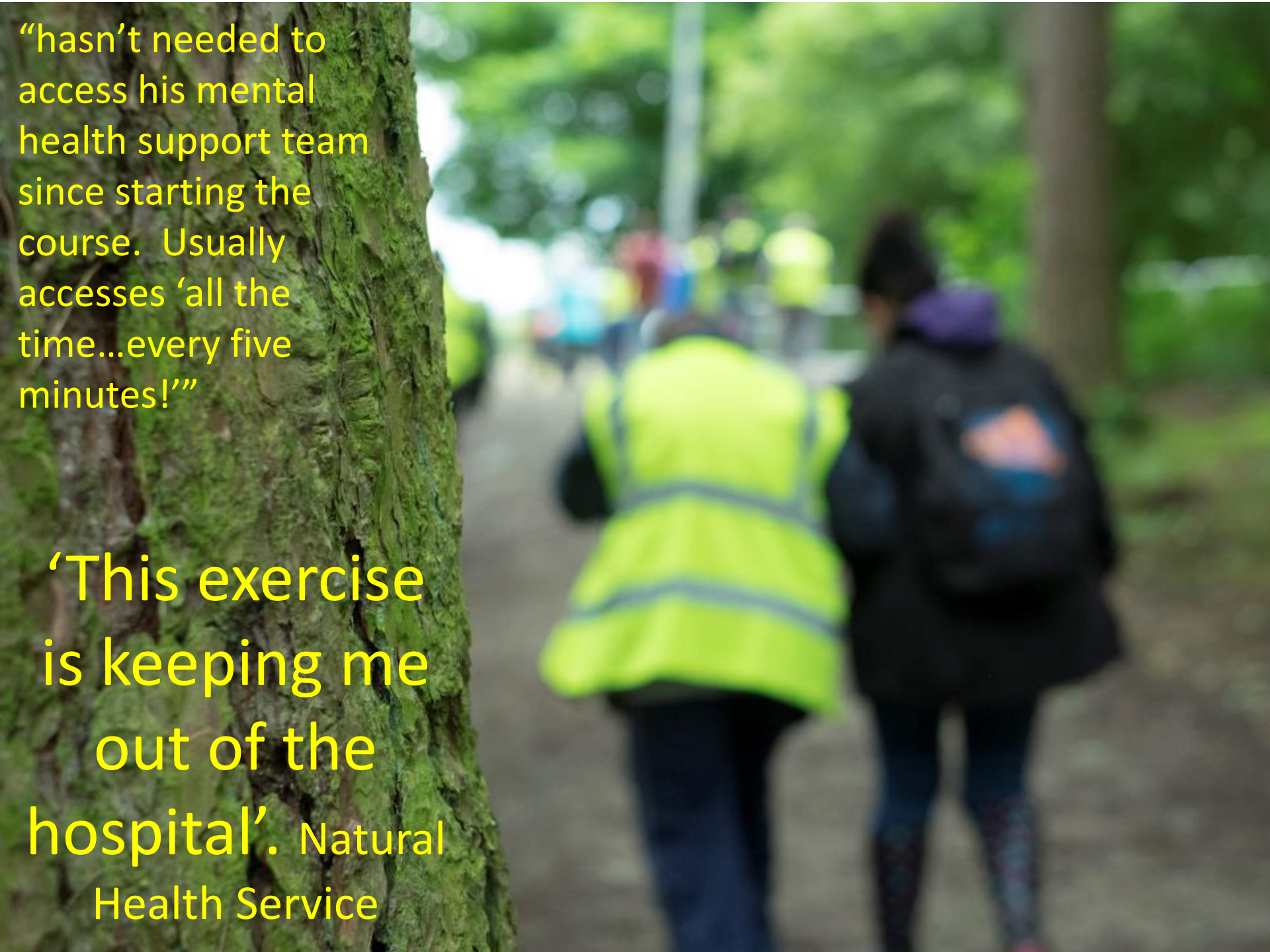
- £80M investment to date in Mersey Forest
 - **£1.3bn** net present value for GVA
 - **£1.5bn** net present value for wider economic benefits



“At night time the street lights shone down upon the trees revealing the most spectacular Autumn colours which took my breath away. I cannot explain the joy it gave me”



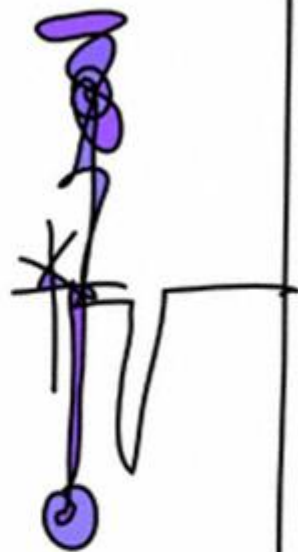
Resident Green Streets Project



“hasn’t needed to access his mental health support team since starting the course. Usually accesses ‘all the time...every five minutes!’”

‘This exercise is keeping me out of the hospital’. Natural Health Service

**NOTHING
HAPPENS
UNTIL
SOMEBODY
FEELS
SOMETHING.**



Thank You

A photograph of a forest path covered in fallen leaves and acorns, with trees in the background. The path is made of cobblestones and is covered with a thick layer of brown and yellow leaves. Several acorns are scattered across the path, some in sharp focus in the foreground. The background shows a dense forest of green trees under a bright sky.

Paul Nolan
Director

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paulnolan@merseyforest.org.uk

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