



# Presentation to GUD Board

Professor Nicky Morrison

Western Sydney University

Urban Living Futures and Society Champion

18<sup>th</sup> December 2020

# Urban Living Futures and Society

- How to foster sustainable, equitable, resilient communities
- Responding to Western Sydney's hard pressing urban challenges
- Academic leadership - Penrith Sustainable Innovation Community
- Supporting WSU Strategic Plans & Western Growth Strategy
- Collaborating with international partners

# WSU Western Growth Strategy

Repurpose campus network

- Peri-urban versus CBD campuses

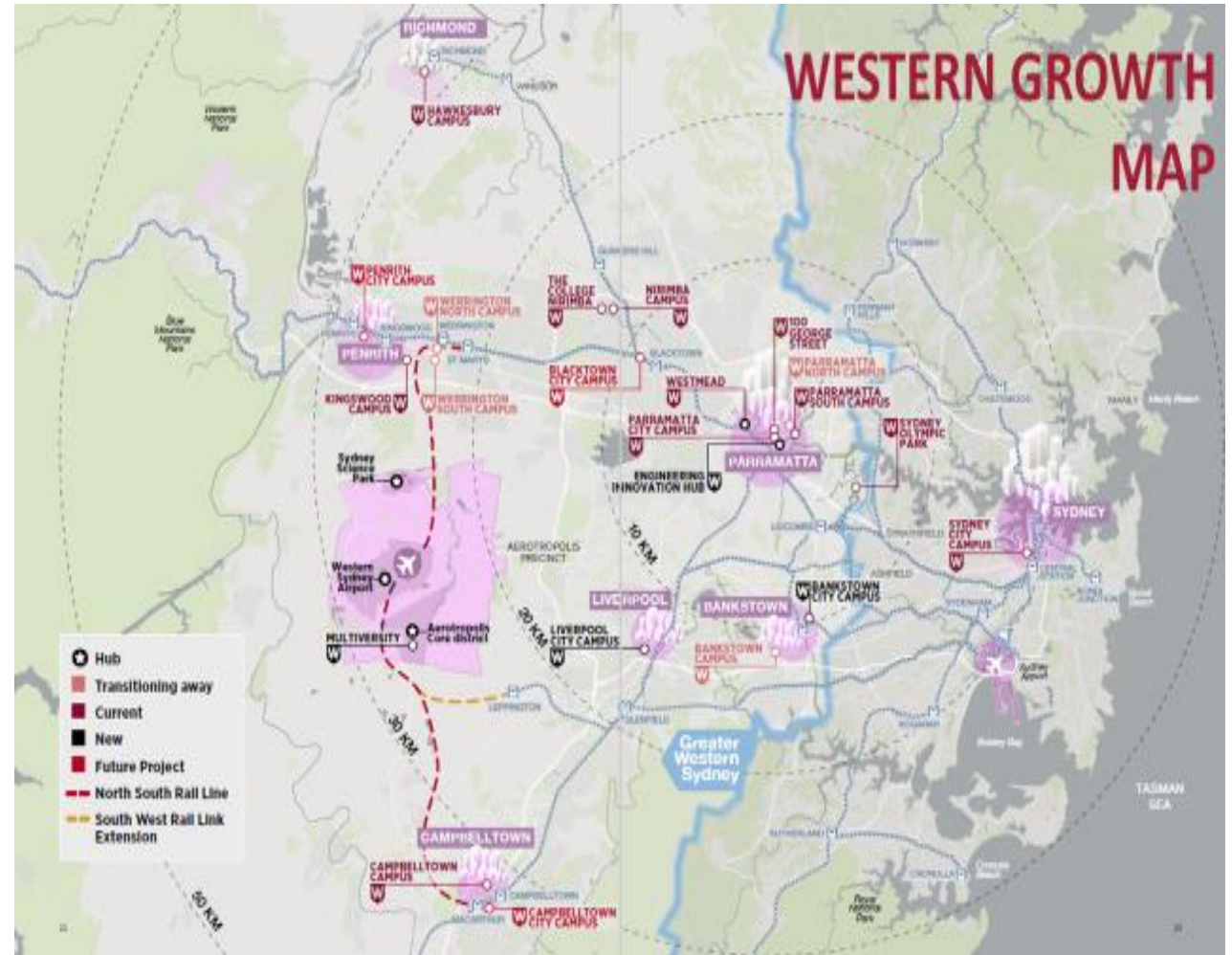
Catalyst:

- Urban regeneration
- Education & Health Precincts
- Government Stimulus package

Risks:

External – policy/market

Internal – space utilization

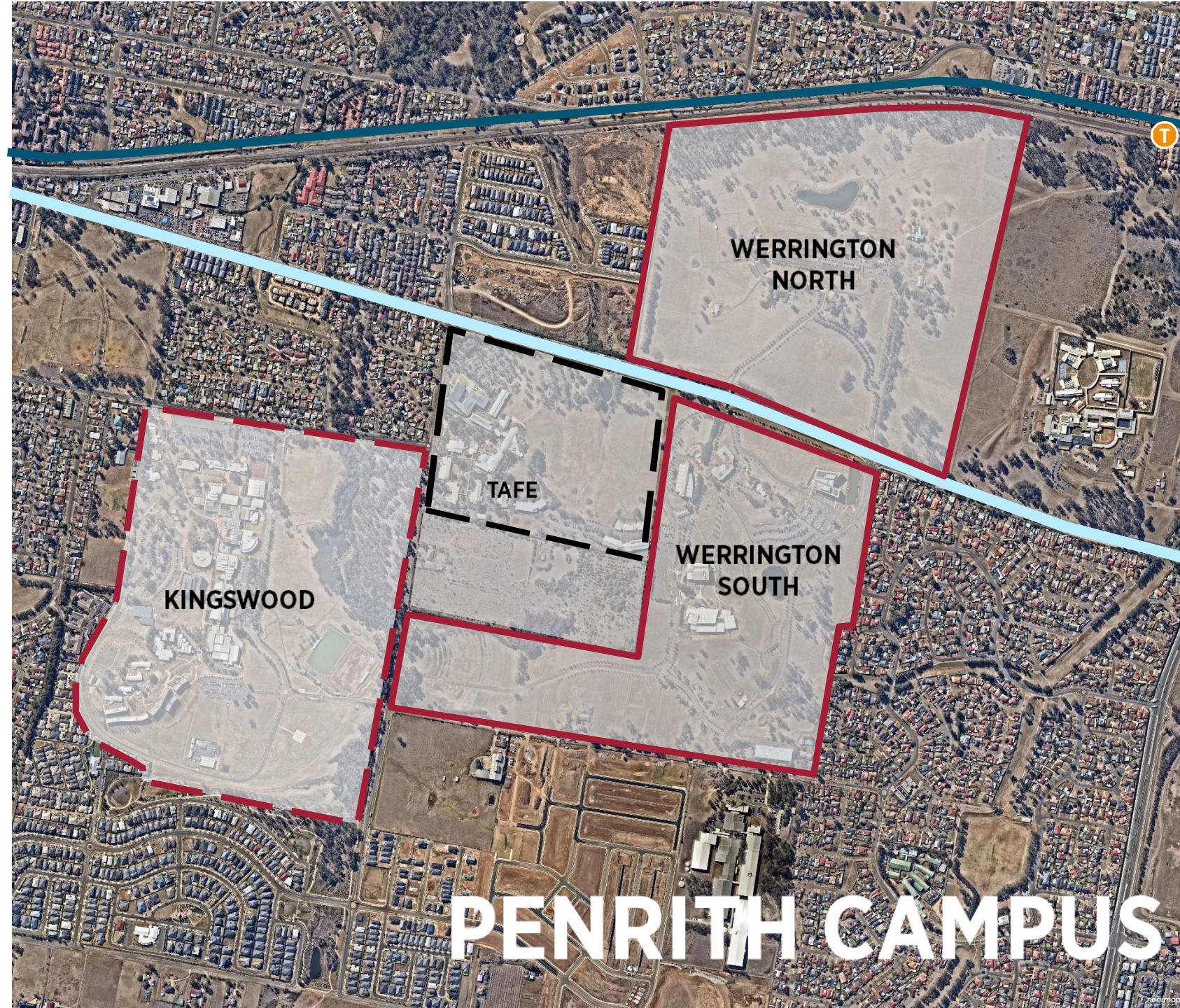


# Leveraging connectivity





Site size:  
163ha



# PENRITH CAMPUS

# PENRITH CAMPUS

WESTERN SYDNEY  
UNIVERSITY



**7,000+**  
STUDENTS

**900**  
STAFF

**1,076**  
CLINICAL PLACEMENTS

ARTS  
COMPUTING  
CONSTRUCTION  
MANAGEMENT  
CREATIVE INDUSTRIES  
CRIMINOLOGY & POLICING  
DATA SCIENCE  
ENGINEERING  
HEALTH & SPORTS SCIENCE  
PSYCHOLOGY  
SOCIAL SCIENCES  
TEACHING & EDUCATION  
TOURISM & URBAN  
PLANNING  
THE ACADEMY  
THE  
COLLEGE

CENTRE FOR  
INFRASTRUCTURE  
ENGINEERING

CENTRE FOR SMART  
MODERN CONSTRUCTION

START UP SYD  
WEST

MARCS INSTITUTE  
CENTRE FOR RESEARCH IN  
MATHEMATICS  
TRANSLATIONAL HEALTH  
SCHOOL OF COMPUTING  
ENGINEERING AND  
MATHEMATICS

OBSERVATORY

LAUNCH PAD  
TECHNOLOGY BUSINESS  
INCUBATOR

**400+**

JOBS  
WERRINGTON PARK  
CORPORATE CENTRE

SOLAR CAR  
WINNER  
AMERICAN SOLAR  
CHALLENGE, 2018

# THIS PENRITH CAMPUS PROJECT WILL DELIVER:

- **EMPLOYMENT OPPORTUNITY:** 5,000 jobs centred around knowledge and innovation
- **INVESTMENT:** in research & education, attractive to new industry
- **CONNECTIONS:** to the Aerotropolis, The Quarter, Penrith & Sydney CBD's and the network of University campuses
- **A NEW URBAN MODEL:** integrating living, working and learning with 7,000 homes, large employment spaces, parks, social programs and facilities. A vibrant night and day culture.
- **A GREEN APPROACH:** a parkland network, pedestrianised and climate responsive design
- **STUDENT GROWTH:** 9,000 to 18,000
- **COMPLIMENTARY CENTRE STRATEGIES:** Penrith & St Marys CBD's and within The Quarter

**AN ANCHOR – WESTERN SYDNEY UNIVERSITY'S LONG TERM COMMITMENT TO PARTNERING WITH INDUSTRY, GOVERNMENT AND COMMUNITY**

# Urban Living Futures Theme Storm June 2020

## Purpose of event

**Penrith Campus transformation offers an opportunity to bring academics' action research related to the SDGs to fruition**

- Co-create the project vision
- Determine key initiatives to pursue
- Turn theory into practice
- Establish collaborative working groups
- Bring in relevant industry partners
- Greater community engagement
- Promote WSU as a sustainability leader

➤ *'Create a legacy that we are proud of' (Auntie Jean South, WSU Alumnus)*

# Penrith Sustainable Innovation Community

## Common themes from on-going engagement exercise

**Smart working hubs** – links to Launch Pad Werrington Corporate Centre

**Heat Mitigation** - smart green infrastructure and urban design strategies

**Carbon neutrality** – green star community

**Circular economy** - water, energy, waste all in-house

**Diverse Housing** – diversify ownership structure, key worker housing

**Social infrastructure** – community hubs connecting to wider Penrith

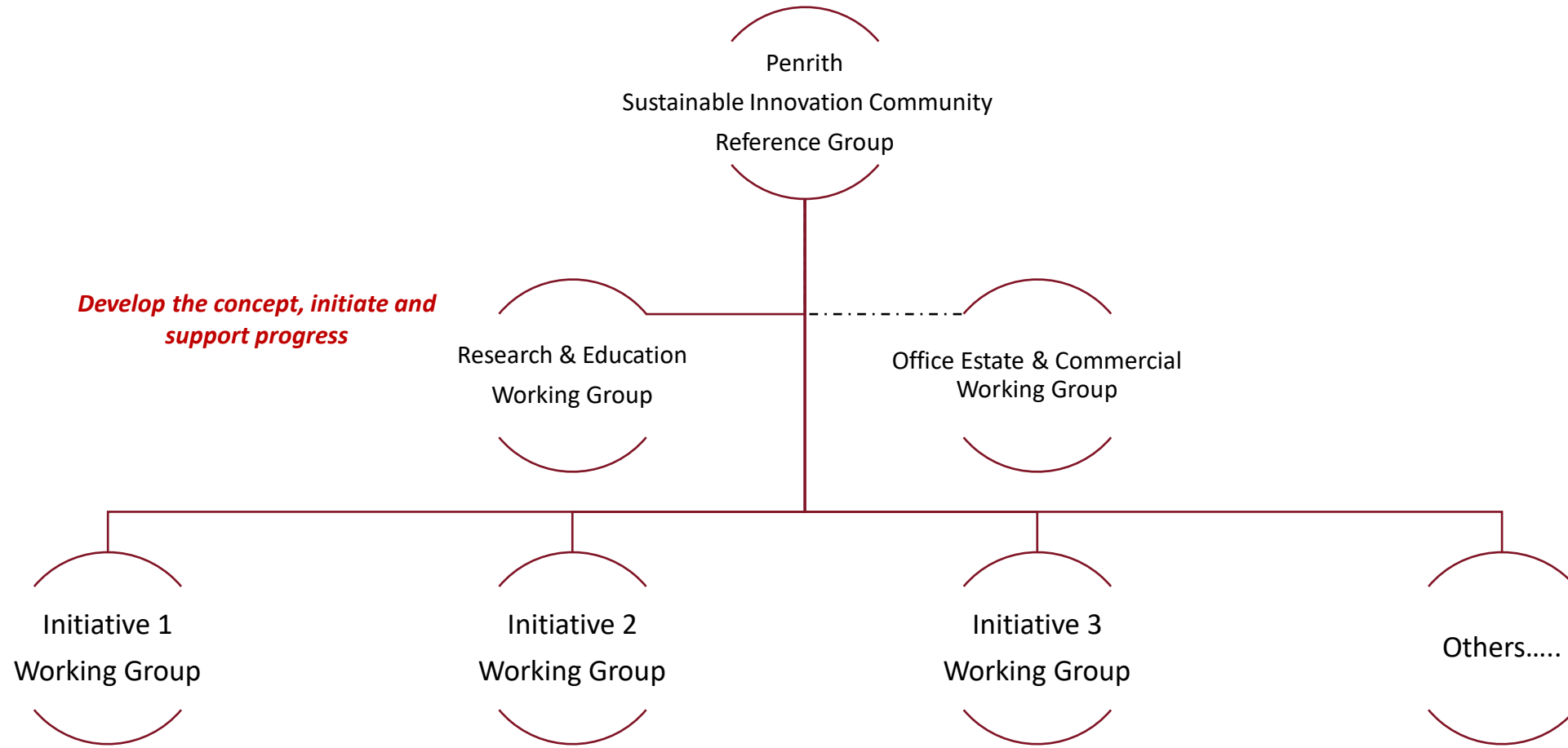
**Collaborative practice** - procure suppliers/partners who buy into vision

➤ **Proof of concept**

➤ **WSU raises the bar on place-making**

# Strong Executive Support

*Oversight & sponsorship from  
Senior Executive Group*



*Working Groups convened with academic lead and focussed on progressing concept through to implementation*

# LEVERAGING WSU CURRENT LIVING LAB PROJECTS...

- **SUSTAINABLE CAMPUS INFRASTRUCTURE AND SERVICES** – Green Star building rating
- **WATER RECYCLING AND REUSE** - Water recycling, best practice peri-urban landscape management
- **STUDENT- LED HORTICULTURAL GARDEN** – Community garden, sustainable agriculture and food security
- **ENERGY MONITORING AND MODELLING** - Energy efficiency initiatives in Engineering
- **CO2 ENHANCED CONCRETE** - Recycled concrete product
- **PHOTOVOLTAIC** - Energy efficiency market opportunities for renewables,
- **RESILIENCE PLANNING** - Infrastructure and communities of practice
- **URBAN BUILT FORM** – Sustainability throughout construction, urban planning and design
- **YOUNG AND RESILIENT** - Intergener8 Living Lab innovative, evidence-based solutions to enhance young people's resilience, wellbeing, entrepreneurship and economic participation

# Connecting with external partners

- Penrith Health and Education Precinct partners
- Department of Planning – and State development agency LandCom
- Urban Development Institute of Australia
- Green Building Council Australia
- NSW Circular
- Strategic industry partners
- Potential donors (working with Office of Advancement)

# Connecting with international partners

## Global Urban Development

- Strategic alignment
- Strategic advice

## Sustainable Innovation Zones & Communities

- Porto Alegre, Brazil
- Santo Angelo, Brazil
- Panama City, Panama
- London, UK
- Brooklyn, NYC, US

