MELBOURNE 4.0 SUMMARY REPORT

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# THE NEXT INDUSTRIAL REVOLUTION



1<sup>ST</sup> INDUSTRIAL REVOLUTION

1780s

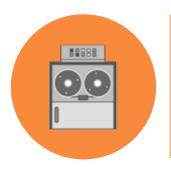
Steam, water, mechanical production



2<sup>ND</sup> INDUSTRIAL REVOLUTION

1870s

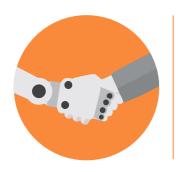
Electricity, division of labour, mass production



3<sup>RD</sup> INDUSTRIAL REVOLUTION

1960s

Electronics, IT, automated production



4<sup>TH</sup> INDUSTRIAL REVOLUTION

Today

Cyber-physical systems

"We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before. We do not yet know just how it will unfold, but one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society." — **Prof. Klaus Schwab** 

# FROM THE CHAIR AND CEO



### Melbourne is one of the best places in the world to live, work and do business.

One of the reasons we're in this enviable position is that a group of passionate Melburnians created the Committee for Melbourne 30 years ago with one purpose: to shape a better future for our city.

Today, our appeal as a leading international city is being challenged – this time by the profound changes known as the Fourth Industrial Revolution. The Revolution marks the next period in humanity's progress, which will be characterised by a fusion of our physical, digital and biological worlds.

People, organisations and sectors will need to adapt to survive, and governments will need to quickly regulate for the technologies behind these changes.

This next period in our evolution will bring enormous opportunity – but it will also disrupt employment markets, our economy, and society at large. The unprecedented changes will be compounded by fragility in geopolitics, in our natural environment, and in the global business landscape.

Against this background of change which will shape our economy, the Committee established the Melbourne 4.0 Taskforce. Harnessing the knowledge and insight from our diverse membership base, the Taskforce has formed a credible policy agenda for our city to prepare for the challenges and opportunities facing our future economy and society.

We'd like to thank everyone involved in the Taskforce. Your knowledge and expertise has been invaluable in forming the policy options that will underpin the Committee's agenda for years to come.

Learning how Melbourne can benefit from the Fourth Industrial Revolution, while addressing its challenges, is the greatest strategic question facing our city. We need to be bold, ambitious and clear in our vision for Melbourne if we're to make the most of our advantages.

We're fortunate to draw on your collective wisdom to shape civic discussion and advocate for policy outcomes to make sure that no Melburnian is left behind.

We look forward to continuing to work with you as Melbourne navigates these unchartered waters to retain our mantle as a city of international significance.

Scott Tanner Chair Martine Letts CEO

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# S H Z H Z

- What is scenario planning?
- 2 The Taskforce process
- 3 The starting point
- 4 The scenarios
- Melbourne's Strategic Needs
- 6 Acknowledgements
- 7 Final word

# **1) WHAT IS SCENARIO PLANNING?**

"He who predicts the future lies, even if he tells the truth."— *Arab proverb* 

September 11, Amazon.com, WikiLeaks, the Global Financial Crisis, the iPhone, the Arab Spring, the Fukushima nuclear disaster, Facebook, Brexit, President Trump... These are just some of the hard-to-predict momentous events and developments that have taken place since the turn of the millennium seventeen years ago.

The world today looks very different from how you might have imagined it only a few years ago. For example, more than half the Fortune 500 has disappeared since the year 2000 due to digital disruption. In such a rapidly changing environment, all of us – including the city we live in – are required to progress and develop in concert with the surrounding environment. By having a structured conversation about this through the use of scenario planning, patterns emerge which help us to develop new and credible insights.

First developed by the U.S. Air Force after World War II as a method for military planning, Royal Dutch Shell adopted scenario planning to successfully navigate the 1973 oil crisis, allowing its spectacular rise from being one of the weaker 'Seven Sisters' (the seven largest global oil companies) to becoming one of its strongest.

Scenarios are not attempts to predict the future. Nor do they try to articulate visions or desirable futures. Scenario planning is a method that, as a starting point, uses the uncertainty in the external environment that a business or city has little to no influence over, but which determines the environment in which it will ultimately have to operate.

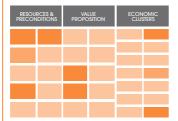
Scenarios do not describe just one future, but rather a range of plausible futures that illuminate all the corners of the 'playing field' in which our city will need to operate and compete. A good set of scenarios will force us to critically assess our conscious and unconscious biases and help prevent us from being blindsided.

Despite not being predictions of the future, scenarios are particularly useful for having an informed dialogue about it. They provide structure in uncertainty, help understand how different planning assumptions may play out over time, and thereby support decision makers in formulating robust long-term strategies and policies.

# **2 THE TASKFORCE PROCESS**

The Melbourne 4.0 Taskforce process had scenario planning at its core. The Taskforce worked through a series of steps by way of workshops, an online community and individual interviews. The result is a co-created roadmap to help future-proof Melbourne in the face of significant change and uncertainty.

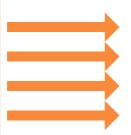
Step 1
Uncover city's value proposition



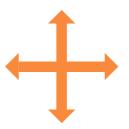
Step 2
Determine scope



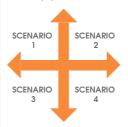
**Step 3** Identify driving forces



**Step 3**Establish critical uncertainties



**Step 5**Develop plausible scenarios



Step 6
Discuss implications and identify needs



# **3 THE STARTING POINT**

"We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don't let yourself be lulled into inaction." — *Bill Gates* 

Thirty years ago, it was clear that Melbourne was losing its stature as the economic capital of Australia. Often referred to as a rust belt, Melbourne and Victoria were in decline with their private and public sectors fragmented and becoming insular. Melburnians were emigrating in their thousands.

On this burning platform, the Committee for Melbourne was established to help Melbourne regain its footing and become a prosperous and globally relevant city. Today, Melbourne is in very different shape from 30 years ago – having been voted 'The World's Most Liveable City' six years in a row, we could be forgiven for thinking that we are doing all right.

However, increasingly people and organisations are starting to realise that perhaps the greatest challenge we face is complacency. A few observations confirm our slipping standards, particularly in the context of a future that potentially sees profound (digital) disruption and a shifting geopolitical landscape.

57

#

Australia's position in global internet speed rankings.

28

#

Australia's position in Year 4 mathematics ranking out of 49 countries. Represents a fall of 10 places since 2012.

50

%

Drop in the number of Australian students studying IT courses over the last decade.

Anticipate Melbourr water, wa

MILLION

Anticipated population of Melbourne by 2030. Meeting energy, water, waste, transport, food, and many other needs will require whole-of-government collaboration.

6

#

Melbourne's ranking among the most expensive housing markets on the globe. 5,000

Annual unmet demand for Australian computer science graduates.

53

#

Australia's position in global high-tech export rankings.

90

#

Australia's position in global ICT services export rankings.

66

**AND** 

86

Respectively, the global economic output and patented innovation that is produced by the world's top 40 mega-regions (NB: 2007 figures). Melbourne does not form part of any mega-region.

\$9

BILLION

Expected cost of delay on Melbourne's major roads is projected to triple in 2031 without appropriate investment to reduce traffic congestion.

LAST

In the OECD rankings for research – business collaboration.

# **4 THE SCENARIOS**

Employing the scenario planning process, the Melbourne 4.0 Taskforce found that the two most critical uncertainties – the two key 'change drivers' – for Melbourne's economy out to 2030 are the impact of the shifting geopolitical landscape and the rate of global technological disruption and innovative advancements.

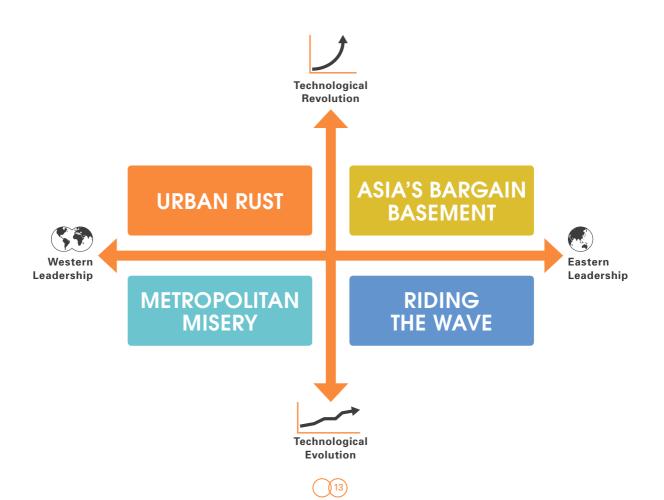
The extreme ends of the spectrum of these change drivers were used to develop the scenarios. By using the 'opposing' ends of the change drivers, we are able to create four maximally divergent and internally consistent scenarios that illuminate all the corners of the 'playing field' in which Melbourne's economy will need to operate and compete in 2030.

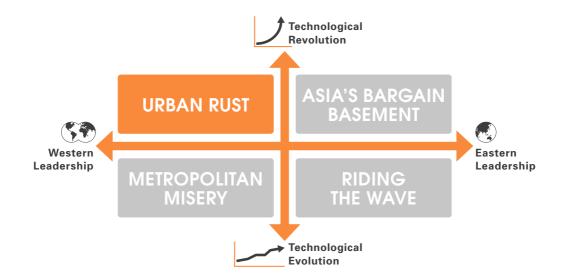




The resulting scenario framework developed by the Taskforce sketches a range of plausible futures for Melbourne which are divergent, challenging, and relevant.

In essence, the scenario revealed that if we keep progressing with 'business as usual,' the future of our city will not be as bright as it is today.







### **THE ROAD TO 2030...**

After a brief period of turbulence, Western economic and political systems stabilised:

- Transatlantic harmonisation of investment and technology regulations accelerated innovation and competitiveness.
- Triple helix cooperation between government, business and knowledge sector drove innovation and growth.
- Cities and regions were engines of transatlantic innovation and growth

Instability in the East hampered growth and political systems came under severe strain:

- Protectionism, corruption, debt burdens and housing bubbles.
- Maintaining control distracted from fostering innovative ecosystems.
- Mainly driven by key Western cities and regions; Fourth Industrial Revolution is underway with exponential rates of technological innovation.



### **AUSTRALIA IN 2030**

- Complacent and not fully prepared for Fourth Industrial Revolution. Politics and regulation bedevil competitiveness.
- 'Technology taker': partially rides tech wave in agribusiness, healthcare and tourism.
- Economy enters recession as key Asiar trading partners become protectionist, inward-looking and security obsessed.
- Melbourne and Sydney drive two-thirds of the national economy
- Climate change impacts infrastructure and liveability of cities.

### **MELBOURNE IN 2030**



### Governance

- Lack of decisive and coordinated policies on innovation, tech development, climate change and urban optimisation
- State government creates Greater Metropolitan Council in late 2020s to make Melbourne competitive globally



### **Economy**

- Insufficient digital talent available to drive business growth. Foreign investment and talent migrate to rival cities in Europe and North America.
- Key sectors (e.g. education and biomedical research) struggle with contracting economy, digital disruption and global competition.
- Other sectors, including agribusiness healthcare and tourism fare better.



### **Human Capital**

- Melbourne not producing enough skilled students. Severe school shortage impacting teaching quality and results
- In 'war for talent', Melbourne businesses losing.



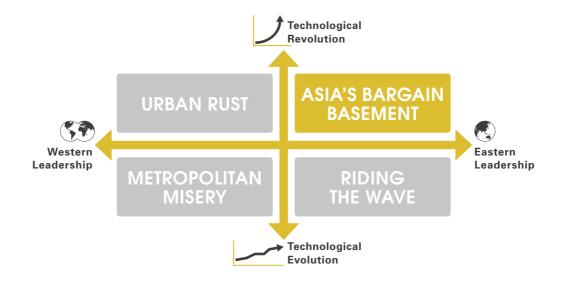
### Infrastructure and Urban Optimisation

- City of Melbourne implements 'smart' technology infrastructure. Surrounding metropolitan municipalities lag behind, leading to creation of Greater Metropolitan Council in the late 2020s.
- Spatial inequality exacerbated.



### Liveability

- Melbourne's liveability declines.
- Crime rate increase. Gated communities. Less green spaces.
- Calls to "Make Melbourne Great Again" intensify.







Eastern economies continued their historical growth trajectories:

- In 2030, Asia is the global engine of innovation and growth.
- Asian mega-cities and regions have become centres of innovation.

Asia's rise contrasts with relative decline of West:

- North America and Europe have not recovered from polarisation and isolationism.
- Capital and talent fled to prosperous and stable East.

Mainly driven by key Asian mega-cities and regions; Fourth Industrial Revolution is underway with exponential rates of technological innovation.

### **AUSTRALIA IN 2030**



- Complacent and not fully prepared for Fourth Industrial Revolution. Politics and regulation bedevil competitiveness.
- Economies of key Asian trading partners thrive.
- Economy grows
- Melbourne and Sydney drive two-thirds of national economy.
- 'Technology taker': partially rides tech wave in tertiary education, agribusiness, healthcare and tourism
- Climate change impacts infrastructure and liveability of cities.

### **MELBOURNE IN 2030**



#### Governance

- Timid governance and reform-resistan regulation stifle innovation and competitiveness
- Bitter partisan politics at state and federa level compound problem.
- In line with global developments, Melbourne and Sydney 'go it alone to form mega-region.



#### Economy

- Fails to generate highly paid jobs in transformed global economy; becoming second-tier economy on the edge of thriving Asia.
- Traditional economic sectors, including agribusiness, healthcare, education and tourism are keeping the economy afloat



#### **Human Capita**

- Education system not producing enough skilled students to thrive in transformed global economy
- Universities remain reputable, having merged and partnered with Asian competitors to survive.



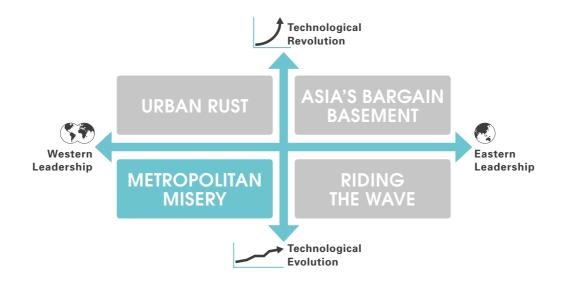
#### Infrastructure and Urban Optimisation

- Failure to implement adequate infrastructure projects.
- Road congestion increases.
   Businesses unable to implement 'just-in-time' deliveries.
- Property market remains unaffordable for most first home-buyers.



#### iveability

- Climate change effects acutely felt
- Crime increase due to uneven economy and wealth distribution.
- Arts and culture scene vibrant.
   Sporting events calendar full.





#### **THE ROAD TO 2030...**

After a brief period of turbulence, economic and political cooperation and integration returned in the West:

 Transatlantic security cooperation and trade and investment grew.

Period of diminished trade exposed structural flaws in Asian economic and political systems:

- Prolonged period of economic instability and social unrest.
- Domestic strains increased tensions between Asian countries.

Fourth Industrial Revolution turned out to be an evolution:

catastrophic technology failures led to clamp-down from governments.

Differing regulatory environments and popular backlash against technology-induced unemployment



### **AUSTRALIA IN 2030**

- Economies of key Asian trading partners slow.
- Gateway to Asia status no longer an asset
- Economy enters severe and sustained recession.
- Cities now overwhelmingly drive national economy.

- State jurisdictions abolished to reduce cost of government; populism on the rise
- Development of disruptive technologies slow following local and global popular backlash.
- Climate change has strong impact on infrastructure and liveability of cities.

### **MELBOURNE IN 2030**



#### Governance

- Australia becomes a republic following the Queen's passing.
- States have disappeared; City of Melbourne and metropolitan councils manage and deliver more services.



#### **Economy**

- Economy in severe and sustained recession
- Melbourne too reliant on Asian growth.
- Sophisticated regional supply chair networks disrupted.
- All sectors struggle with economic headwinds.
- Higher education and agribusiness sectors remain competitive by improving efficiencies.



### **Human Capital**

- Recession leads to fall in foreign tertiary student intake
- City less attractive for skilled migrants.



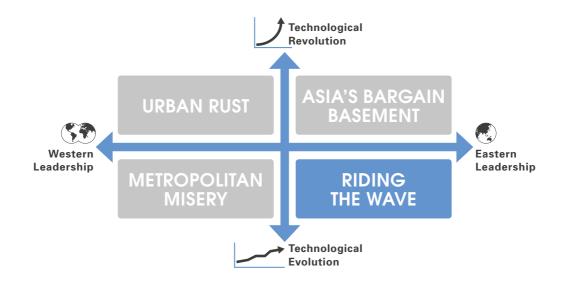
### Infrastructure and Urban Optimisation

- Property market bubble burst
- Lack of adequate infrastructure.
   Congestion remains problematic.
   Spatial inequality increases



### Liveability

- Melhourne's liveability declined
- Crime rate increases. Homelessness increases. Drug and Alcohol abuse increases. Green spaces decrease.
- Arts and culture scene no longer vibrant.
- City resembles walled city-state, surrounded by hostile regional and rural hinterland





### **THE ROAD TO 2030...**

Prolonged polarisation and isolationism had crippling effect on West:

- European Union disintegrated and Trump Doctrine closed off United States.
- Painful and turbulent time for individuals, businesses and governments in West.

Top-down and longer-term focus was fertile ground for economic success in Fast:

Key economies across Asia created favourable business climates: corruption bureaucracy and infrastructure were effectively addressed.

Home to two-thirds of global middle class; this is a prosperous and confident Asia.

Fearing social instability, technological disruption was regulated and 'contained'. The Fourth Industrial Revolution turned out to be an evolution.



#### **AUSTRALIA IN 2030**

- We are in the orbit of major
- Australia joins intra-Asian alliance to balance China.
- Cities now overwhelmingly drive national economy.
- Development of disruptive technologies less than predicted
- Climate change has strong impact on country's infrastructure and liveability of cities.

### **MELBOURNE IN 2030**



### Governance

- Geostrategic uncertainty assures status quo.
- Tyranny of distance having shaped
   Australia's history since early settlement mitigated by the promise of proximity.
- Vast dependence on Chinese market state government tries to accelerate diversification of trade, regionally and globally.



### **Economy**

- Directly to Australia's north is epicentre of global economy.
- Significant parts of city's economy in the middle of world's most lucrative and competitive playing field.
- Melbourne plays to its strengths in higher education, agribusiness, healthcare, tourism and construction in hypercompetitive business environment.



### **Human Capital**

- Skilled migration from 'old' continent
- Slipping educational standards compounded by strong population growth that is not matched by sufficient educational infrastructure in outer suburbs.



### Infrastructure and Urban Optimisation

- Housing affordability a great societal concern; growing population and Asian investment appetite compounding issues
- Lack of educational, employment and community services in outer suburbs; spatial inequality is greatly exacerbated.



### Liveability

- First home buyers and young families struggle to secure affordable housing. Residential Tenancies Act reviewed regularly.
- Despite significant locational disadvantage in outer suburbs, Melbourne continues to receive accolades for its liveability.

## (5) MELBOURNE'S STRATEGIC NEEDS

"Cities magnify humanity's strengths... They spur innovation by facilitating face-to-face interaction, they attract talent and sharpen it through competition, they encourage entrepreneurship, and they allow for social and economic mobility." — *Edward Glaeser* 

Humanity has been moving into cities for thousands of years and the reasons for that today are no different to thousands of years ago.

Throughout history, there have been three key elements that give cities their enduring success: people, connectivity and governance.

These elements do not change. However, the context in which these elements manifest themselves does. Now that we are in the early stages of the Fourth Industrial Revolution, we must ensure that our city can progress and develop in concert with our (rapidly) changing environment.

The scenarios produced by the Melbourne 4.0 Taskforce provided an excellent platform for a structured conversation abou Melbourne's future economic environment, which generated a set of responses to the challenges and opportunities that the scenarios uncovered

In line with the elements that give cities their enduring success – people, connectivity and governance – the Taskforce identified nine strategic needs that will have to be addressed if we are serious about underpinning a liveable and flourishing Melbourne in the future.

# MELBOURNE 4.0 KEY FINDINGS STRATEGIC NEEDS



### **People**

- 1. Future skills
- 2. Innovative ecosystem
- 3. Housing mix



### **Connectivity**

- 4. Competitive internet
- 5. Airport link
- 6. Eastern seaboard transit link



### Governance

- 7. Metropolitan collaboration
- 8. Eastern seaboard collaboration
- 9. Digital capability

# **5 MELBOURNE'S STRATEGIC NEEDS**

### 1 Future skills



Linear careers will become less common as automation, globalisation and more flexible working arrangements are rapidly changing the nature of work. To succeed, our economy needs a workforce with a portfolio of skills and capabilities.

One of the most effective ways to address this is to encourage and support a job-creating and enterprising workforce in Australia.

### Potential advocacy options for the Committee:

- Include experiential entrepreneurship program in primary and secondary school curriculum.
- An annual entrepreneurial camp for highly skilled teenagers.



### 🖸 | Innovative ecosystem



Most globally relevant cities have a sizeable innovative (start-up) ecosystem. These places are attracting highly skilled workers and investors; generating the next wave of economic growth.

There are already great initiatives to help nurture Melbourne's innovative capacity and ecosystem. However, there is a need for continuous improvement and development.

### Potential advocacy options for the Committee:

- Establish a CfM Mentoring Network.
- Annual international tours for leading Melburnian entrepreneurs.
- Development of an international ecosystem with innovative cities.
- Yarra River activation.
- Innovative energy cooperatives.

### 3 | Housing mix



Melbourne's key workers, including nurses, police officers and teachers, are particularly challenged in finding a place to live close to their location of employment.

Furthermore, high cost of living – of which housing costs are a major determinant – has a detrimental effect on a city's creativity and innovative capacity; expensive cities make self-employment and entrepreneurship more difficult.

### Potential advocacy options for the Committee:

- Rental accommodation as an attractive institutional investment class.
- Student accommodation in aged-care facilities.

### 4 | Competitive internet



Internet speed, coverage, capacity and security will profoundly affect cities' ability to compete in international markets.

We need a better understanding of our current and future internet requirements in light of international competitive developments and, if found to be wanting, act to address the situation.

### Potential option for the Committee:

 A 'Competitive Melbourne Internet' taskforce to review options and make recommendations.

### **5 | Airport link**



The world's leading cities have high quality direct (public) transport links to their airports. Melbourne does not.

Appropriate options are available. They should be assessed as a matter of priority, particularly in the context of having a strong regional, interstate and global link as well as improving Melbourne's international image.

### Potential option for the Committee:

 An 'Airport Connectivity' taskforce to review options and advocate a preferred action plan.





## **5 MELBOURNE'S STRATEGIC NEEDS**

### 6 | Eastern seaboard transit link



Megaregions are the 'New Competitive Unit'. They are integrated sets of cities and surrounding (suburban) hinterlands across which labour and capital can be allocated at very low cost.

Constructing a high-speed eastern seaboard transit link will be a major step forward in the creation of a megaregion, which will effectively alleviate some of the major population challenges that our capital

cities experience, stimulate the economy and increase our ability to compete in international markets.

### Potential advocacy option for the Committee:

 A competitive eastern seaboard transit link, including key Victorian regional centres.

### Metropolitan collaboration



A hyper-competitive global business environment, a growing population, a challenging housing market and digital innovation are some of the key factors that will significantly increase pressure on Greater Melbourne's governance structures.

We need better metropolitan governance arrangements to build a resilient, economically competitive city that can confront the challenges and capture the opportunities that the 21st century will bring.

### Potential option for the Committee:

 A 'Metropolitan Collaboration' taskforce to review governance structures and make recommendations.

### Eastern seaboard collaboration

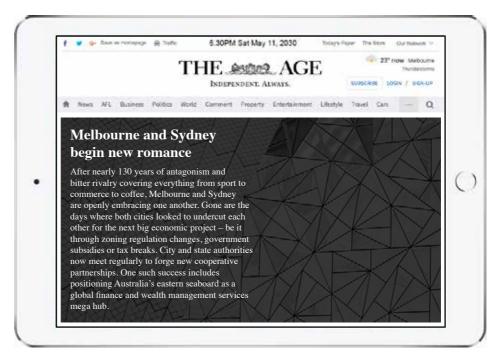


Already a decade ago, the world's top 40 mega-regions made up 'only' 18% of the population, but produced 66% of global economic activity and 86% of patented innovation – mega-regions are the 'New Competitive Unit'.

Effective collaboration between the (capital) cities along Australia's eastern seaboard will provide a real competitive boost.

### Potential option for the Committee:

 An 'Eastern Seaboard Collaboration' taskforce led by the Committees for Melbourne and Sydney to develop a blueprint for an eastern seaboard mega-region.



### O | Digital capability



The scale and scope of rapid technological developments will drive productivity, growth and investment, as well as improve public services, and enable scientific breakthroughs. At the same time, it can cause great disruption to employment markets and society at large.

Melbourne must be digitally capable to successfully navigate the significant challenges and opportunities of the 21st century.

### Potential advocacy options for the Committee:

- Establish a Digital Commissioner for Victoria.
- Establish a Victorian All-Party Parliamentary Group on Artificial Intelligence.

# **ACKNOWLEDGMENTS**

For over 30 years, the Committee for Melbourne's influence has been built on the breadth, depth and calibre of our membership base. It is this collective strength that has been a major driving force behind the development and progression of our city.

Over the course of the Melbourne 4.0 process, we have had the good fortune to capture the knowledge and expertise of our diverse membership through the Melbourne 4.0 Taskforce.

The Committee for Melbourne would like to thank every individual involved in the Taskforce as well as the many subject matter experts who generously donated their time to provide expertise and perspectives.

Below is an alphabetical overview of the contributing individuals and members.

### Steering | Committee

### **Monique Dawson**

Chief Executive Officer Metropolitan Economic Development, DEDJTR

### **Krvstal Evans**

Chief Executive Officer -BioMelbourne Network

#### Lorenz Grollo

Chief Executive Officer -Grollo Group, and Director Committee for Melbourne

### Project | Group

#### Kevin Begg

Technical Services Lead -Precinct Design and Urban Design

### Monica George

Manager - Urban Development

### **Kylie Ling**

Manager Infrastructure Advisory

### **Antony Maubach-Howard**

Urban Designer

### Project | Leader

### Sander van Amelsvoort Director, Policy & Research

Committee for Melbourne

### **Toby Kent**

Chief Resilience Officer City of Melbourne

### Prof Linda Kristjanson

Vice-Chancellor Swinburne University

#### Martine Letts

Chief Executive Officer Committee for Melbourne

### Dr Magnus Moglia

Research Team Leader

### Sam Rowlands

Market Leader Property and Buildings Victoria

### Ella Simmons

Law Graduate Hall & Wilcox

### **Brett Van Duppen**

Policy & Research Officer Committee for Melbourne

### Julian Vido

Employment & Industrial Relations Lawyer Hall & Wilcox

### Consulting | Jester partner



### Taskforce | AECOM Members

Adshel

**Airshuttle Commuter Express** 

**Arts Centre Melbourne** 

Arup **Ashurst** 

**AusNet Services** 

**Bank of Melbourne** 

**Bates Smart** Bendigo Bank

**BioMelbourne Network** 

British Consulate-General, Melbourne

**Cabrini Foundation Charter Keck Cramer** City of Melbourne City of Port Phillip

Citywide Clayton Utz

Commonwealth Bank

**Corrs Chambers Westgarth** 

**CSIRO** 

**Destination Melbourne East End Theatre District** 

ΕY

**Fed Square GHD** 

**Grant Thornton** Grimshaw **Grollo Group** Hall & Wilcox **HASSELL** 

Jo Fisher Executive

**KJA** 

La Trobe University McKinsey & Company **Melbourne City Mission** 

**Melbourne Convention and Exhibition** 

Centre

**Melbourne Recital Centre** 

Melbourne Water

Metro Trains Melbourne Monash University

**NORTH Link Nous Group** 

Peter MacCallum Cancer Centre

**Pitcher Partners** 

**PwC** 

**Royal Consulate General of Denmark** Royal Automobile Club of Victoria

**RMIT University** 

**RPS** 

Sofitel Melbourne On Collins

Spolib

**Swinburne University** 

Telstra

The Bank of Tokyo-Mitsubishi UFJ

The Big Issue

The University of Melbourne The Walter & Eliza Hall Institute

of Medical Research

**Urbis** 

Victoria University

Victorian Health Promotion Foundation

**Victorian Planning Authority** 

**Yarra Trams** Yarra Valley Water **Youth Projects** 

# **7 FINAL WORD**

"The future is already here — it's just not evenly distributed."

### William Gibson

The next decades will see profound changes to the environment in which Melbourne's economy will operate and compete. The far-reaching technological changes that are taking place, coupled with big geopolitical shifts, are likely to alter the landscape beyond our imagination.

To echo William Gibson's astute observation, we can, however, already catch a glimpse of the future and the opportunities it offers at a global level with Asia's growing strategic weight and right here in Melbourne with technology. Our city's biotech industry, for example, regularly delivers world-leading innovation.

No city is yet fully experiencing the breadth and depth with which the Fourth Industrial Revolution is likely to unfold. The Committee's MELBOURNE 4.0 Taskforce was given the remit to help uncover – and try to make sense of – the impact that these changes are likely to have on Melbourne. By employing the collective knowledge and insight of our unique membership base, the Taskforce has co-created a set of scenarios that sketch a range of plausible futures for Melbourne which are divergent, challenging and relevant.

We cannot predict the future. However the Strategic Needs that the Taskforce identified present robust investment opportunities for our city; they are essential under all scenarios, and we must work together to address them. Moreover, in the course of our work, it has become clear that there are a number of conversations we cannot delay any longer. A Victorian All-Party Parliamentary Group on Artificial Intelligence proposed to strengthen our digital capability is just one example of how we must create an informed public debate and common understandings about how to manage the consequences for our society of accelerating digital disruption. Similar discussion is needed on a range of fast emerging fields from biotechnology to the Internet of Things, and from robotics to quantum computing. How do we feel about algorithms guiding parole decisions? What level of privacy is non-negotiable in an age of hyper-connectivity? And what does a 'fair go' mean when babies are genetically modified?

In reality, the findings of the MELBOURNE 4.0 Taskforce are only the beginning of a new and ongoing conversation about the future of our beloved city. We would like to thank all those who have contributed to the MELBOURNE 4.0 Taskforce through our workshops, interviews and online forum.

The full MELBOURNE 4.0 report will be published later this month and will form a unique platform from which to have a dialogue about our city's future.

The Committee is looking forward to being at the forefront of these conversations as we continue to **shape a better future for Melbourne**.

