

## **Productive cities: opportunity in a changing economy**

It is time to put the functioning of our cities squarely on the economic reform agenda.

Cities are essential to generating economic growth and to creating and sharing opportunities. In the past, our cities have served us well in this regard. But if Australia is to prosper in an ever more knowledge-intensive global economy, then our cities must perform these roles differently – and much better – than they do today.

*Productive cities*, the latest report from the Grattan Institute Cities program documents who lives where in Australia's four largest cities and how this is changing. It then analyses the consequences for national productivity and individual opportunity.

At this free public seminar, leading business figure Sir Rod Eddington, Chairman of Infrastructure Australia and author of the East West study on Melbourne's transport needs, discussed *Productive cities* with report author, Jane-Frances Kelly, Director of the Grattan Institute Cities Program.

**Speakers:**     **Sir Rod Eddington, Chairman Infrastructure Australia**  
                      **Ms Jane-Frances Kelly, Cities Program Director, Grattan Institute**  
                      **Mr Peter Mares, Cities Fellow, Grattan Institute**

PETER MARES: We're very lucky tonight to have Sir Rod Eddington to help us launch our report. He'll be in discussion with Jane Frances-Kelly, the report's co-author and Program Director for Cities at the Grattan Institute.

Sir Rod Eddington I think we're very lucky to have. He's one of Australia's leading business figures as the Non-Executive Chairman of JP Morgan and Lion. He's also one of Australia's, indeed one of the world's deepest thinkers about transport and cities and connectivity. Sir Rod is an engineer by training, educated at the University of Western Australia and then at Oxford University as a Rhodes Scholar. He went on of course to be the CEO of Cathay Pacific, of Ansett, of British Airways – have I forgotten any airlines that you ran, Sir Rod?

SIR ROD EDDINGTON: No, that'll do.

PETER MARES: Before he retired it says here – this is his official biography – it says he retired in 2005. I think that's a mistake because since retiring he's authored a major transport study for the United Kingdom on its transport needs in a carbon-constrained world, and then he came to Melbourne and led the East-West Needs Assessment Study on Melbourne's transport needs. So far from retired I think and an ideal person to discuss the issues before us tonight.

Jane-Frances Kelly, as I said, is a Program Director with us at the Grattan Institute for the Cities Program. Before joining Grattan, four years ago, Jane-Frances worked originally in Britain with the British Prime Minister's strategy unit and then, since coming to Australia about 10 years ago, she's led strategy work for the Queensland, Victorian and Commonwealth governments and she's also worked for the University of Melbourne's Vice-Chancellor Glyn Davis, for Noel Pearson at Cape York Institute and other positions.

So please join me in welcoming Sir Rod Eddington and Jane-Frances Kelly.

The format evening will be that Jane-Frances Kelly will provide an overview of the *Productive cities* report, Sir Rod will then respond and give his comments on the report. I'll engage them or they'll engage each other in a bit of a conversation, and then I'm going to open up to you for questions from the floor.

JANE-FRANCES KELLY: I'd like to add a quick additional welcome to the youngest member of the audience up the back on the left, that wee boy, because it reminds me of the last time that I was in this room was when I became a citizen a few years ago. There was a very large portrait of the Queen on the stage at that point, which I see is not here anymore. And my nephew, who was three at the time, was sitting up where whoever it is is sitting just now and as the Lord Mayor came down the steps in incredibly embroidered robes, really 3D robes, all you could hear was this little three year-old voice from the back, in this kind of quietness, go "Is that the King?" which was incredibly charming. So I'll be expecting a question.

As Peter mentioned, I've been in Australia since 2004 and I remember when I first arrived I was given a couple of maps of Melbourne from the ABS Social Atlas which was published at the time. I was really struck by it because it showed that people with university qualifications in Melbourne were very heavily concentrated in the inner suburbs in the centre of the city, whereas people with TAFE qualifications and with no post-school qualifications were concentrated in the outer suburbs. It was a very striking pattern and I remember really noticing it almost as soon as I arrived. 2004 though was also the year that Melbourne was first top of *The Economist* liveability index, and so as I was talking to people – I was working in the Premier's department here in Victoria at the time – they were saying "Well, you know, Melbourne, it's just the best place on the planet. It's not really possible to be in a city and not be in heaven unless you're in Melbourne". So I was struck by seeing these patterns about Melbourne which were enormously striking, but everywhere I was just hearing about how marvellous the place was and, of course, I was falling in love with it myself. But I thought "Surely this must have implications for the economy and for access to opportunity?" but I found it quite hard to get a conversation started about that. We also know, just from our own experience, that who lives where in cities changes over time. It was before my time, but Peter has told me all about 25 or 20 years ago when the CBD of Melbourne would shut up shop really by 5.30 and there would be tumbleweed rolling down the streets. And I'm kind of sorry I missed that because of course it's not like that now.

We wanted to ask in this report what's been happening with the economy and with who lives where and how they interact. I'll just take a few minutes to briefly summarise what we found.

When we were taking a look at what's happening with the economy in Australia there were two aspects of it that we focused on. One was a really significant shift, like in all advanced economies globally, a real significant shift towards more and more knowledge-intensive activity which, although not exclusively, tends to agglomerate in the centre of cities. Then the second characteristic of the modern economy that we focused on was the broader shift right across the economy to higher skill levels and to more and more specialisation.

The first of those, the shift to knowledge-intensive activities, the people that do, these engineers, architects, industrial designers, financial analysts and so on, is happening across all sectors. It's a much richer story than just a decline of manufacturing and an increase of services. There's highly skilled manufacturing and so on. While these knowledge-intensive jobs are far from the majority of jobs, they're very important for national prosperity and that's because they're export-intensive and so on. Now, to maximise their productivity they need a few things, but one of the things I wanted to note particularly this evening was that one of the biggest things they need is deep labour markets so that they get the best matches between job opportunities and employees.

Now, the economists in the audience will be going "I can't believe she just said deep labour markets, the term is thick labour markets". I know that in the literature the term is thick labour markets. It just doesn't sound very good, and so I prefer the term deep labour markets. And a deep labour market is when you have lots of potential employees and lots of employers and because job matching, the match between the employee and the role, is so important in knowledge-intensive industries, to maximise their productivity they need really deep labour markets. But, of course, the majority of jobs are not in the CBDs of Australian cities, but we do note that right across the whole economy we're becoming increasingly skilled, the qualifications profile of the labour force has increased a lot over the last 20 years or so and it's becoming increasingly specialised.

Adam Smith first identified this in the 18<sup>th</sup> century and we really enjoyed writing a report about the economy that had an 18<sup>th</sup> century reference in it, and a 19<sup>th</sup> century reference because Alfred Marshall, he was the guy who got all the stuff about agglomeration – this is no recent fad. Adam Smith was the first to identify specialisation and was talking about division of labour and so on, but that continues to be a trend in the economy. You used to get engineers, you maybe graduated an engineer, but today people graduate as mechanical engineers, bio-medical engineers. I looked up Wikipedia, because it's the font of all knowledge, and they've got 20 different kinds of engineers that they mentioned, so that proved it. What that means is that deep labour markets matter everywhere, they matter right across the city. They matter for productivity through that job matching mechanism, and they matter for individuals so that individuals can find a job that works for them and they can build their skills and experience.

Then we took a look at who lives where and we went back five censuses from 1991 to 2011 and we looked at income, qualifications, access to job and some other things. And there it was like what I had noticed in 2004, although the pattern is continuing to increase: people with higher incomes are living in the CBD and the inner suburbs, again congregating more around the centre of the city; people with lower incomes around the outer suburbs. Again, university-qualified residents concentrating in the inner parts of the city and people with TAFE or no post-school qualifications in the outer suburbs. What was very interesting to us is we asked what kind of access to jobs people in different parts of the city had. So we said "What proportion of jobs in the city can you access if you are willing to drive 45 minutes by car to work or 60 minutes by public transport?" and of course people in the inner suburbs have the best access to jobs.

What was really striking though is that there are large areas of Australian cities – and we did this work for Sydney, Melbourne, Brisbane and Perth – where residents can access really only small proportions of the jobs available in the city, often less than 10%, by a commute of either of those lengths (45 minutes by car and 60 minutes by public transport). Because house prices have risen faster in the inner areas, what this means is that a lot of people have ended up locked out of opportunities to move into where the jobs access is richer. So rather than the deep labour markets that the modern economy needs, our cities are not doing well at connecting people in jobs and, as I said, that's bad for productivity and also bad for opportunity. Where there are fewer opportunities it makes it less likely that someone would be able to make a good job match and get on in their career, and we see that people in outer suburbs are more vulnerable in a downturn because they will have access to even less of the fewer jobs that would be available.

So 80% of Australian GDP is generated in cities and the vast majority of Australians live and work in them. So I got my passport after I became a citizen in this very room and I was really struck, there are 39 images, those lovely watermarked artistic images through the pages, and only one of them even has a building in it and it's clearly an outback pub. So Australia doesn't really think of itself as an urbanised nation, but the vast majority of Australians live and work in cities. As I say, 80% of GDP is generated there, half the jobs in mining are in cities, yet the productivity debate in Australia doesn't tend to mention how our cities function at all and we think it clearly should. It's like a circuit board: the more connections there are the faster it goes. Cities are a bit like that: if they're good at connecting people in jobs, both through where people live and how good the transport links, then the more productive a city will be.

I might pause at that point because, although I haven't spoken about what we should do about it, I feel like I've been talking for some time.

PETER MARES: You've only been talking for right on 10 minutes, so we're exactly right in terms of our running order here. We'll come back to what we should do about it, I think that's a good idea. Before I ask Sir Rod, Jane-Frances was talking about the work we did from the census and what I wanted to point out was as well as our report *Productive cities* we produced four sets of supplementary maps using data from the censuses from 1991 through to 2011 for each of the four major cities, so we looked at Sydney, Melbourne, Brisbane and Perth. You can find all these on the [website](#).

So, Sir Rod. ...

SIR ROD EDDINGTON: Thanks Peter. One of the things I like about the report is it puts cities front and centre in the debate and, as Jane-Frances said, most of us actually live in cities. We Australians like to think of ourselves as either a descendent of Crocodile Dundee or Slim Dusty, but the bottom line is we're a very urban community and most of us live not in the bush – I grew up in the bush – but in cities. So how well our cities work is really important and one of the things the document speaks to is the economic importance of cities, particularly modern cities, in services-driven economies; access to jobs and in particular what our transport networks mean for that. But there's another dimension to cities too because there were tumbleweeds after 5.30pm down Collins Street and on Saturday and Sunday all day because people didn't live in the cities. Now, not only do many people choose to live close to the city from a work viewpoint, but also from a lifestyle and a community viewpoint. So when we finish this evening I'm going down to the National Gallery of Victoria where the Monet exhibition opens – I hope many of you will get there – and that's right in the centre of the city. People who come to watch an AFL game and follow their favourite team in the national competition go to the MCG or Etihad Stadium, or they go to AAMI Stadium, or they go to the shops and the restaurants and the music halls and the theatres that are in the middle of our city.

So cities just aren't important for the economy, they're important for the way in which we live our lives. One of the questions is how to ensure that as many people get good access to the cities as possible, not only because they have access to the jobs in the cities, but also because of the lifestyle that comes with it. And cities are a real challenge and they're a particular challenge now that we're a predominantly service economy, 80% of Australia's GDP almost is services and 80% of those of us who work in regular jobs work in services. So services really matter and that's one of the things I think that's changed the very nature of cities because cities aren't just about economic activity, they're about medicine, they're about education, they're about government, and all of those things matter to our lives. So we need to think about cities, particularly as the cities grow. And in Australia we now have two cities – Sydney and Melbourne – that are 4million/4million+ and as they grow naturally the issues around congestion will intensify unless we make the right calls on infrastructure generally and transport infrastructure in particular. One of the things I think this document does is says we ought to take these issues very seriously.

That doesn't mean we should forget rural Australia. It doesn't mean that we should forget our international gateways. We're a trading nation so our ports and our airports really matter and the connectivity around those really matter because we export so much, we import so much, we are an island after all, albeit a big one. So it's not just about cities, but my view is that in a sense the lions kill in the cities and the whole country feeds, and that's a sort of cool analogy in some ways, but it's true. A lot of the economic activity that takes place in the cities has profound economic benefits for the state and the nation. We were talking earlier about the work that's currently taking place in Victoria on Regional Rail Express and what that does to provide much better heavy rail links to the west and northwest of the centre of Melbourne, areas that 40 years ago were farmland and defence territory. It's the older parts of Melbourne that have got the best public transport networks and the best road networks. It's the newer parts that have much fewer transport options generally and much fewer public transport options in particular. If we're going to see the city grow out to the west – and if Bernard Salt the demographer was here, I think he'd tell us that the west of Melbourne is the most rapidly growing part of Australia – have we built the infrastructure we need? We'll focus tonight particularly on what I would describe as the hard infrastructure: the road, the rail networks, the electricity, the water. But of course there are issues around soft infrastructure too, schools and hospitals, which are really important.

The other thing that Regional Rail Express will do is that, because it separates the long haul trains, the V-line trains, from Ballarat, Geelong and Bendigo from the commuter trains, it'll provide much better connectivity to the inner city – and I talk about the inner city rather than the CBD now – to those cities. If they themselves are going to become centres of economic activity then the single most important link they have is the link to the inner city of Melbourne. So Ballarat, Geelong and Bendigo are really important pieces of the Victorian jigsaw, just as places like Newcastle and Wollongong matter in New South Wales and places like Mandurah in Western Australia. We need to think about the state's geography, its economic geography, but its physical geography as well, and unless we make the right long-term investments the city will become increasingly congested. Now, in my time, particularly working in Asia, I saw a lot of

cities up close, I lived in Seoul and Tokyo as well as Hong Kong, but I was a regular visitor to places like Manila, Bangkok, Kuala Lumpur and Singapore. You can very quickly differentiate between the cities where the thinking has been around the long-term needs of the city and the cities where that hasn't been true.

In places like Hong Kong and Singapore, for instance, very dense cities but major global financial centres, they've got first-class infrastructure: good airports, good ports, good rail networks, good road networks, good electricity grids, good water treatment facilities; and they've thought about it and they've invested in it at the right time and the right place. There were other cities in Asia, particularly when I first lived there in the '70s and '80s, where there'd been none of that forward planning, or if there was it wasn't visible. Places like Manila, which had been major centres of economic activity – in 1963 Japan was the biggest economy of Asia and the Philippines was the second biggest economy of Asia – and Manila therefore was the capital of the second biggest Asian economy and it was a city that worked. For a long time there was very little investment in transport infrastructure in particular and it showed – the journeys around town from the airport. Bangkok was the same. Now, those two cities have spent a lot of time over the last decade thinking about those challenges and trying to address them, but if you do nothing for long enough – and some Asian cities did that – then the cost of congestion, not only in economic terms but in terms of peoples' lives, the amount of time they sit stuck in traffic jams, is real.

So cities matter and we've got to make sure we take a far-sighted view to their development if we want our cities to be prosperous and relevant and great places to live. The report speaks to that.

PETER MARES: Thank you Sir Rod. Well, Jane-Frances, we've set the context, we've talked about why cities matter, we've talked about the productivity of cities and the connectivity of cities. So what does the report recommend?

JANE-FRANCES KELLY: We felt the most important thing was to bring people and jobs closer together, particularly out of the centre of the city. Recent residential development patterns in Melbourne in particular, and in Brisbane also, have been increasing the distance between people and jobs, sort of doing the opposite. So there's three ways of bringing people and jobs closer together: you can move jobs to where people live; you can enable people to live closer to where the most jobs are; or you can effectively decrease the distance between the two by improving the transport links.

SIR ROD EDDINGTON: Decrease the time.

JANE-FRANCES KELLY: Yes, exactly. Because, as you say, congestion; it's not just a drain on productivity and bad for the environment, but it takes away significant amounts of time, peoples' discretionary non-work time, often from the things that are most important to them, their family and social life and so on. So, as you say, it's not just the economy.

SIR ROD EDDINGTON: Yes, no-one has on their tombstone "I wish I spent more time in the office".

JANE-FRANCES KELLY: Or in traffic. So we took a look at those three options.

The first option, what we were talking here was about calls for particularly knowledge-intensive jobs in the centre, to move them to outer suburbs. We took a look at the evidence about how well that works, and it doesn't work that well, or when it does happen it's extremely expensive. That's not to say that there won't be natural jobs growth. There are a lot of jobs which people refer to as "population-serving" jobs, so wherever people live you need teachers and doctors and dentists and hairdressers and boxing trainers and so on. So there's natural job growth of that kind and there are local employment centres as well and so on, but what we were talking about was calls to move in particular knowledge-intensive jobs and highly skilled jobs from one part of the city to another.

The second option was enabling people to live closer to more job opportunities. What that would involve is building more types of housing in established areas of Melbourne, so in the middle suburbs. A couple of years ago we did a report at Grattan called [The housing we choose](#) where we asked Australians what kind of housing choices they would like to be able to make and it turned out that, contrary to assumption, not every Australian wanted to live in a detached house. There's a mixture of preferences that people have, which shouldn't be surprising in a liberal democracy, and the biggest shortfall between what people wanted to be able to choose and what we have now was non-detached options, so medium-density options, in established areas, in middle suburbs. What this most recent report has found is not only that what people want when you ask them, but it's also good for the economy and it's good for opportunity as well. So we're essentially revisiting those recommendations.

The third was about improving the transport links between the two and we suggest that there are two things that have to happen there, and we're deliberately very generic about these recommendations because the combination of transport solutions will be very different in different cities and depends on legacy infrastructure as well as topographical challenges and so on. But there are two things. One is that looking out towards the next 10/20 years the only way that you can manage demand for roads is to charge for use of road space. And again, we haven't been specific about whether that's at a time of day or particular roads, because that solution will be different everywhere, but the laws of physics essentially mean that we can't keep putting more cars on roads and expect for anybody to get anywhere. So that's something about the nature of the universe that we just can't get over really. So the first is charging for road space. Some of that revenue could then be used to improve public transport links and the one type of public transport that we did speak about specifically was buses and rapid bus transit in particular. The reason we mentioned that was because it can be done quickly, it can be done flexibly, and it can be done relatively cheaply.

So it's very possible to have decades of discussion about heavy rail infrastructure and so on, but buses can happen in the meantime. We were also very struck by a report that The Brookings Institution did last year on 100 cities in America and how good their public transport systems were at connecting people and jobs. The ones that were good included ones you would expect like New York and Boston who have very big metro systems, but a couple were quite surprising to us. One was Salt Lake City and another one was Las Vegas. The reasons that they were so good was not because they had underground systems, it was because they had really well-connected rapid bus transport and it was incredibly good at connecting workers with job opportunities. So we do mention buses in particular, we like buses.

PETER MARES: So Sir Rod, I want to get your response to some of those specific things that we talk about, for a start the idea of some kind of road pricing to not only raise revenue for investment in other forms of transport but to allocate space on the road and hopefully to see road use go to its most productive or important purposes. What's your view on road pricing?

SIR ROD EDDINGTON: Yes, I think the economics of road pricing and the economic case for road pricing is pretty compelling; it's the political and social issues that are more complicated. So there's a question, I mean, if you're a car driver you probably think "Well, I already pay de facto road prices through my licence fee and my fuel levy" because there's a heavy tax component on our fuel prices. So is road pricing as well as or instead of and how is that going to play out? And then there's the question of, I think the idea that if you build a significant road today it should be a toll road, many people would accept that on the basis that there are free alternatives to the toll road, and I'm certainly in that camp. I think what is more difficult is deciding to toll existing roads that haven't been tolled.

For example, the Westgate Bridge is a very important piece of transport infrastructure for the city of Melbourne, but it's a single point of vulnerability for our city particularly as things grow to the west to places like Werribee. We have as a city got a lot of eggs in the Westgate basket and it's safe, but it's carrying many more vehicles every day than it was anticipated it would carry, so the maintenance bill will continue to climb. There was a toll on the Westgate. It was removed for reasons I think I understand, but sadly by removing the toll you robbed yourself of a stream of revenue, not only to ultimately keep that bridge in good repair without having to delve into the general tax pool, but also to build a second freeway-standard crossing of the Maribyrnong

because we need that. If something should happen to the Westgate for a period of months it would profoundly change the economic geography of the city and the state. So I think road pricing is economically pretty straightforward, it's coming to terms with the political and social consequences that are difficult. But at the end of the day, as the city gets bigger and the inner city becomes even more important, it has to happen. So the question is, you've got to have the debate in forums like this.

The other piece of that jigsaw is that the technology which allows you to price roads is improving all the time. In London, which was one of the first places to introduce a congestion charge, they use number plate recognition and that technology works, but it's pretty expensive. So a significant chunk of the revenue you generate through road pricing is actually consumed by the system you use to charge people. We have here a much more efficient system, in part because it's newer – that's what I've said, there's no criticism of London, I support the congestion charge in London – but we have those gantries on the freeways and we have a little pinger in our windscreens and that's a much cheaper and much more efficient way to collect money. I assume that in five years' time every car will have a GPS in it and there may be even cheaper and even more efficient ways to charge for road use. And we might be able to introduce variable road pricing so you pay more if you use the road in the peaks than the off-peaks and that'll help spread the load. There was some work done recently in New South Wales by one of the universities there that looked at what effect variable road pricing would have on congestion, because congestion costs. People don't like road charging because it costs them, they don't realise how much congestion costs the economy and costs them personally. So I'm in favour of it, but I don't think for a moment Peter it's a straightforward or easy issue.

PETER MARES: No, there are all sorts of equity considerations.

SIR ROD EDDINGTON: There are.

PETER MARES: As our report shows, the further people are from the city centre the more cars they're likely to have in their household, the more dependent they are on car as a form of transport, the more vulnerable they are to petrol price rises and so they would also be the ones who would suffer the biggest bills potentially. But those are equity issues.

SIR ROD EDDINGTON: And if you go to the south and the east of the inner city of Melbourne you'll find plenty of tram and rail lines. You go to the west and the southwest and it's a different story. As I said, these places were farmland and defence territory by and large 40 years ago. So here you've got big houses with three cars in the garage or out front and people have very limited choices other than the motor car to get to work.

PETER MARES: I want to ask you another question and that's about the link between connectivity and productivity. For example, in London the Crossrail project which is being developed, they talk about something called "wider economic benefits" about the connections between businesses and, as Jane-Frances has talked about, between businesses and workers. There's a productivity bonus here which is different to the money you save in travel time and that sort of thing. How strong is that link?

SIR ROD EDDINGTON: And there are a couple of economists in the room, a couple of whom worked with me on the East-West Study. One of the things is, how do you calculate on an evidence basis the economic benefits that come from having an inner city that is productive because it's well-connected? Particularly we're talking now about transport connections. Well, it turns out that the simple measures of economic benefit underestimated some things that really matter. What are the economic benefits that come from co-locating in the inner city the banks, the consultancy firms, the legal firms, the universities, the governments, and the media entities; co-locating these places in one place so people can literally walk across the street and speak to people who they need to help them with a particular transaction or business opportunity? It turns out those economic benefits are real and substantial and the cities that are the major global financial centres, like Singapore and Hong Kong and New York and London, have recognised that there are real advantages to co-location, but there are some congestion problems associated with that.

Many of you will have been to London, you will have been on the Underground. Crossrail makes it much easier to go across town, as it were, because you have a radial transport network that leads into Paddington Station, Victoria, Southern Cross and the other big stations, but if you want to go from east to west in the city it's quite difficult and Crossrail addresses that. That will enhance London's productivity profoundly, and because London is such a big chunk of the British economy it will also enhance the economy of the regions. If you look at London as an example and you go to places like Birmingham and Manchester and Bristol and Cardiff, Leeds. Leeds is three hours by train north of London. A lot of the economic activity in Leeds is a direct link to the economic activity in London. The sort of businesses I've talked about might have their main headquarters in London, but they have large numbers of people working in Leeds and Birmingham and Manchester. You can only do that if the transport and the communication infrastructure is up to scratch.

PETER MARES: It's one of the reasons of course that the Sydney-Melbourne air route is one of the busiest in the world. It's because of those inter-firm connections.

SIR ROD EDDINGTON: Spot on Peter, and when we think about inter-city links we naturally think about Sydney-Melbourne and Sydney-Brisbane. We also need to think about Geelong-Melbourne and Bendigo-Melbourne and Ballarat-Melbourne. We need to think about Wollongong and Sydney and Newcastle and Sydney.

PETER MARES: Let me put this to you though Jane-Frances, we're living in a world of brand new technologies, smartphones, etc. etc. the NBN is on its way. We don't need to get together face-to-face anymore, do we?

JANE-FRANCES KELLY: I suppose my answer to that is that we are still social animals, we'll always remain human. I think that digital connectivity as it increases will change our travel habits, but we will always need to travel around the city. Whilst people will be able to do some work at home, for example, there will always be times when people prefer to come face-to-face, and that's just because of the kinds of animals we are. So at this point I'll wave to the people who are watching on the stream on the web and so on, but also note how many people there are in the room. Possibly when the NBN, or whatever happens, comes and we have amazingly good telepresence then some people will sit at home and talk about it, but there is a fundamental need among humans to come together and to work face-to-face and I don't know how we're going to propagate the species if we stop doing that.

PETER MARES: Another quick question to both of you before I invite questions from the floor. Sir Rod, you use this great image "Lions kill in the cities and the whole country feeds". I think there'd be a few people in Western Australia and Queensland who might say "Hang on a minute, the lions kill in the mines, in the resources sector and those people in the cities, they're the ones who are feeding off us?".

SIR ROD EDDINGTON: Both are true. Go to Western Australia, go to the Pilbara. I took the Australian Infrastructure Council up to the Pilbara for three days late last year. I used to go there a lot when I was on the board of Rio Tinto. I truly understand how important the Pilbara is to the Australian economy, let alone the West Australian economy. So making the right infrastructure investments in the Pilbara and its equivalents around the country really matter. That's why I said you can't forget regions, you can't forget rural Australia.

But the other interesting thing about that is that Western Australia's capital Perth, which is a long way south of the Pilbara, is increasingly becoming a globally recognised centre for mining services. So there are many people who live and work in Perth in mining services. You go to the university where I did engineering – it's ancient history really in a sense, I was there as an undergraduate in the late '60s, a million years ago – but the university is doing a lot of research around mining, it's high tech research. You'll find a number of big mining companies from other parts of the world now have substantial headquarters in Perth to feed off the mining services industry and the thinking around it. So the Pilbara has a profound influence on Perth and Perth has a profound influence in the Pilbara. They're part of the same story. My point is, it's not just enough for the Pilbara to work, as important as that is, the cities have to work as well.



PETER MARES: Do you want to add to that Jane-Frances?

JANE-FRANCES KELLY: Yes, that's absolutely right. We were really struck when the RBA released a report a couple of months ago that said that about half the jobs in mining were actually in cities and also about, as you mentioned, the high tech research. There's a lot of knowledge-intensive jobs in mining as well.

SIR ROD EDDINGTON: I went to the most recent CHOGM, which was in Perth, and I was struck by how many people were there to talk about mining, businessmen and women. I was struck by the fact that they came from all over the world. There were people from Singapore and Nigeria as well as people from Sydney and Melbourne and the Pilbara and there were people obviously from Queensland too. So Perth is increasingly a mining services centre, not just for the Pilbara but for global thinking around new technologies in mining, a lot of research about new extraction techniques, remote drilling. So if you go up to the Pilbara and you look at these trains with 230 carriages each carrying 100 tons of iron ore from a mine 300km from the coast to the port, three engines pulling and two pushing and not a person to be seen because the person driving it is sitting in Perth in a room controlling it remotely. Remote drilling, they're doing some work at the moment on remote trucks. So there's a whole range of technologies that are being developed and they're being developed in Perth for use in the Pilbara.

JANE-FRANCES KELLY: What's great about it is there's all these economists who said "It's ideas or resources and you can't have both". It's like, we've got both. It's like The Beatles and the Rolling Stones, in the real world you get to have both.

PETER MARES: I will now open questions to the audience. Just briefly state who you are and a quick question please.

AUDIENCE: It's nice to see geography centre stage for once. The question is, sea port expansion, big issue in Victoria. Where would you put your money: Hastings with the Libs or Corio Bay with the ALP?

PETER MARES: I think I failed to say in my introduction of course that Sir Rod is also the Chairman of Infrastructure Australia, so his job is to look at, analyse and prioritise infrastructure projects and decide which ones should get government money. I just want to make that clear.

SIR ROD EDDINGTON: It's a good question, but it's not an easy one to answer. The first thing I'd say is that the current Port of Melbourne is really important to us, so the real question is firstly do we make the most of the current Port of Melbourne and what does that mean for things like Webb Dock expansion? One of the reasons the current Port of Melbourne is important to us is it's there, it's invested in already, but also much of what comes in and out of Melbourne in containers particularly is actually going to places that aren't that far from where the port is, so it has those advantages. Its disadvantage is that it doesn't have great rail links and the trucks that come with it provide congestion. There's another challenge, a recent one, which is as the Docklands become gentrified, if I can use that word, historically Docklands were just that, but if you look at the residential development in Docklands which I see as the expansion of the inner city, to what extent are apartment blocks and office blocks compatible with containers being loaded, unloaded at all hours of the day and night? There are real challenges there. Notwithstanding, the single most important priority is to make the most of what we have.

The next question is: where do you go from there apart from the Webb Dock expansion? My own view is that there's quite a bit of evidentially-based work that needs to be done before you can think about that. There's talk about another big port in Port Philip Bay, but you need to really understand the geology of the seabed because some of the places that have been suggested may well have some hard rock issues, so how do you get that hard rock out of the way? Because one of the things that's happening is that the ships that come into the port are getting bigger and bigger, and you'll remember the fuss around channel deepening that happened because the container ships got bigger and bigger. So why did that matter to us? Well, as container ships get bigger they'll make fewer calls at Australian ports. They're not going to go to Cairns, Brisbane, Sydney, Melbourne, Hobart, Adelaide and Perth. They'll only go to one or two of the big ports and then from there the feeder container ships, the smaller ships, will go. So

Melbourne port is the biggest port in the country, it's responsible for about a third of our traffic, it's really important not only to the Victorian economy but to the South Australian economy, to the economy of southern New South Wales and the economy of Tasmania. So it's really important that we have expansion capacity.

So now you're into a debate, as I said, about whether or not the expansion over and above Webb Dock is somewhere else in Port Philip Bay, or do you go outside to a deep water port in a place like Hastings? Hastings is much discussed. I think the thing around Hastings, from the limited work I've done on it because the East-West Study didn't look at these issues in great detail, as important as they are, because we were interested in the east-west corridor, that's what we were asked to do. The challenge around Hastings I think is primarily around service access, around the road and rail links you'd need to build to make it an integrated transport network and there's no easy answer to that. So you need to do a lot of evidentially-based work, you need to understand economics, ship size, cargo flows, geology, all of these things, and you're going to make some big calls because wherever you go the price tag is billions of dollars, maybe tens of billions of dollars.

PETER MARES: Okay, we need to take another question. We had a lady just here in the middle, thank you.

AUDIENCE: Thank you. I've got two quick questions if I may? One is how are the recommendations that suggest moving highly skilled people from outer suburbs to middle and inner-ring suburbs not going to push up house prices and widen the gap between inner and middle-ring suburbs and the outer suburbs? So that's the first question. The second question is about considering those things that have worked and those things that are emerging in the outer suburbs, rather than focusing on what hasn't worked. So for example, in Melbourne University Hill Monash, in Sydney Norwest, and emerging co-worker centres around the world in terms of high tech.

PETER MARES: Jane-Frances?

JANE-FRANCES KELLY: I'll make sure I understand correctly, we talk about moving people from outer suburbs further in. Obviously all of this happens in a context of population growth because that's what we're expecting in Australia. What we are recommending is that people are able to make the choices that they want to make which include different types of housing in middle suburbs as well as outer suburbs. What will happen with house prices? I have no crystal ball more generally in the economy, but there is a strong argument that one of the reasons that they have been as high as they are across the city is because there is a structural undersupply and we spoke, again in the report a couple of years ago, about the reasons for that, all of the disincentives that developers face. So we are arguing that those disincentives are addressed so that more housing can be built. I'm not sure what the total effect on house prices would be, but I'm not sure that it would be to increase them.

I did speak about the natural jobs growth that can be expected in outer suburbs. What we did was take a look at the evidence for programs where firms have been offered incentives to move from one part of the city to another and the evidence says that they don't work because firms who decide to locate in the centre of a city do that because they know how valuable it is for them to be in the centre of the city. So there are some jobs which need to be in the centre of the city, the economy is not completely agnostic about where certain things locate. And so what we've said is that the evidence says that trying to locate things which naturally should be in the centre of the city, trying to put them in the outer suburbs won't work.

SIR ROD EDDINGTON: Jane-Frances spoke about three things. The first is, move the jobs to where the people are, and the evidence suggests that doesn't work. So if you say to Mike Smith who runs the ANZ Bank "You've got to move 10 miles out of the city" he'll probably say "Well, I'll go to Sydney or Singapore". I can't speak for Mike, but you can't assume you can force businesses to move their economic activity away from the very organisations they want to be close to. Some of that will happen naturally, but you can't force it. The second is you move the people into the inner city, and we've seen some of that because there are now substantial residential high-rise buildings in the inner city, and you can argue the pros and cons of that.

The third for me is the most important, which is to say “Are our transport links good enough so that if you live 20km from the inner city you can still get there at reasonable cost and reasonable time and therefore have access to all the jobs that are there?” Not just the jobs in the buildings, but if you’re a student who wants to go to RMIT or Melbourne University and do a course there rather than Monash or Swinburne or wherever, you can get there. I think ensuring that we’ve got the transport links that allow people to live in an area that they choose and hopefully have as many options from a work viewpoint as possible, that’s the single most important thing we can do. They all matter, but I think if you can deliver that history suggests you will have really had a win.

PETER MARES: Okay, we have a question here, thank you.

AUDIENCE: Regional-siders have a perspective on cities that suggests that over time there are self-adjusting mechanisms in terms of the relationship between where jobs are and where people live and there is overwhelming evidence that that happens in major metro regions with the development of multi-centred cities. In Australia the work that Bill Mitchell and I have done, people like Kevin O’Connor have done, over many years shows that there are distinct labour market regions that have emerged in our major cities. You take the metro region of Sydney, there are seven distinct labour markets and six in Melbourne. I’m not at all convinced that we have all that big a problem. I think that already within those areas and these labour market regions within them upwards of 70% of people live and work within the same region. So I think the sorts of things that are happening through the evolution from self-adjusting mechanisms are in fact overcoming a lot of the problems.

SIR ROD EDDINGTON: A lot of people who live in cities that are much more congested than ours might say “What’s all the fuss about?” because Melbourne is after all the world’s most liveable city, and that’s not something we should be arrogant about, beware Hubris. I think the question is, it’s only by examining the sort of issues we’re discussing tonight that we ensure that that remains true, because I think the downside of resting on our laurels is that slowly things will get a little bit worse every year; it’ll take you another minute or two to get to work or the train that you used to be able to catch goes past the station because it’s full or it used to take you 35 minutes to drive to work, it now takes you 40 and then 45 and then 50. I think the cities that have worked best and made the most of their opportunities – and I lived in one – it was Hong Kong, and Singapore is another. Those cities that have their challenges but there’s been very far-sighted thinking around the sort of infrastructure they put in place which has meant that they continue to be competitive. So I agree, I think we’re in a pretty good space but I’d hate people to be sitting here in 20, 30 years’ time saying “They sat on their hands, they did nothing and guess what? Life’s not as good as it should be”.

PETER MARES: Can we have the young gentleman here?

AUDIENCE: Considering everything that we’ve talked about tonight about linking jobs and people and congestion and the issues with that, and your quite poignant experience of Asian countries who aren’t investing in the long-term of the city. If you had to choose one infrastructure project at the moment to really alleviate some of that, would that be an East-West tunnel or would that be a metro rail package? Choose one.

PETER MARES: I knew this question would get asked. Sir Rod, over to you.

SIR ROD EDDINGTON: Well, in the East-West Report, and a couple of the team members are in the room tonight with me, I think the key issue is it should be evidentially-based. One of the things we tried to do in the report was to be modally agnostic. Sometimes people will say to you “I’m a train nut so whatever the problem is, build a railway line” others will say “I’m a road nut so whatever the problem is, build a road”. My view is you look at the journeys that matter, you look at the community and economic consequences of them, you look at the different solutions and you go with the one that makes the most sense for that particular problem. Economic and physical geographies are unique to every city, so what works in one place doesn’t necessarily work in another, albeit there are some lessons to be learned. I think three of the major things that I and the team who worked on the East-West Study did – and remember, that was six years

ago now and also remember we looked at one part of the greater Melbourne jigsaw, the east-west. There are other challenges, north-south, so you have to look at the whole thing. One of the things I said to the then Premier John Brumby when we presented the report was “Look, we’ve looked at pieces of the jigsaw. You need to look at the whole jigsaw before you can come up with priorities”.

I tried not to be too prescriptive about priorities because at the end of the day that’s what governments are elected to decide. I wasn’t elected. I did the East-West Report with that terrific team as an advisor and I offered my advice. Advisors advise and governments decide, that’s how democracies work, and so it’s up to the government of the day to decide what its priorities are. But I have to say, the greatest priority I thought when I looked at the east-west challenge in Melbourne funnily enough was neither. It was these vast housing estates out to the west where people had no chance to get either to jobs in the inner city or to the universities and schools in the inner city because if they couldn’t drive effectively over the Westgate or drive to work they couldn’t get there. So I actually think the single most important priority was what the Brumby government initiated and Premier Baillieu has continued with vigour, which is to build better heavy rail networks to the west, particularly because it provides rail access to the inner city to people who live in those big areas and it provides much better links to Ballarat, Geelong and Bendigo to the inner city and all that entails. So it wasn’t for me to decide what the priorities are, it was for the elected government of the day. But I wouldn’t disagree for a moment about what John Brumby and his government’s priorities were, nor the excellent focus that the current government, albeit of a different persuasion, have given to that particular project.

As to the two projects you’ve talked about, my view is quite simple: it’s not either or. Over a 30 year timescale you’ve got to do both. As Melbourne gets bigger we need an urban rail network to support the suburban rail network we have and you ultimately have to confront the fact that, just as the Domain and Burnley tunnels south of the inner city provide much better connectivity, you need similar linkages to the north. And as the East Link is added to Mornington Peninsula Bypass the traffic that flows on that line will get greater, so you’ve got to do both. The warning on these things is retrofitting infrastructure of any sort, particularly transport infrastructure, to a thriving, successful, vibrant city is expensive and it’s disruptive. So you’ve got to take a long-term planning horizon and you have to be prepared to accept both. If it’s going to be expensive and disruptive then you’d better do your sums carefully in advance. One of the things I think Infrastructure Australia tries to do, and I believe governments around the country are increasingly focused on, is not to build bridges over puddles and roads to nowhere in marginal electorates during an election campaign. I think governments of all persuasions are becoming much more focused on understanding the evidence and making the right call, and I see that as a thoroughly good thing. It might not happen as quickly as some would like, but I think the quality of the debate around these projects is much better than it was.

PETER MARES: I know we’ve got questions waiting and I’m very sorry that we do have to wind up on time so I can’t take any more questions. I want to remind you that the report *Productive cities* is available on the Grattan Institute website together with all those maps. And just a final word from Jane-Frances.

JANE-FRANCES KELLY: I just wanted to thank all of the people who’ve worked on this report – Jordana Hunter, Matthew Oberklaid, Michael O’Toole - who has moved to Scotland since this - Cameron Harrison, but most of all my co-author Peter Mares. We’re unfortunately losing Peter from the Grattan Institute to do better things. This is his last public experience of doing “the orange thing” as we call it at Grattan. He’ll be much missed, so thank you very much.

PETER MARES: Thank you. And thank you very much to Sir Rod for taking part in this. Thank you all for coming and please, go to the [Grattan website](#), download the [report](#) and have a read. Thank you.

End of recording