
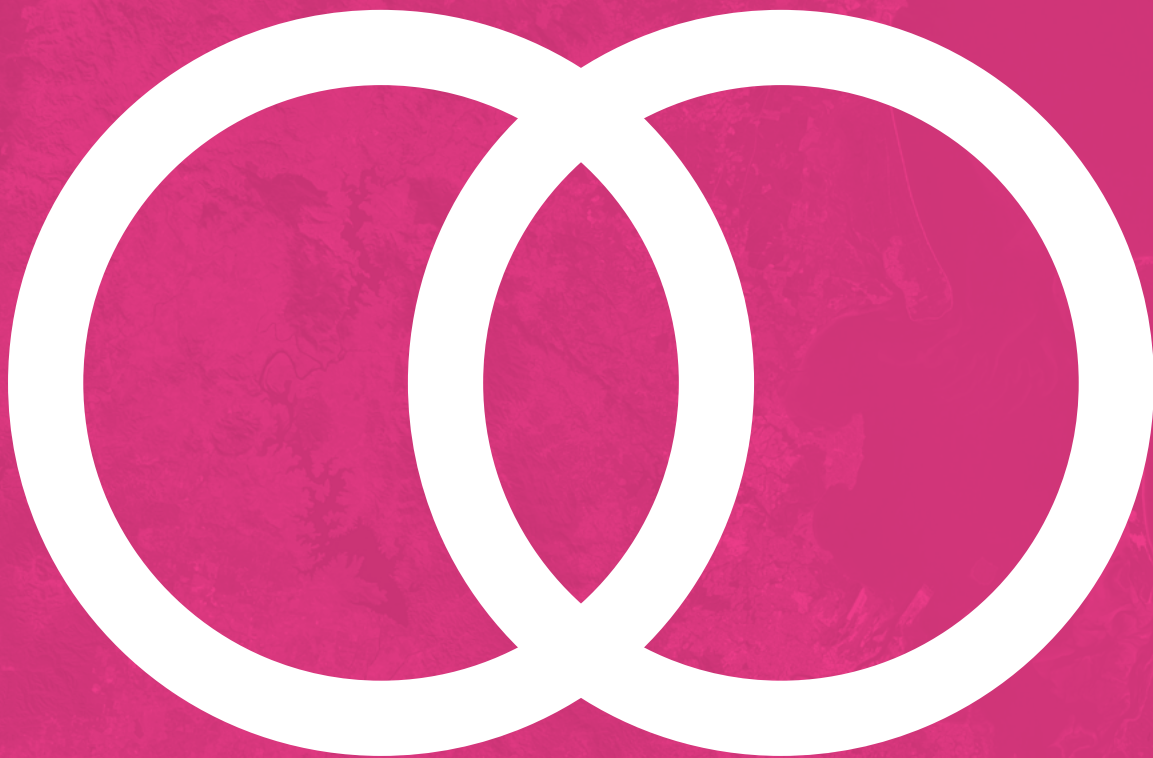


**WITHOUT
LIMITS**

SEQ2040 
GROWING BETTER



PAPER 5
A CONNECTED REGION

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AECOM

FAST TRANSPORT AND FAST INTERNET. EFFICIENT CONNECTIONS ARE CRITICAL IN A REGION AS DISPERSED AS SEQ. HOW CAN WE CREATE BETTER AND FASTER CONNECTIONS IN OUR REGION WHEN IT COMES TO TRANSPORT AND TECHNOLOGY?



01

THE CONTEXT

The South East Queensland (SEQ) region is highly dispersed and relies heavily on private vehicle transport for most travel journeys. Private transport accounts for 70% of all journeys across SEQ, compared to 10% by public transport. Indeed, Brisbane's commute times have increased at a faster rate over the 15-year period up to 2017 than Sydney, Melbourne, Adelaide, and Perth ([HILDA Survey](#)). Add to this a predicted population growth of 1.9 million people across SEQ over the next 20 years, which will translate to 1 million new jobs and 800,000 new dwellings, it becomes clear that regional connectivity is critical for our liveability and productivity.

Connectivity refers to *accessibility*. Accessibility to goods, services, and employment at the local, sub-regional, and regional level. The SEQ region faces a challenge because it is growing rapidly, but its accessibility is not as efficient as it could be – and that needs to change.

Understanding where people will live, work and travel, needs to be guided by sound policy and practice. The '45-minute region' championed in [TransformingSEQ](#) provides the basis for this, aligning all levels of government planning and helping to optimise the regional transport network. But we also need to qualify the limitations and metrics of this approach, as not all journeys will be 45 minutes across the region, or will need to be in the future. Gaps and under-capacity exist across the SEQ metro transport systems, and we need to qualify these to manage community expectations and inform policy.

Coronavirus has given the global and local transport system a serious jolt. The initial post-lockdown phase, has seen us travel less, and working from home has become the new normal. Significant falls in regional public and private travel patterns have reduced congestion and hit public transit revenues. As we move into recovery of the pandemic response, there will be dilemmas for travel behaviours, transport systems, and decision-makers:

To what degree will working from home persist?

What will be the real medium- to long-term impact of working from home on public transit systems and road usage?

Can we repurpose underutilised road space for rapidly rising active transit?

As federal, state, and local governments roll out transport-based stimulus projects, what added value can these bring to build physical, social and economic resilience and community wellbeing?

The debate around these issues is related to our aspiration for a 45-minute region. While work-related journeys make up the lion's share of travel patterns and the current 'connection' is an internet link to company operating systems, we cannot separate the role of technology and digital platforms.

We must understand how better mobility for people, goods, and services should inform land use, transport policy, projects, and sequencing of infrastructure commitments. The concept of 'movement and place' as a core policy directive has helped inform better integrated thinking and outcomes in NSW and Victoria.

We propose informed transport and technology policy and innovative project delivery to ensure the region *grows better*.

OUR GOAL FOR REGIONAL CONNECTIVITY IS TO ENABLE RESIDENTS TO ACCESS A RANGE OF ESSENTIAL SERVICES AND DAILY NEEDS WITHIN 30 MINUTES AND HAVE EASY ACCESS TO HIGH-QUALITY JOBS, KEY ECONOMIC CLUSTERS, AND SIGNIFICANT LIFESTYLE OPPORTUNITIES WITHIN 45 MINUTES.

02

THE CHALLENGE

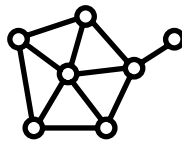
Creating a connected region is complex and challenging – but not insurmountable. We have outlined three key challenges and our propositions for change. We show how we need an integrated response if we are to create significant social and economic benefits for the region.



REVERSING A JOBS-HOUSING IMBALANCE



BUILDING A RAIL RENAISSANCE



CREATING A SMART CONNECTED REGION



REVERSING A JOBS-HOUSING IMBALANCE

Our current regional jobs-housing imbalance creates long commute times and heavy congestion across SEQ. Estimates of employed resident growth show that more people are expected to move to the regional fringe where they can purchase affordable housing but where there is a dearth of employment (see figure 1).

The inevitable result is a perpetuation of longer travel times and potential congestion. Unless, of course, the trend can be reversed with a combination of improved transport systems and newly located employment uses closer to where people live.

Figure 1: Forecast growth in employed residents in SEQ2040 (2016-2041)

	Employed residents in the locality (a)				Employed residents finding work in the same locality (a)				% Share of new resident employment absorbed locally (2016-2041)
	2016	2041	employed residents in the locality (2016-2041)	%Growth (2016-2041)	2016	2041	employed residents finding employment	%Growth (2016-2041)	
Toowoomba	62,532	84,706	22,174	35	54,975	74,360	19,385	35	87
Lockyer	16,853	27,197	10,344	61	9,861	14,890	5,029	51	49
Somerset	9,832	15,613	5,781	59	5,384	7,419	2,035	38	35
Ipswich	87,848	288,006	200,158	228	46,763	109,921	63,158	135	32
Scenic Rim	17,867	30,336	12,469	70	10,885	16,908	6,023	55	48
Logan	143,283	259,892	116,609	81	63,998	110,544	46,546	73	40
Brisbane	625,164	793,271	168,107	27	558,220	718,045	159,825	29	95
Noosa	22,650	26,712	4,062	18	15,773	19,637	3,864	24	95
Sunshine Coast	130,952	222,047	91,095	70	108,685	181,845	73,160	67	80
Moreton Bay	196,806	308,407	111,601	57	100,308	156,499	56,191	56	50
Redland	73,234	89,176	15,942	22	35,539	47,440	11,901	33	75
Gold Coast	277,825	483,255	205,430	74	228,608	392,188	163,580	72	80
SEQ	1,664,846	2,628,618	963,772	58	1,623,806	2,565,661	941,855	58	98

Source: Queensland Treasury Regional Employment Projections – 2010-2011 to 2040-41

Four of the six SEQ local government areas predicted to have the fastest population growth between 2016 and 2041 are located at the southern and western fringe of the region. Logan (2.53% p.a.), Ipswich (3.89% p.a.), Scenic Rim (3.06% p.a.) and Somerset (2.5% p.a.) will outperform the 1.77% p.a SEQ average ([Shaping SEQ](#)). These locations will also have the lowest share of resident employment growth absorbed in their own locality. What they need is a combination of improved transport accessibility and targeted employment growth.

Regional transport planning focused on getting people to employment locations efficiently and safely makes perfect sense. But that might be modified if the land-use solution attempts to bring work and home closer together (see [paper 4 – Economy of the Future](#) link in this series).

Successive metropolitan plans for Sydney have begun to address this issue, building new employment and supporting infrastructure in the western suburbs and stemming the daily movement of tens of thousands of Sydneysiders who head east to work.

The Western Sydney City Deal's aim is to build a new metropolis around a second Sydney airport and deliver 200,000 jobs. This City Deal is driving long-term change, aligning three levels of government support to deliver a suite of projects and programs that bring work and home closer together. The SEQ City Deal could have the same catalysing effect without the need to build a new city – instead reinforcing existing satellite centres, and new and improved connectivity spines.



BUILDING A RAIL RENAISSANCE

THE SEQ PUBLIC TRANSIT SYSTEM CURRENTLY UNDERPERFORMS IN MODE SHARE COMPARED TO OTHER AUSTRALIAN CITY REGIONS.

This is partly to do with the sprawling nature of SEQ and the current capacity of the system, road- and rail-based – it is not as extensive. Frequency is lower in some areas, and so travel times are also longer than other cities. As a result, SEQ residents tend to prefer private travel. The Cross River Rail and Brisbane Metro projects are an attempt to address this issue and create improved local and sub-regional public transit.

WE HAVE A SKEWED SEQ INFRASTRUCTURE PIPELINE.

The vast majority of projects and financial commitments are road-based. Road infrastructure is critical to the region – it's how people and freight move efficiently, especially in the absence of any other mode – but Inland Rail and changing work patterns challenge how we prioritise our transport infrastructure. What if the two metro systems became the step-change to a rail renaissance for the region? A rail renaissance based upon a mix of light and heavy rail passenger routes and dedicated freight routes direct to the region's export hubs of the intermodal terminals, port, and airports?



CREATING A SMART CONNECTED REGION

A DIGITALLY CONNECTED REGION WITH HIGH ACCESSIBILITY, FAST CONNECTIVITY AND STORAGE CAN DELIVER MORE SUSTAINABILITY.

In the two challenges above, there is a concentration upon linking places of work and home and the role and reach of rail solutions; the missing nexus between these is digital technology. To be specific, the ability of the technology to help us make smarter decisions in how we choose to travel and work. This challenge is not exclusively about the role of autonomous vehicles or the use of sensors to help move people and goods but about how a digitally connected region can in fact create more sustainable liveability through travel choices, work choices and unlocking new innovative enterprise opportunities due to highly accessible and fast speed internet connectivity and storage.

The response to Coronavirus has demonstrated the benefits in remote work, online schooling and telehealth. But the region's digital access and speeds aren't as efficient as they could be. Sporadic coverage means limitations in the support of data-driven enterprises, regional economic clusters or an advanced manufacturing / robotics / aviation / aerospace industry.

There are several initiatives underway that provide hope. Queensland Government's 'Digital Projects Dashboard' allows you to view 122 projects valued at nearly \$1 billion. Many of these are in the health sector, but 16 are transport focused, including Building Information Modelling (BIM) data management, smart ticketing, flood assessment, and hazard perception testing. Additional research and development trials, including the Cooperative and Automated Vehicle Initiative, are underway. The recent Redlands Coast Smart Mobility trial – the RACQ Smart Shuttle, a joint initiative between RACQ and the Redlands City Council – is the state's first on-road autonomous vehicle trial. Sunshine Coast Council was the first Australian council to invest in an international submarine cable that will enable the fastest telecommunications connection from Australia to Asia.

A trio of Melbourne universities has instigated recent trials for superfast, terabits per second internet transmission, which suggest that optical fibre internet using micro-combs to send huge volumes of data is within our reach. We can extend the bandwidth using existing fibre connections – the commercial implications are huge, and we must ensure our region is at the forefront of micro-comb innovation.

03

OUR PROPOSITION

MULTIPLE CORRIDORS, CATALYSING AND CONNECTING NODES

The general dislocation of our employment centres and our major residential nodes demands a refocus. The emerging SEQ City Deal will provide a corridor solution, connecting the clusters and regional centres along the anticipated route of the Inland Rail project. It will connect the western edge of the region at Toowoomba to the Trade Coast, Port, and Airport. This logical approach requires significant alignment of land use and transport strategies so that transport and community infrastructure can be identified and prioritised in this corridor. Inland Rail is the unifying catalyst, but this will be augmented by upgrades on strategic roads, including Warrego, Cunningham, and Mt Lindesay Highways. Imagine if there was an enhanced passenger rail option to growth areas to complement these road upgrades?

This east-west corridor could be complemented by a north-south corridor, picking up the southern-most regional airport at Coolangatta and running north through the rapidly growing Gold Coast and beyond Brisbane, to Redlands, Moreton Bay and Maroochydore on the Sunshine Coast. The catalyst in this corridor could be a light and heavy rail system extension up to Brisbane and north to the Sunshine Coast. The private sector has, in part, already flagged this in the North Coast Connect project. But imagine if job-creating land uses at rail nodes were linked by frequent and rapid public transit services to link beaches and the hinterland. The developing micro-comb internet fibre connections and the scope for enhancing the northern economic clusters at Strathpine-Brendale-Petrie, North Lakes, Kawana, and the Northern Gateway is significant.

A REFOCUS FOR RAIL: A RAIL RENAISSANCE

Proposing a rail renaissance is controversial. Picking priorities is difficult, but we only have to look for inspiration to the renewed focus on heavy and light rail projects in Perth, Canberra and Sydney. These projects will continue to drive shifts in mode share to public transit and improved travel time journeys. Gold Coast Light Rail patronage (notwithstanding the impact of coronavirus) suggests that it works and could have been improved if the land-use strategies and public amenity enhancements along the corridor and at stations were better coordinated.

As outlined, the delivery of Cross River Rail and Brisbane Metro has already created some momentum. It is likely these projects will be highly successful when operational and a very visible feature in the urban landscape. Will we be brave enough to continue the rail renaissance and identify what the Grattan Report refers to as the best renovations that give real 'bang for buck'? Will we identify:

The local light rail connections that would connect significant activity generators in the region?

The sub-regional heavy rail connections that would improve connections between residential and economic nodes?

The regional heavy rail connections connecting the major regional centres and enabling more efficient freight movements.

Elements of these rail options have been the subject of review and debate. Potential extensions of both Brisbane Metro and Cross River Rail consider elements of the first two options, while current federal and private initiatives to explore fast rail solutions address some of the regional connections to Toowoomba, the Gold Coast, and the Sunshine Coast.

The key is to reignite debate and engage all levels of government and the private sector in reconsidering rail for the region. We recommend the exploration of utilising existing corridors more efficiently and repurposing road space for active transit and light rail options.

A TRULY SMART REGION

The [Grattan Report, Fast Train Fever \(2020\)](#) provided a sobering assessment of high speed and faster rail for Australia. Our regions "...have more pressing infrastructure needs than faster rail, including better internet connectivity and freight links". Faster internet connectivity is critical to connect our regional businesses and community better, domestically, and globally. There is so much activity occurring at local government level in the dash to improve internet speeds and deliver better local services via smart city strategies; it is often quite bewildering. There is an absence of a collective smart city–smart region strategy. [TransformingSEQ: The SEQ City Deal Proposition](#) refers to a 'Smart Digital Region' – leveraging technology to drive performance, embracing innovation and digital disruption, using data to drive new enterprise, and ensuring the region is competitive and attractive to new industries. We propose establishing a new data lake and sensor network, allowing data sharing. But it is not clear how the governance mechanism will make any of this happen in a coordinated manner.

Our proposition is simple. We want a regional smart city agreement across SEQ, where all the councils commit to working together to share insights and resources. If one council has better high fibre access and speeds than others, how could it help others to develop the same standard for the benefit of the region? We want aggregation by sharing resources, spreading risk, and creating a strategy will move the region from a series of multiple well-intentioned pilot projects to a potential powerhouse with significant competitive advantage. In [paper 1 - Leadership and Governance](#) we proposed that an SEQ Commission would better integrate regional infrastructure needs. A Commission would also provide the shared governance role for a smart region agreement.

THE BENEFITS OF CHANGE



Enhance regional accessibility, connecting housing and employment.

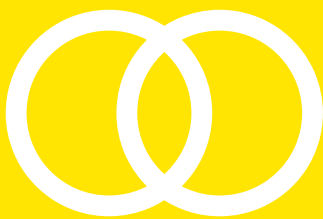


Enable and enhance the region's productivity by improving rail-based infrastructure.



Invest in and encourage digital innovation to unlock and support the regions existing and emerging enterprises.

We need strong government leadership and a willing and proactive private sector to achieve these recommendations. We want a move away from business-as-usual. The coronavirus pandemic continues to remind us that we need to be more resilient and has provided us with an opportunity to pause and use the moment to help the SEQ region *grow better*.



CALL TO ACTION

A MORE CONNECTED SEQ IS VITAL FOR THE RESILIENCE AND PROSPERITY OF OUR REGION. WHAT WILL YOU DO TODAY TO DRIVE THIS?



SOUTH EAST QUEENSLAND

PLANNING FOR A BRIGHT FUTURE

South East Queensland (SEQ) is estimated to grow to 5.3 million people by 2040. That will mean more people, new housing and additional jobs for the region. This growth will provide challenges and opportunities that require governments, industry and the community to come together now, so we can grow better.

Developed through internal workshops and 18 interviews with industry leaders, SEQ2040 – Growing Better explores Leadership and Governance, Water to Grow, Health & Wellbeing, the Economy of the Future, and the need for a more Connected Region. It examines the issues and provides propositions to address the challenges, de-risk them and create opportunities for a better, more liveable and productive region.

The initiatives we propose are shaped from listening to, learning from and synthesising a diverse range of perspectives and are built from commitments currently being considered by governments and industry which need to be recognised as real enablers for future change.

We want *SEQ2040 – Growing Better* to open a multi-faceted discussion about the future of the SEQ region, providing an opportunity to rethink our current course and future actions. Being bold, ambitious and strategic, with long-term integrated thinking. The time is now to question whether a different approach is required.

How can we shape the future of SEQ as a region that will *grow better*?

RECOMMENDATIONS



LEADERSHIP & GOVERNANCE

- Ambition
- Coordination
- Regional governance



WATER TO GROW

- Climate and resilience
- Health and wellbeing
- Economic potential



HEALTH & WELLBEING

- Prevention
- Integrated place-based approaches
- Economic and social imperative



ECONOMY OF THE FUTURE

- Competitive advantage
- Polycentric growth
- Commitment to integrated long-term thinking



CONNECTED REGION

- Resilience
- Connected living
- Smart investment synergies



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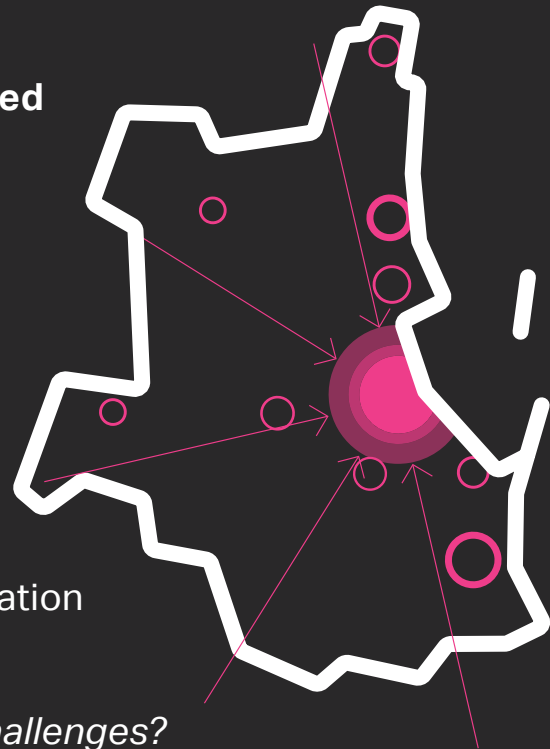
PRINCIPLES

With ambition, SEQ can learn valuable lessons from other places that have already experienced the challenges of reactive growth without change.

A broader regional perspective for SEQ can deliver a legacy of benefits at the regional scale.

This is the difference between just growing, or growing better.

NOW Centralised



Regional Concentration

Building Future Challenges?

GROWING BETTER

Ambitious Leadership & Governance

Integrated Longterm Thinking

Resilient Polycentric Growth

Community Legacy



CONCEPTUAL NETWORK



Polycentric Region

Resilient Legacy of a Connected & Integrated Regional Eco-System

WITHOUT LIMITS

Imagine it. Delivered.

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