

How will you
**Make
your
way?**

Enquiry by design workshop

17 June 2021

Sunshine Coast Mass Transit



How will you
**Make
your
way?**

Sunshine Coast Council vision

Bill Haddrill

Chief Strategy Officer
Sunshine Coast Council



Sunshine Coast

Setting the Scene:

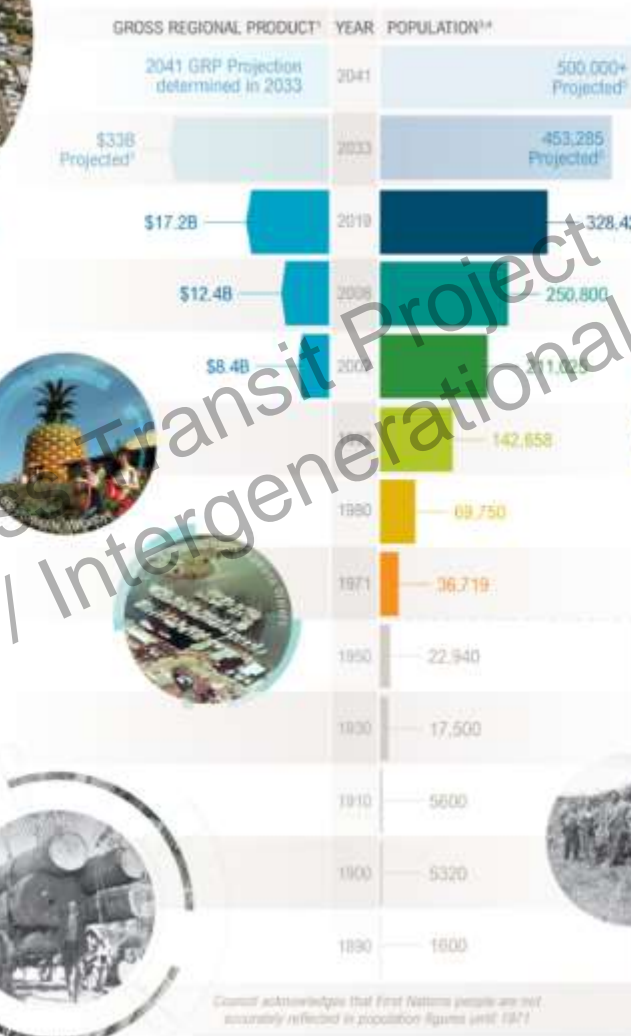
- Major urban and economic centre, and fast becoming and emerging city-region
- One of the largest economies of all local government regional areas in Australia
- Enviably natural environment and distinct landscapes underpin the Sunshine Coast way of life.
- Strong reputation as a lifestyle region
- Sunshine Coast is a much sought-after place to live, work and visit.



How will you
Make
your
way?



The Sunshine Coast's growth evolution



TRADITIONAL COUNTRY OF THE KABI KABI AND THE JINGARA PEOPLES

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¹ NIHR, 2019
² ABS Census
³ GRP, Queensland Government, Queensland Post and Present: 100 Years of Shaping Our Future, 1990, 2009
⁴ ABS GRP by local government area, 2019
⁵ Queensland Government population projections, 2018



Recurring community themes and values

- 'Community of communities'
- Lifestyle, sustainability and protection of significant landscape values
- Ensure 'balance'
- Opportunities for a more resilient economy, more jobs, and better infrastructure
- Manage growth sustainably, including avoiding the 'feel' of other urban metropolitan areas
- Infrastructure to support growth
- Strengthen 'connectivity' – digitally, spatially and physically

How will you
**Make
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way?**

Our Vision

- ▲ Our Vision: Australia's most sustainable region.
Healthy. Smart. Creative.

Our vision is supported by a number of long-term strategies that have been developed in consultation with the community. These regional strategies provide the key strategic objectives for Council and relevant stakeholders to deliver on the vision. The desired outcomes and objectives within these strategies set the broad framework for our Corporate Plan 2021-2025.



How will you
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Sunshine Coast Council
Advancing our region map

Sunshine Coast Biosphere
UNESCO Nomination
Celebrating our region,
our people and nature

Blue Heart
Sunshine Coast
5000 hectares (approx.)
sustainable, adaptive
floodplain management
and blue carbon offsets

Hospital
4600 jobs
\$1.8 billion
investment

Bruce Highway
\$1.6 billion
expansion and upgrade
First stage expected to
be complete by 2021

Beerwah East
50,000 residents
First stage development
forecast to be ready by
2027

Inter-urban Break
32,034 hectares
Protecting the Regional Inter-urban
Break in perpetuity to secure
environmental, production and
recreation values



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Airport
Completed 2020
2230 jobs
\$4.1 billion estimated
contribution to economy

International Broadband Network
\$927 million
forecast to Queensland economy
\$453 million
forecast to Sunshine Coast economy

Maroochydore
A world class city centre
More than 15,000 jobs
Forecast \$4.4 billion
contribution to economy

Palmview
\$3 billion
development (est)
Approximately 15,000 residents

Mass Transit solution
9000 jobs
Stage 1 forecast by 2027
\$3.6 billion contribution to economy

Aura Caloundra South
50,000 residents (est)
\$7 billion+ investment

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Our region.
Healthy. Smart. Creative.

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Lifestyle values

Table activity

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Lifestyle values

Follow the lead of your table facilitator. Share your views about:

What do you value most about your lifestyle on the Sunshine Coast?

Think about

- Ability to move around easily
- Environment
- Active lifestyle
- Accessibility to housing
- Entertainment
- Local jobs
- Services

Your table's responses will be pinned up so that everyone can peruse them over morning tea

How will you
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way?**

What's changed over the past 20 years?

Live polling activity



2001 – 2021: what's changed?

- John Howard is the Australian Prime Minister
- Nicole Kidman and Tom Cruise announced their split
- Mobile phones, streaming services
- Wikipedia, a free online user-generated encyclopedia site was launched
- Aussie sportsman Ian Thorpe becomes first swimmer to win six gold medals at a single World Championship
- September 11 attacks occurred in the US
- The Apple First Generation iPod was released
- The first Xbox was released
- First Harry Potter movie premieres
- NASA launches the Genesis spacecraft
- Australia's population went from 19.5M to 25M (+6M)



WIKIPEDIA
The Free Encyclopedia





2001 – 2021: what's changed on the Sunshine Coast?

Use your own smart phone or device and follow the prompts below

What is a significant transport-related change that has occurred during your time on the Sunshine Coast?

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Go to www.menti.com

- Enter the code: xxxx
- Click on the heart!

Challenges and opportunities

James Coutts

Program Director Urban Growth
Sunshine Coast Council

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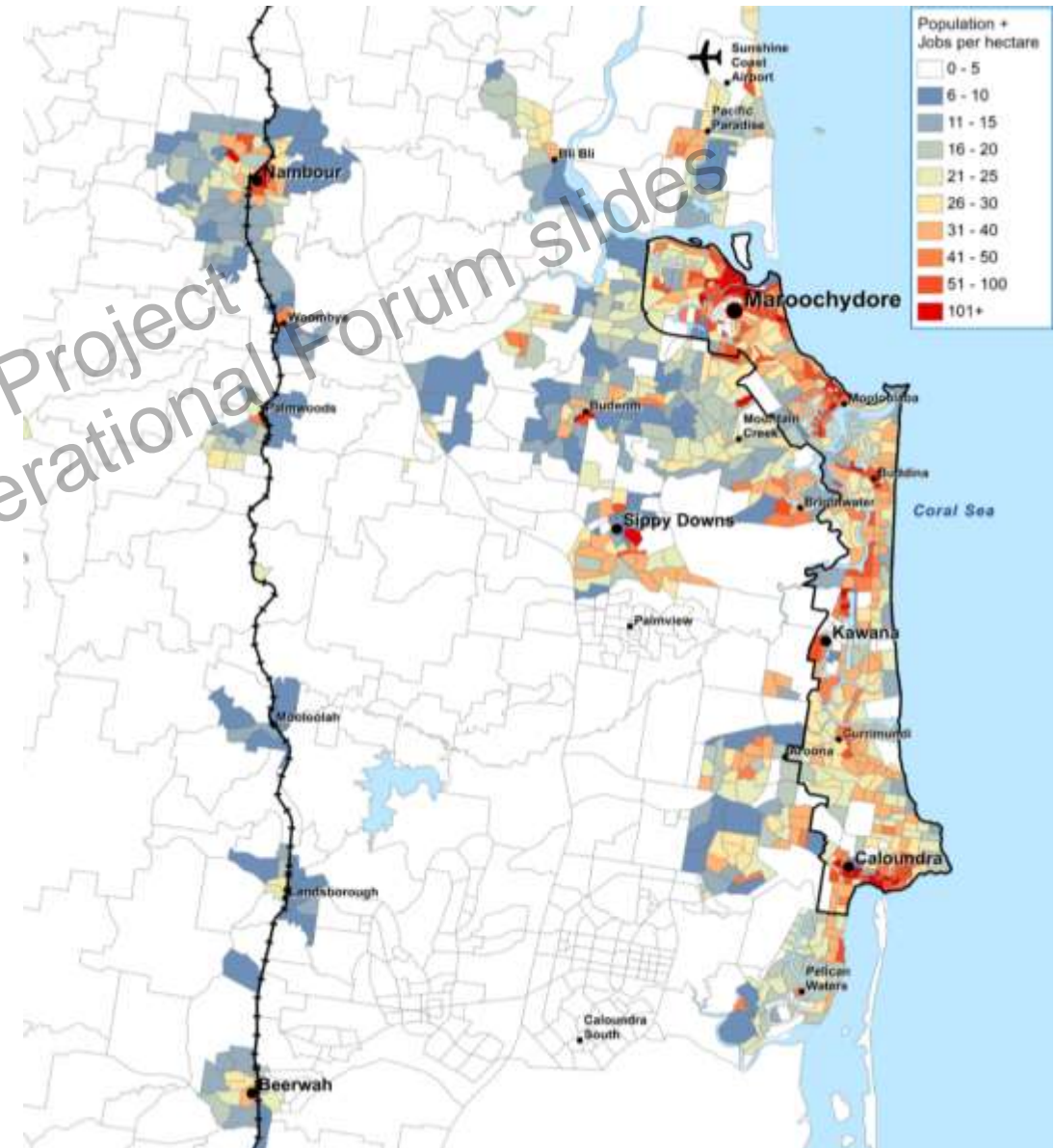
Challenge 1 Urban Expansion

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The Sunshine Coast local government area – a fast growing region

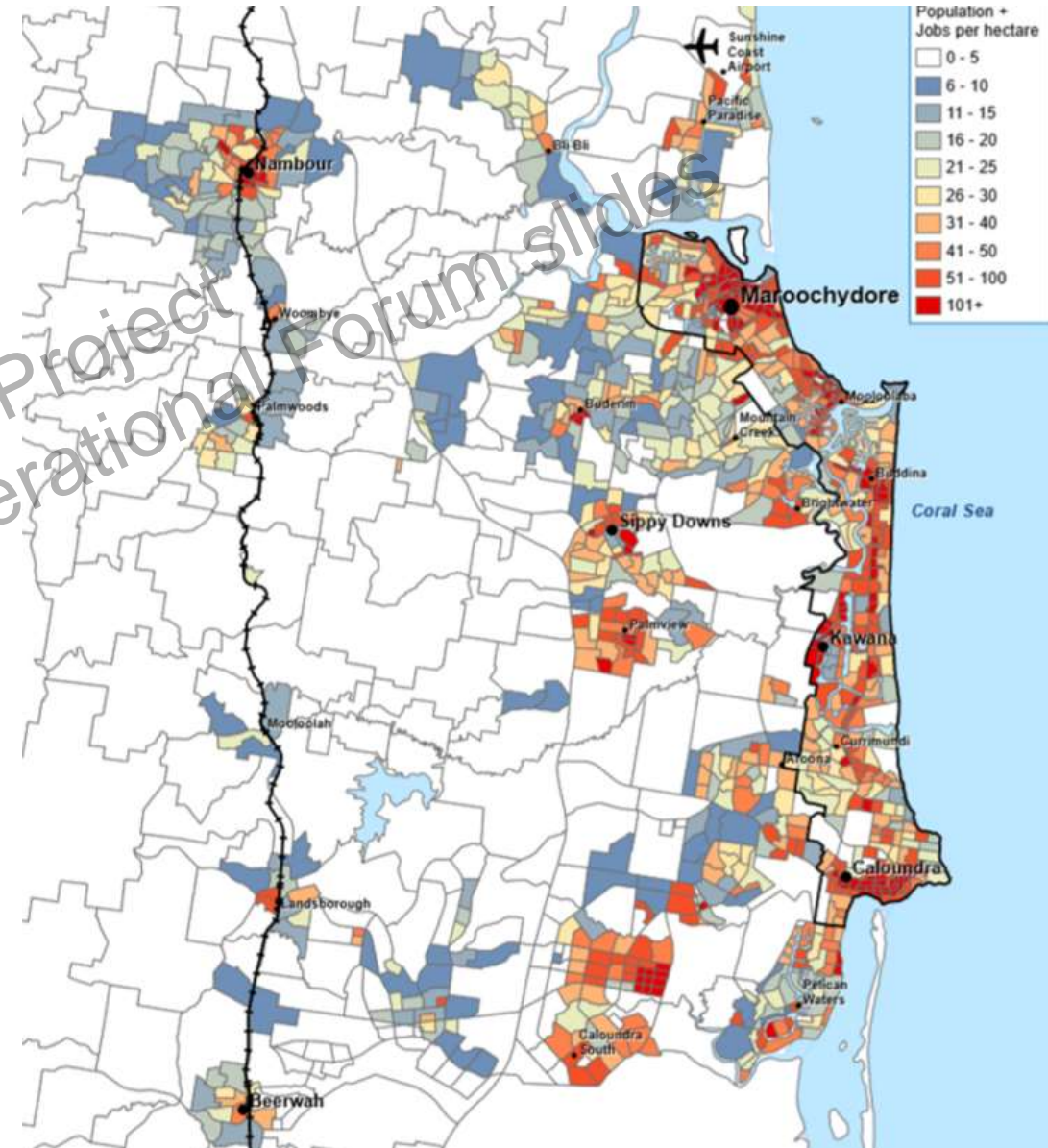
- Already the 5th largest local government area in Queensland and 9th largest in Australia
- Population of 303,000 in 2016 grew to 328,000 in 2019 – an annual increase of 8,300 or 2.6%
- Each year, around 33,000 people arrive on the Sunshine Coast and around 25,000 people leave
- QGSO projected growth rate 2018-2041 is 2.1% - population of 518,000 anticipated



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The Sunshine Coast local government area – a fast growing region

- Already the 5th largest local government area in Queensland and 9th largest in Australia
- Population of 303,000 in 2016 grew to 328,000 in 2019 – an annual increase of 8,300 or 2.6%
- Each year, around 33,000 people arrive on the Sunshine Coast and around 25,000 people leave
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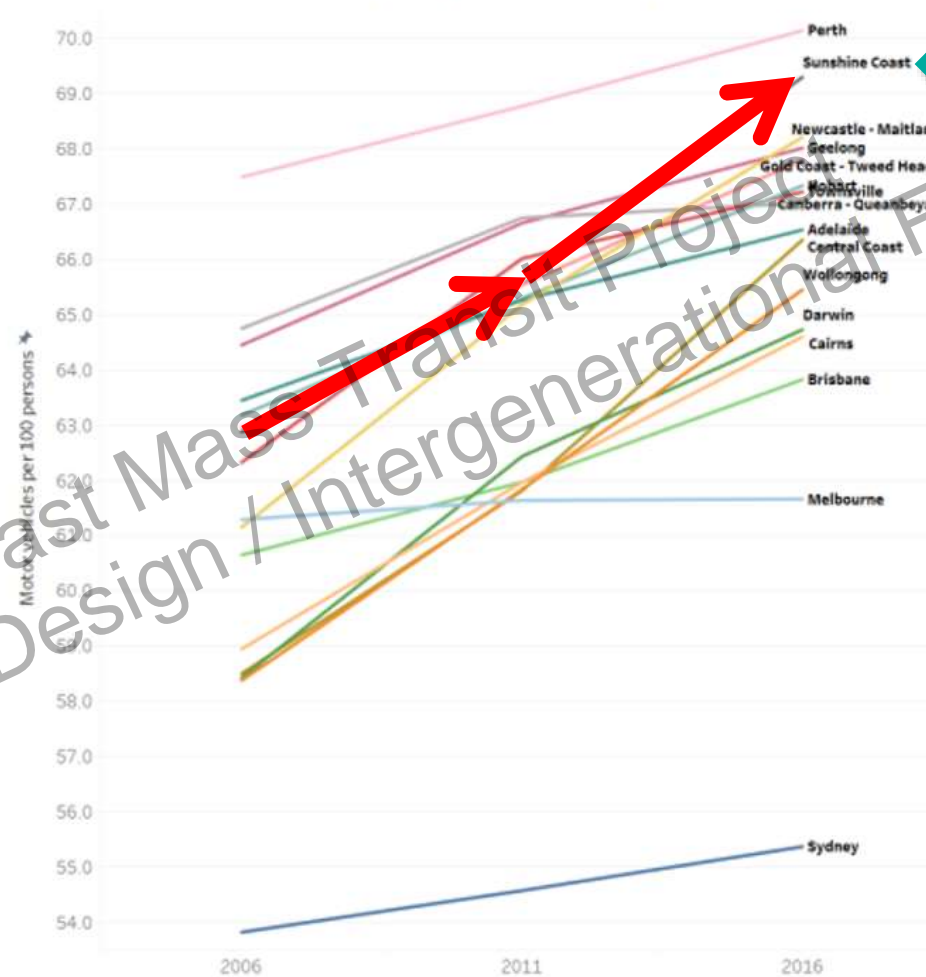
Challenge 2

High dependency on cars

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Sunshine Coast loves cars

Motor vehicles per 100 persons in private dwellings

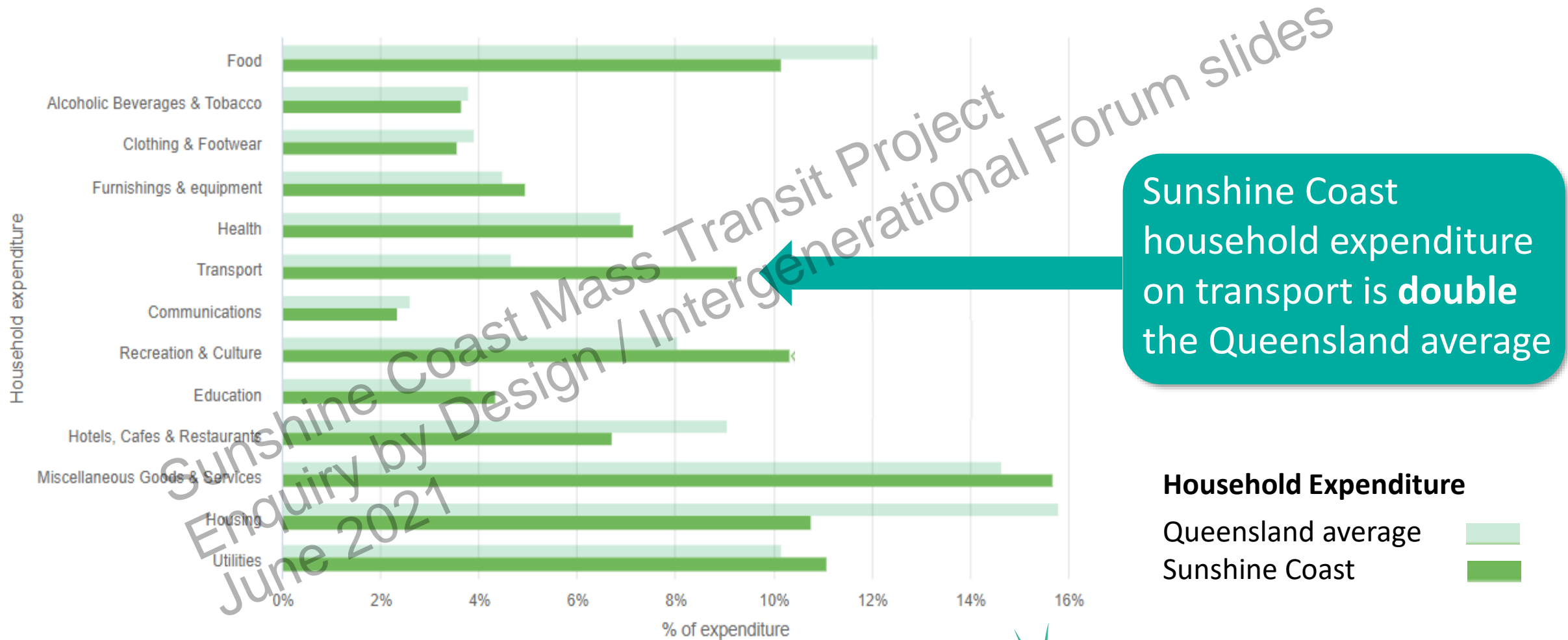


**Sunshine Coast
car ownership**

The number of motor vehicles per 100 persons in private dwellings has steadily increased since 2006-2011, and 2011-2016

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Implications of car use



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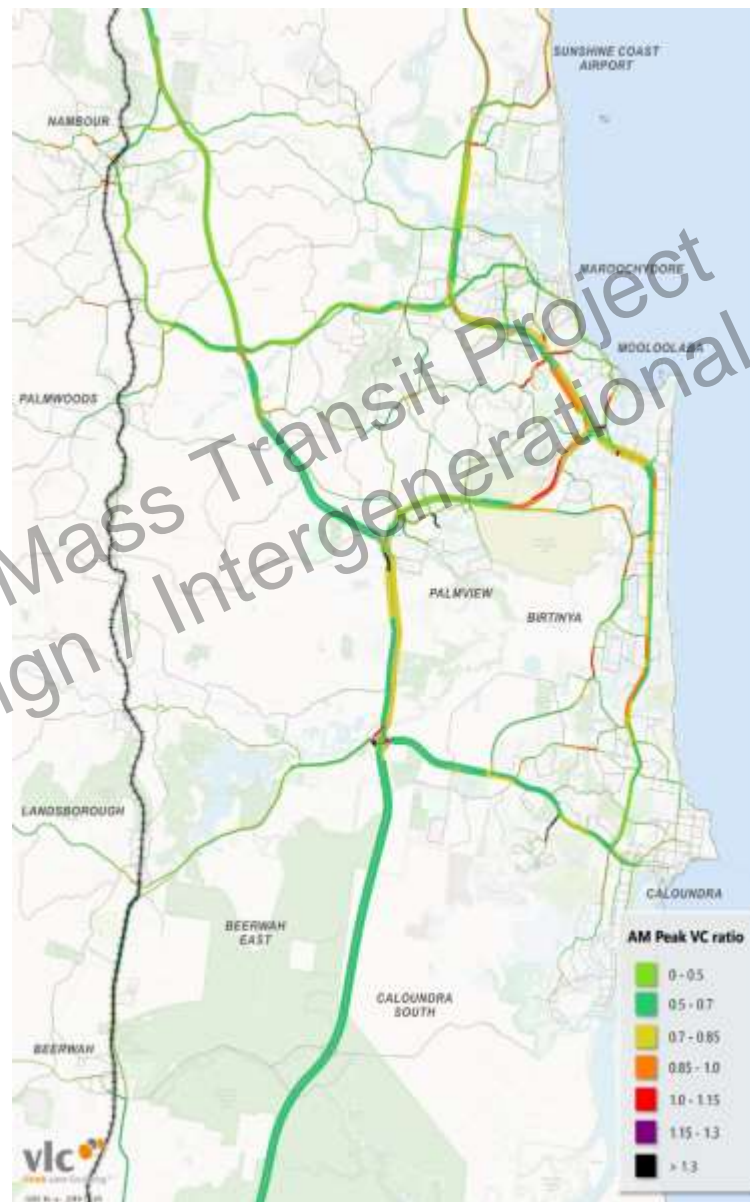
Challenge 3

Growing levels of congestion

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Project Need – Base case without the SCMT

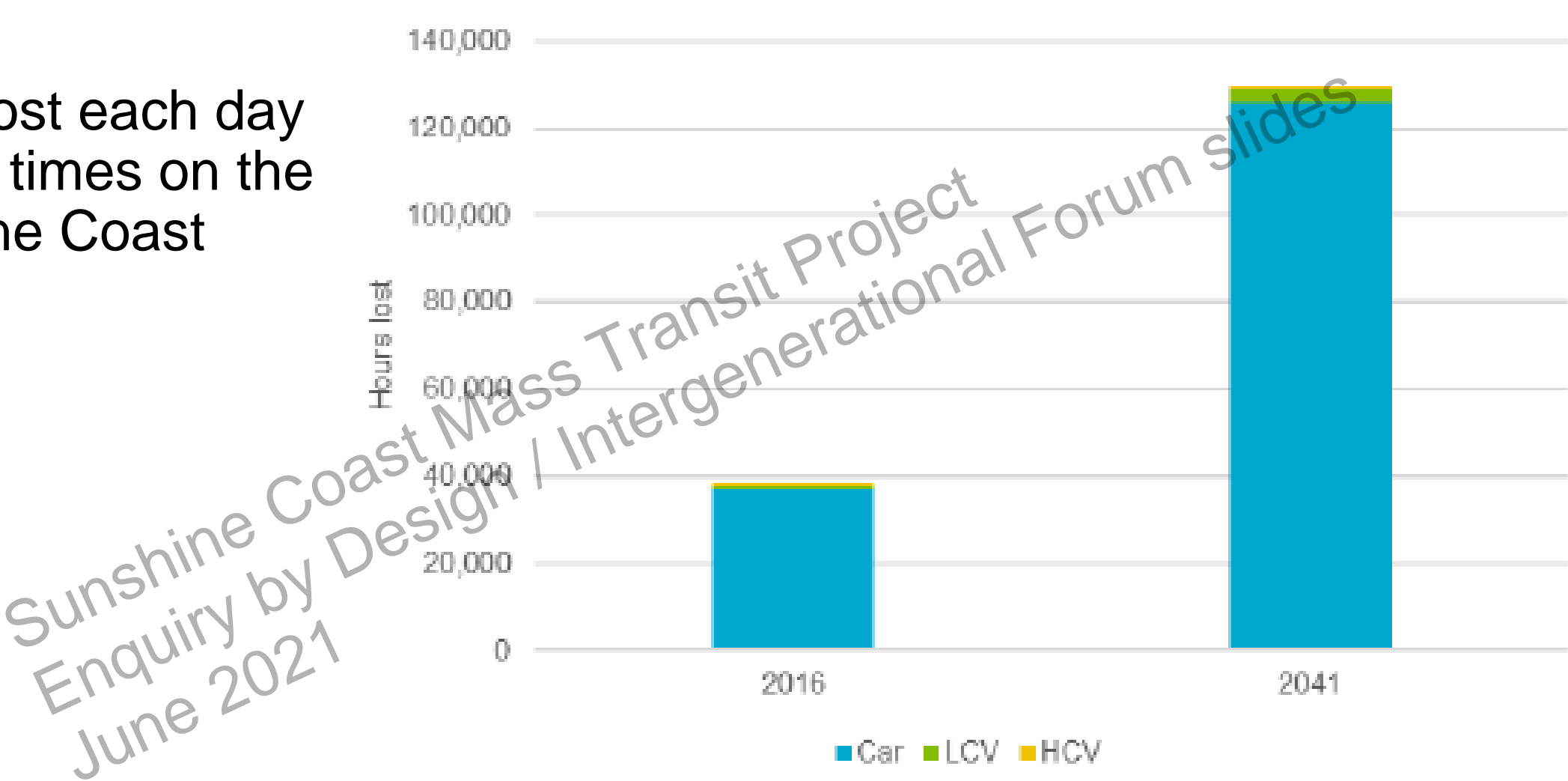
- From 2016 to 2041 without mass transit:
 - Over 50% increase in car trips from 1 to 1.52 million trips per day
 - +169% increase in vehicle hours delay within stage 1 corridor
 - Average car trip length increase from 8.6 to 9.2 km
- \$3B is the projected annual cost of congestion in 2041.





Congestion hours

Hours lost each day at peak times on the Sunshine Coast



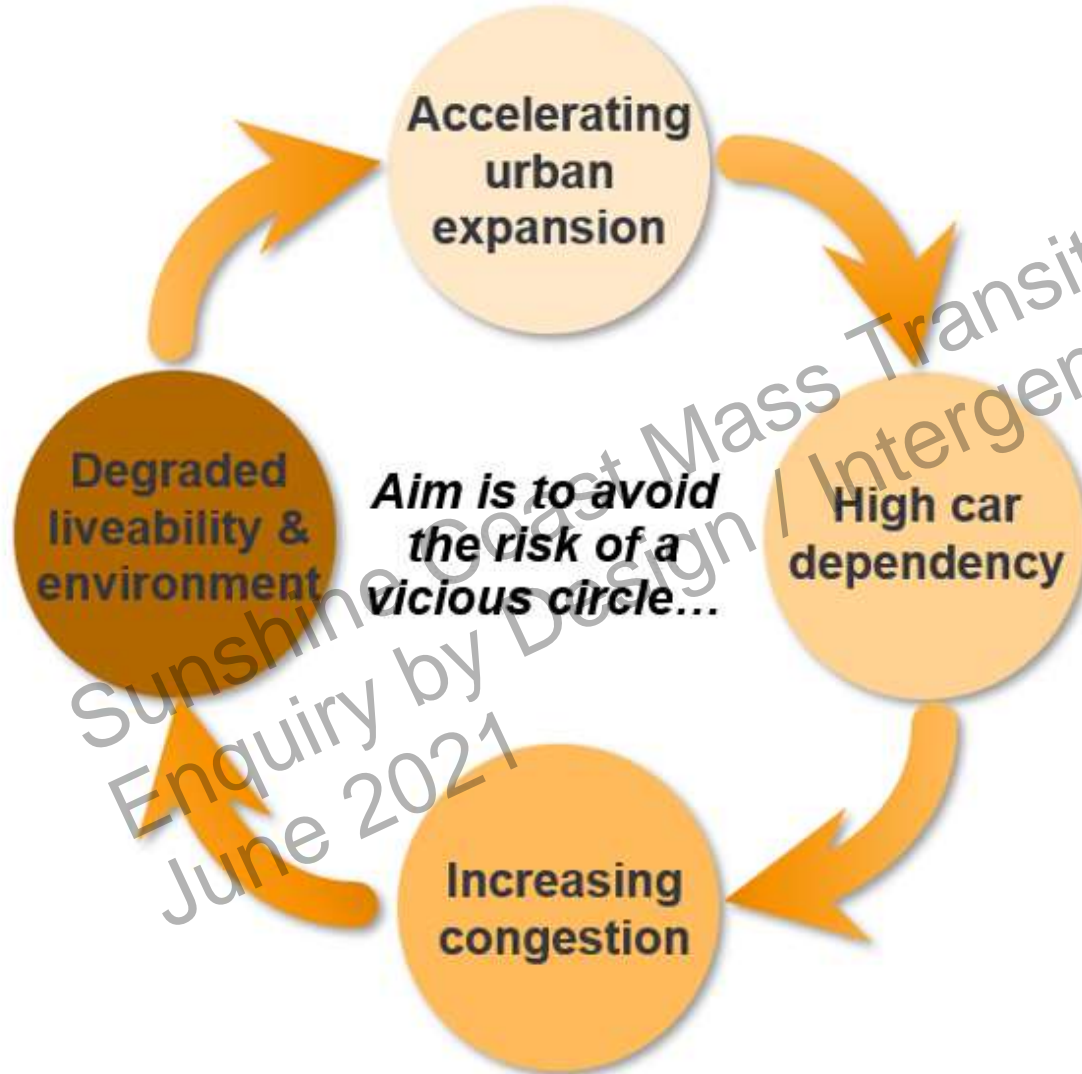
How will you
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Challenge 4

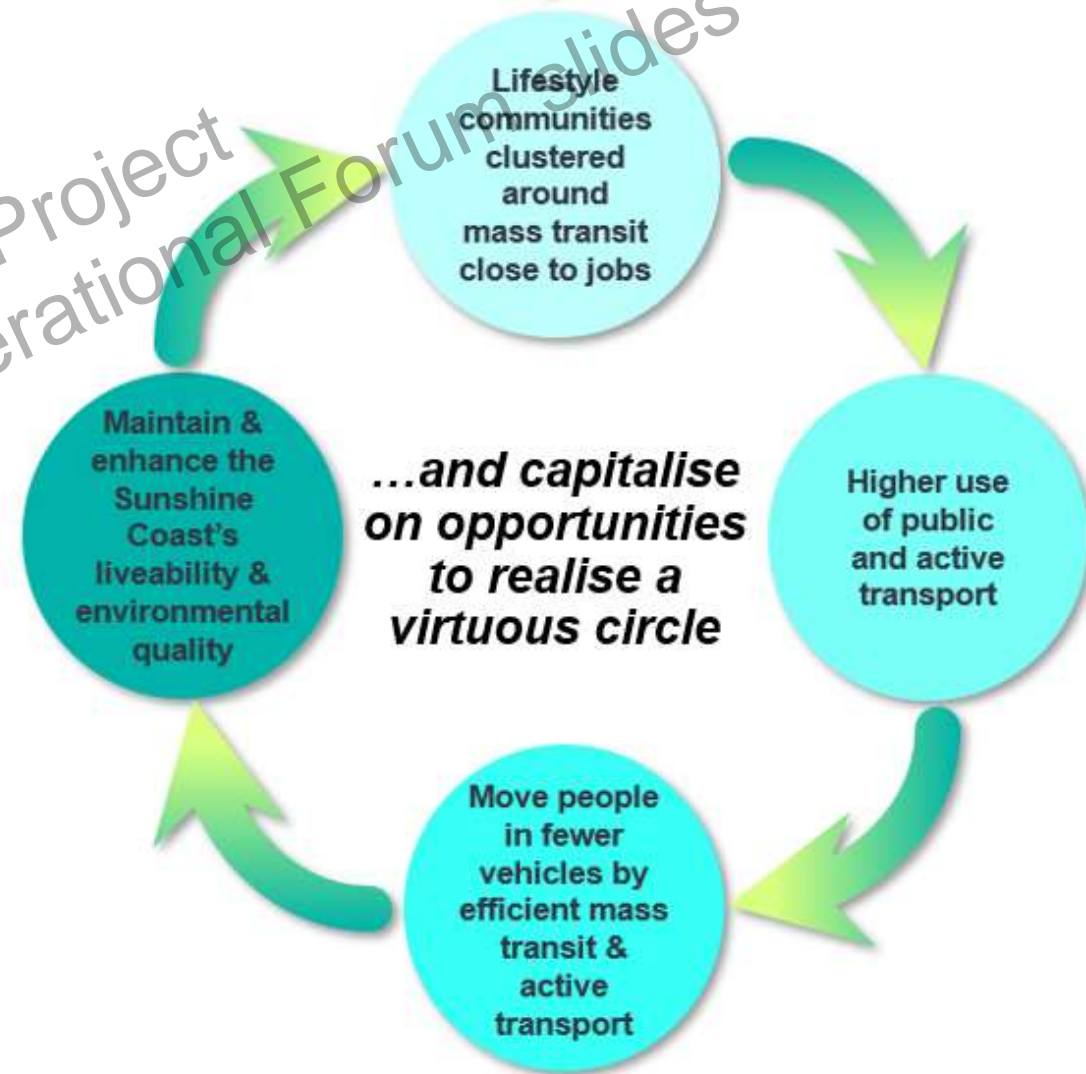
Threats to liveability and sustainability

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GROWTH CHALLENGES



GROWTH OPPORTUNITIES



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Mass transit options

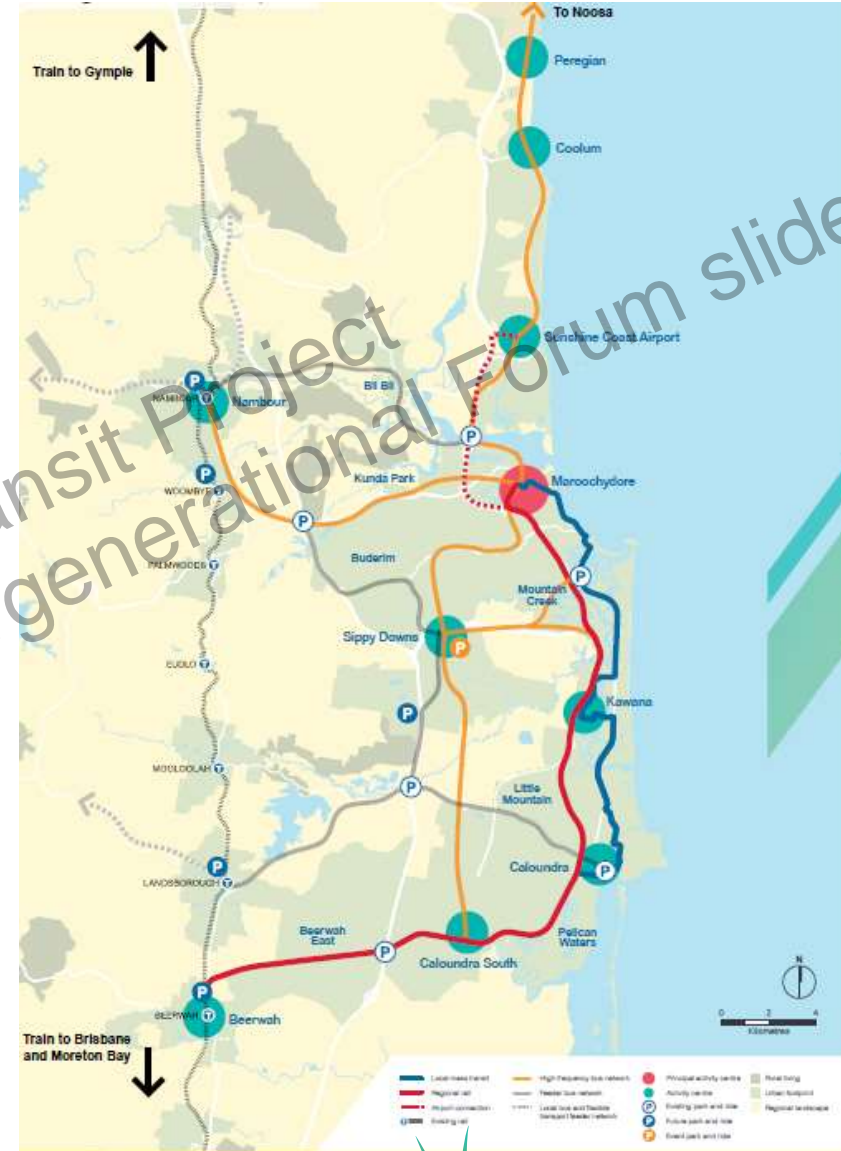
Adam Cracknell

Sunshine Coast Council

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Transport Master Plan

- High quality intra-regional mass transit solution
- Connecting with a fast rail to Brisbane at strategic locations
- Supported by an integrated feeder bus & active transport network



Priority system areas

Strategic Business Case identified the priorities for investment:

- 1 - Local mass transit from Maroochydore to SCUH
- 2 - Regional heavy rail in CAMCOS Birtinya to Beerwah (and Brisbane)



Mass Transit Route

- Stage 1 would connect key destinations from Maroochydore to the Sunshine Coast University Hospital at Birtinya
- This area contains the greatest concentration of population, jobs, facilities and services and is already experiencing growing traffic congestion
- Route largely follows main roads. Draft Options Analysis report says this is the most feasible route to accommodate a mass transit system



The role of the CAMCOS corridor

- CAMCOS connects the Sunshine Coast to Brisbane and other centres
- Stage 1 Mass Transit corridor serves over 5 times the population (66,088 people within 800m catchment) compared to CAMCOS corridor from SCUH to Maroochydore (12,323)
- Both corridors have a distinctly different role and complement each other
- CAMCOS role may move further away from a level of local access (8 stations per previous TMR plans) with faster rail agenda (3 stations with North Cost Connect)
- CAMCOS is not an option for the Coastal Urban Corridor





The recommended options

The draft Options Analysis report assesses a wide range of options as depicted below and recommends that five of those options be further considered in the Detailed Business Case. There are several options under consideration in the Options Analysis to meet the transport needs of the coastal corridor.

Each of the recommended options would:

- offer more frequent services
- use vehicles with low emission technologies
- have a flat floor making it easier for people with prams, wheelchairs and mobility aids to move around the vehicle.

The last four options would also:

- operate in an exclusive “right-of-way” lane with priority at traffic signals, meaning the vehicles don’t get caught in traffic congestion and offer a very reliable service that runs on time on a predictable route.
- utilises a raised platform at the stations making it easy to get on and off the vehicle for passengers with prams, wheelchairs and other mobility aids.

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Quality bus corridor



Quality bus corridor

A high-frequency bus service running in dedicated kerbside bus priority lanes with features such as high-quality vehicles, pre-paid boarding and quality bus stops

Bus rapid transit



Bus Rapid Transit
25 metre-long
battery-powered,
rubber tyred vehicles
running at high
frequency in a
dedicated busway
corridor mostly in the
centre of the road
with high-quality
stations, pre-paid
boarding and priority
signalling

Light rail transit



Light Rail Transit

45 metre long modern rail vehicles running at high frequency on a dedicated trackway mostly in the centre of the road with high-quality stations, pre-paid boarding and priority signalling

Trackless tram



Trackless tram

32 metre long battery powered rubber tyred 'tram like' vehicles running at high frequency in a dedicated busway corridor mostly in the centre of the road with high-quality stations, pre-paid boarding and priority signalling

Wireless light rail transit system



Wireless Light Rail Transit system

A wire-free light rail system - identical to the light rail option, minus the overhead wires, with on-board batteries and charging equipment at select stations.

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Other Options

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Business as usual



Road network upgrade



Region-side bus service enhancements



Region-wide bus network upgrades



Examples from other places

Les Carter, MRCagney



Order of Importance to PT Customers

1. **Frequency**
2. **Reliability**
3. **Convenience**
4. **Safety/Security**
5. **Price**

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Compare and Contrast

City		City	
Brisbane	 	Newcastle	
Gold Coast		Sydney	 
Canberra		Melbourne	 



Compare and Contrast

Brisbane – Sydney – Melbourne

- Large dense (particularly inner core) capital cities... million plus populations
- Not directly comparable except all cities place great emphasis on frequency and reliability
- Focus on trunk route services.... still lots of work to be done on integration and accessibility
- Heavily reliant on walking and driving (park/kiss and ride) to connect to trunk services (though good examples of FMLM trials now happening)

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Compare and Contrast

Gold Coast

- Major city but still less than a million population
- Has a dense coast strip (long narrow foot print) at its heart
- LRT was a response to localised density not a cause of it
- Reasonably well developed bus network before LRT investment
- Bus network curtailed along LRT corridor
- DRT trials (though not as an obvious connector) underway

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Compare and Contrast

Canberra and Newcastle

- Less dense populations (less than 500,000)
- Canberra (in particular) has a long narrow foot print
- Both cities are using LRT to spur growth (density?)
- However, Sunshine coast would already have population centres with greater density than either Canberra or Newcastle
- Canberra LRT successful (passenger loadings) in advance of major corridor development
- Canberra has reworked its bus network to complement LRT

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Accessibility (FMLM)





Mobility as a Service

- Integrated (multi-modal)
- Aggregated (single view)
- Incentivised (value adding)



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Questions?

Do you have any questions for
Adam Cracknell or Les Carter?

How will you
**Make
your
way?**

Morning tea

Please bring your refreshments back to your table so we
can keep working....

How will you
**Make
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Session 2

Urban form scenarios and placemaking opportunities

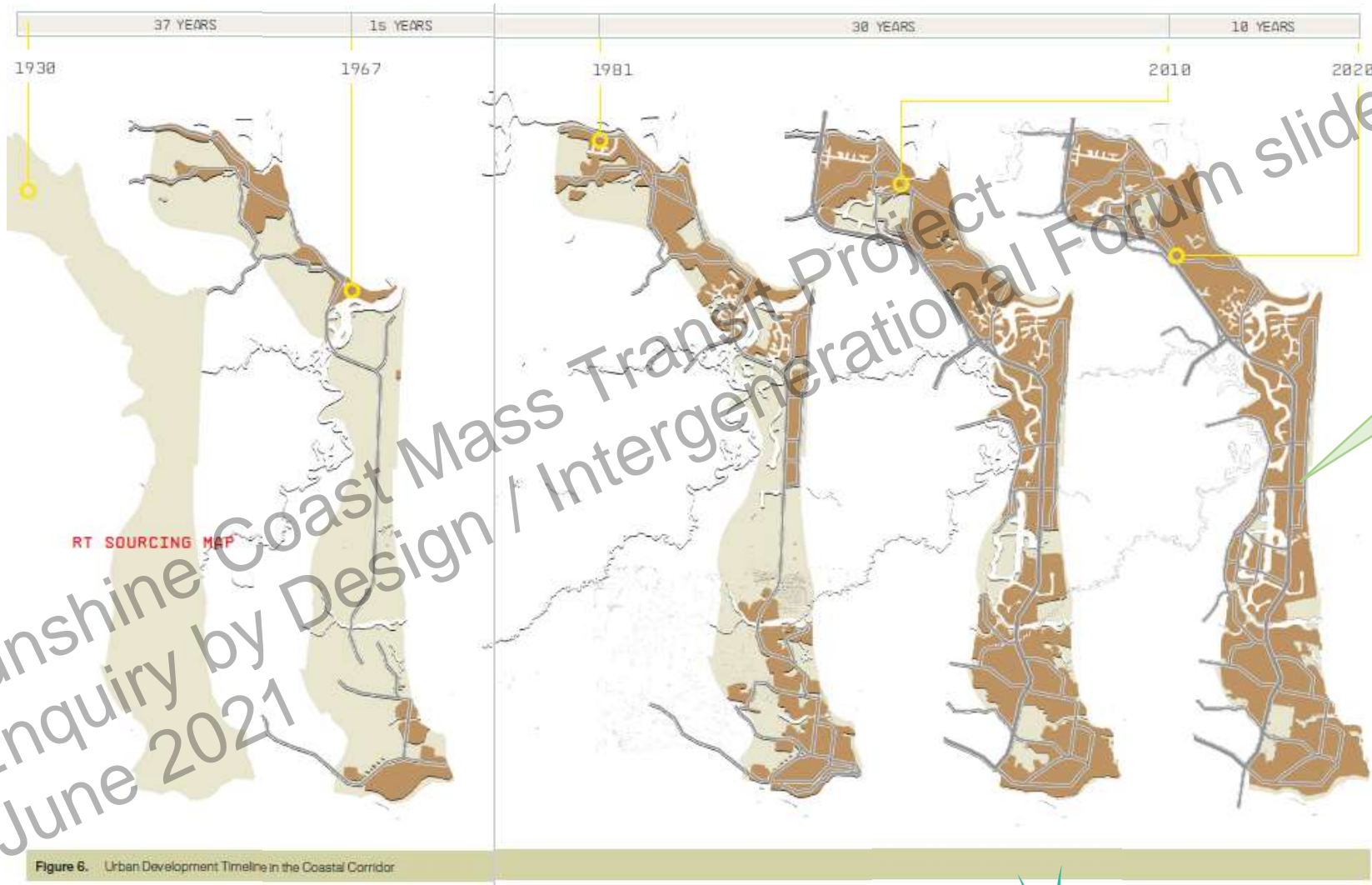
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Urban form scenarios

Greg Vann
Ethos Urban

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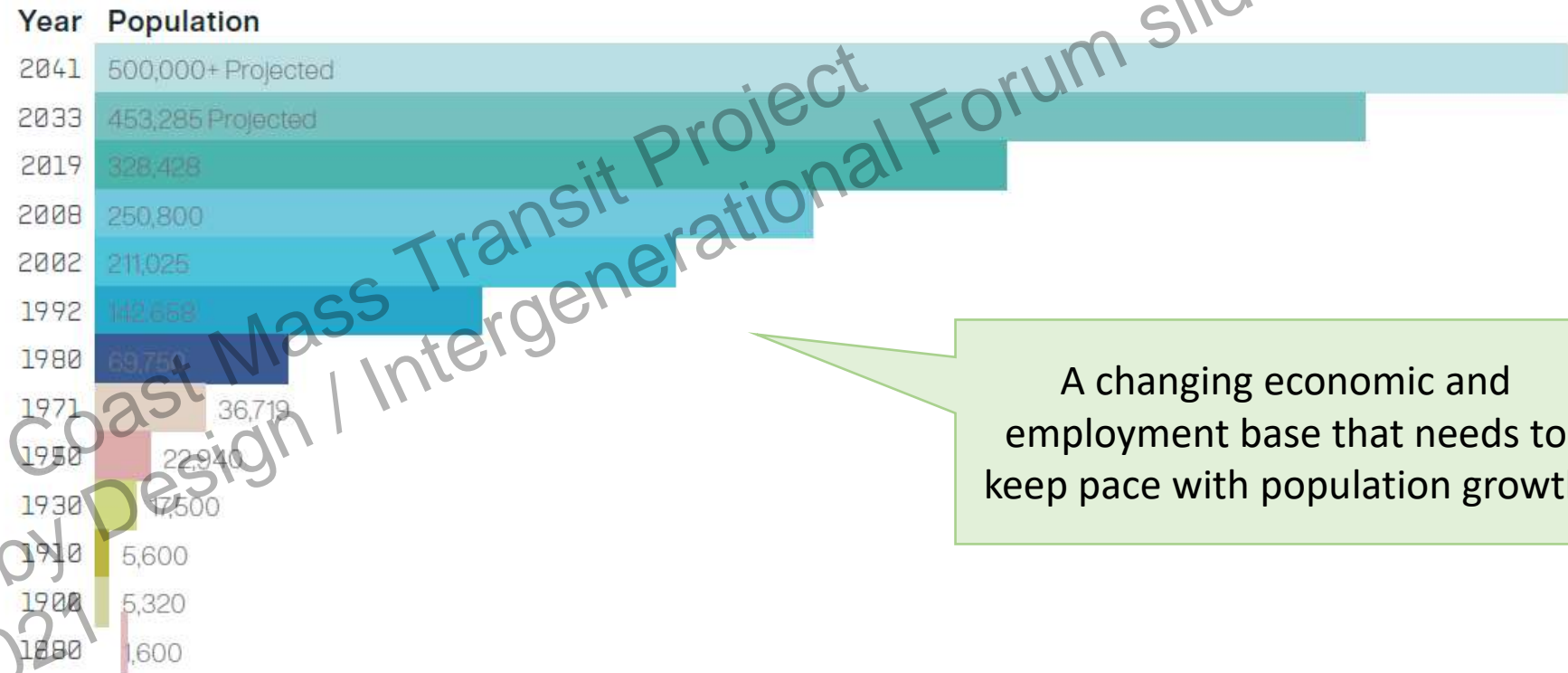
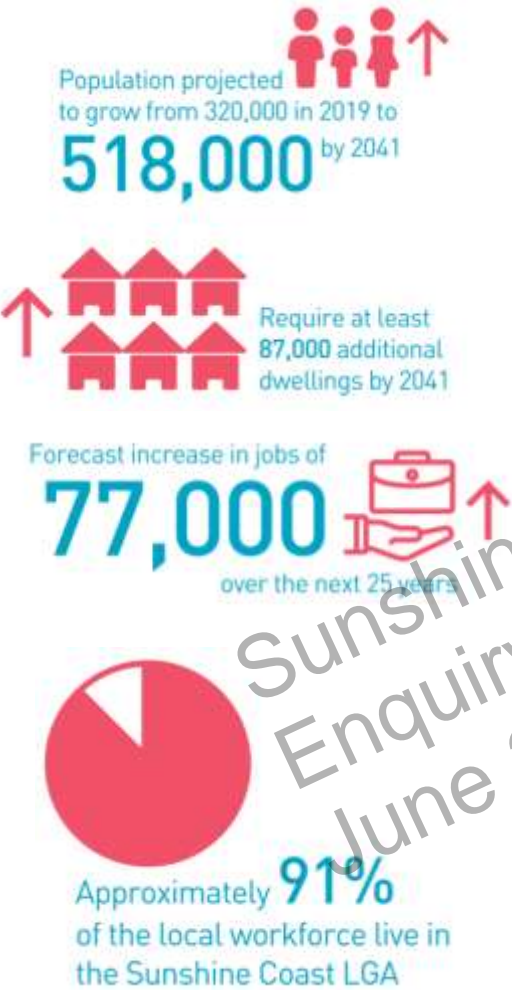
Key issues – expanding low density



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Key issue – continuing growth



A changing economic and employment base that needs to keep pace with population growth

Figure 1. Growth Within the Corridor. Source: Sunshine Coast Council Corporate Plan 2021 - 2025

Key issue – car dependence & congestion

Congestion has a cost

- Right now, over \$500 million/year
- Forecast to grow to \$1.4B/year (2016 \$\$) by 2041 (about \$3B in 2041 \$\$)



of all daily trips taken
in a private vehicle

Public transport accounts
for just



3% of all trips



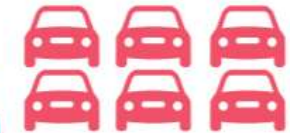
High car dependency
Growing congestion

Active transport accounts for



12%

90%



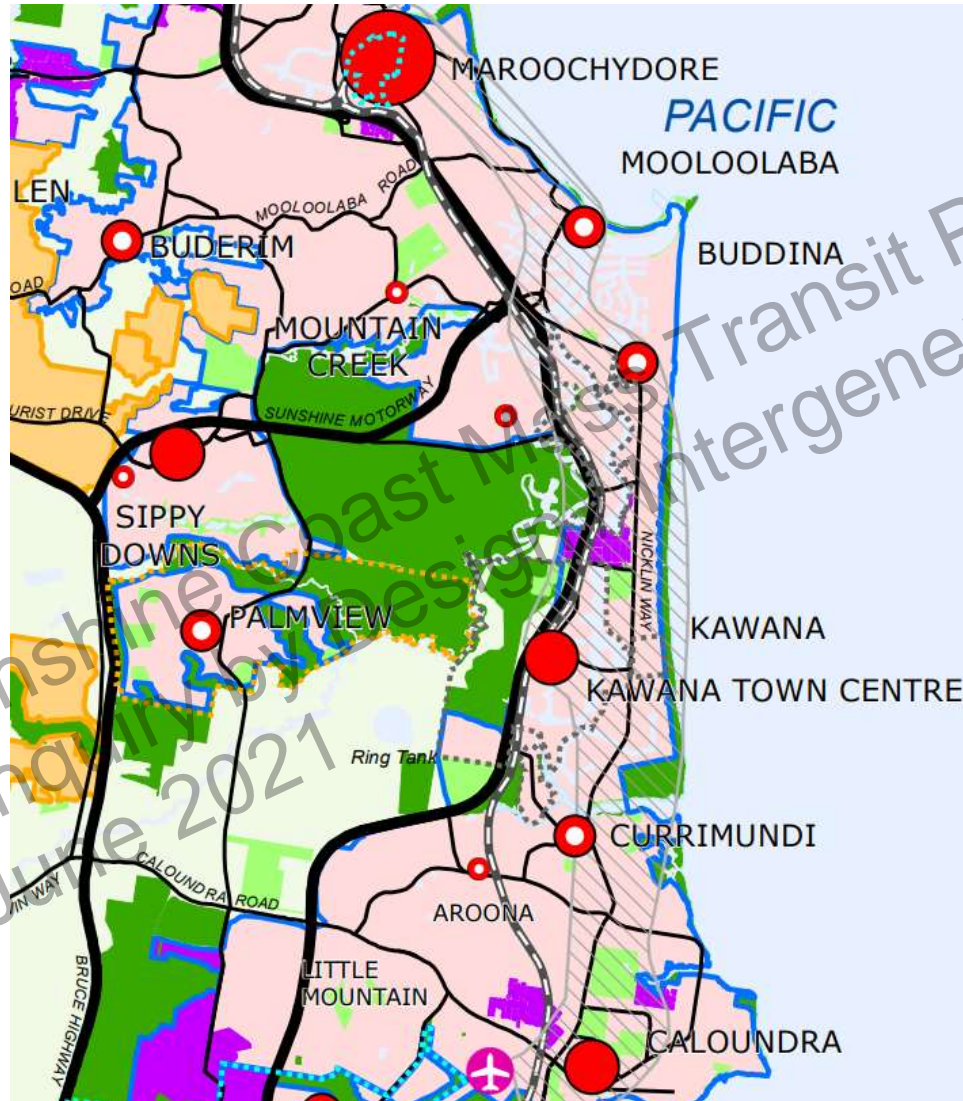
of all trips are local and never leave
the Sunshine Coast



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Our region.
Healthy. Smart. Creative.

Current state of play - planning scheme



Strategic Framework Map 1 Land Use Elements

Defined Management Boundaries

- Urban Growth Management Boundary (Note 1)
- Rural Residential Growth Management Boundary (Note 1)

Land Use Categories

- Urban Area (Note 1)
- Rural Residential Area (Note 1)
- Industry and Enterprise Area
- Rural Enterprise and Landscape Area (Note 2)
- Major Sport and Recreation Open Space (Note 2)
- Major Conservation Area (Note 2)
- Further Investigation Area

Activity Centre Network

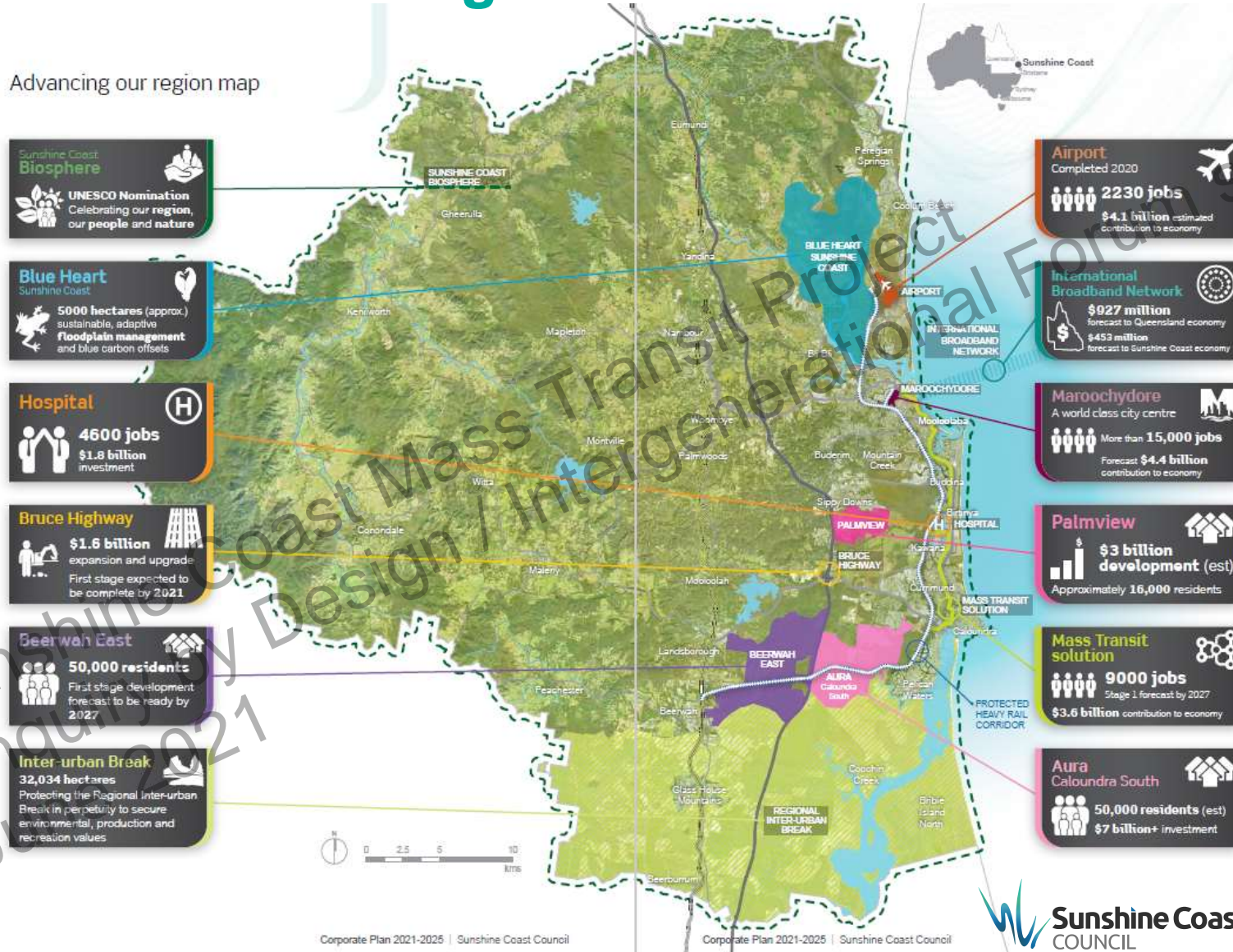
- Principal Regional Activity Centre
- Major Regional Activity Centre
- District Activity Centre
- Local (Full Service) Activity Centre (Note 3)
- Specialist Regional Activity Centre - Sunshine Coast

Major Transport Elements

- Highways and Motorways
- Road
- North Coast Rail Line (subject to upgrade investigations)
- Dedicated Public Transport Corridor - CAMCOS
- Maroochydore to Caloundra Priority Transit Corridor

Urban form – regional context

Advancing our region map



Growth and Sprawl



Urban form scenarios: 1. Focus on nodes/centres

1: Growth mostly in activity nodes around mass transit stations and local centres

- Medium rise mixed-use form (4-6 storeys occasional 8 storeys)
- A series of distinct and separate activity nodes
- Diversity of housing types in activity nodes
- Building heights transition down to adjoining lower density
- High accessibility in nodes
- Restricts where major change happens, but more intense where it does



Urban form scenarios: 2 Focus on mass transit route

2: Growth focused along mass transit route

- Medium rise (3-6 storeys) along the route
- Diversity of housing types in a variety of places along the corridor
- Building heights transition down to adjoining lower density areas
- Absence of distinct nodes - less potential for a concentration of attractions
- Reasonable accessibility from new development to stations
- More areas change but not as markedly as scenario 1



Urban form scenarios 3: Dispersed

3: Growth dispersed across Urban Corridor

- Mixed density, low to medium rise form (1 to 3 storeys)
- Less opportunity for new shopping, dining & entertainment precincts
- Diversity of housing types widely dispersed but lower scale
- Some new development further from mass transit
- Requires a moderate proportion of the existing properties



How will you
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Placemaking opportunities

Cameron Davies
Deicke Richards

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Overview

- What makes a good place?
- What does it have to do with mass transit and the Sunshine Coast?
- How can we design our public transport infrastructure for the Sunshine Coast?
- What is the importance of walkability and shade?
- How can we improve our sense of custodianship and connection to a place?



How will you
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What makes a good place?

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Sunshine Coast
Design.

How will you
**Make
your
way?**

How does this apply to the Sunshine Coast?

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How will you
**Make
your
way?**

How can we design our public transport infrastructure for the Sunshine Coast?



How will you
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**Subtropical design –
Brisbane's ferry terminals**

**The world's longest art
gallery – Stockholm's metro**



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How will you
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The importance of walkability and shade

How will you
**Make
your
way?**

Improving sense of custodianship and connection to place



How will you
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Questions?

Do you have any questions for
Greg Vann or Cameron Davies?

How will you
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Urban futures collage

Table activity
Cameron Davies
Deicke Richards

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Prompt questions

1. Our Sunny Coast Character

- Images which you think best represent the character on the Sunny Coast. Tell us why these pictures resonate with you (town specific or just “the vibe”)

2. How we live

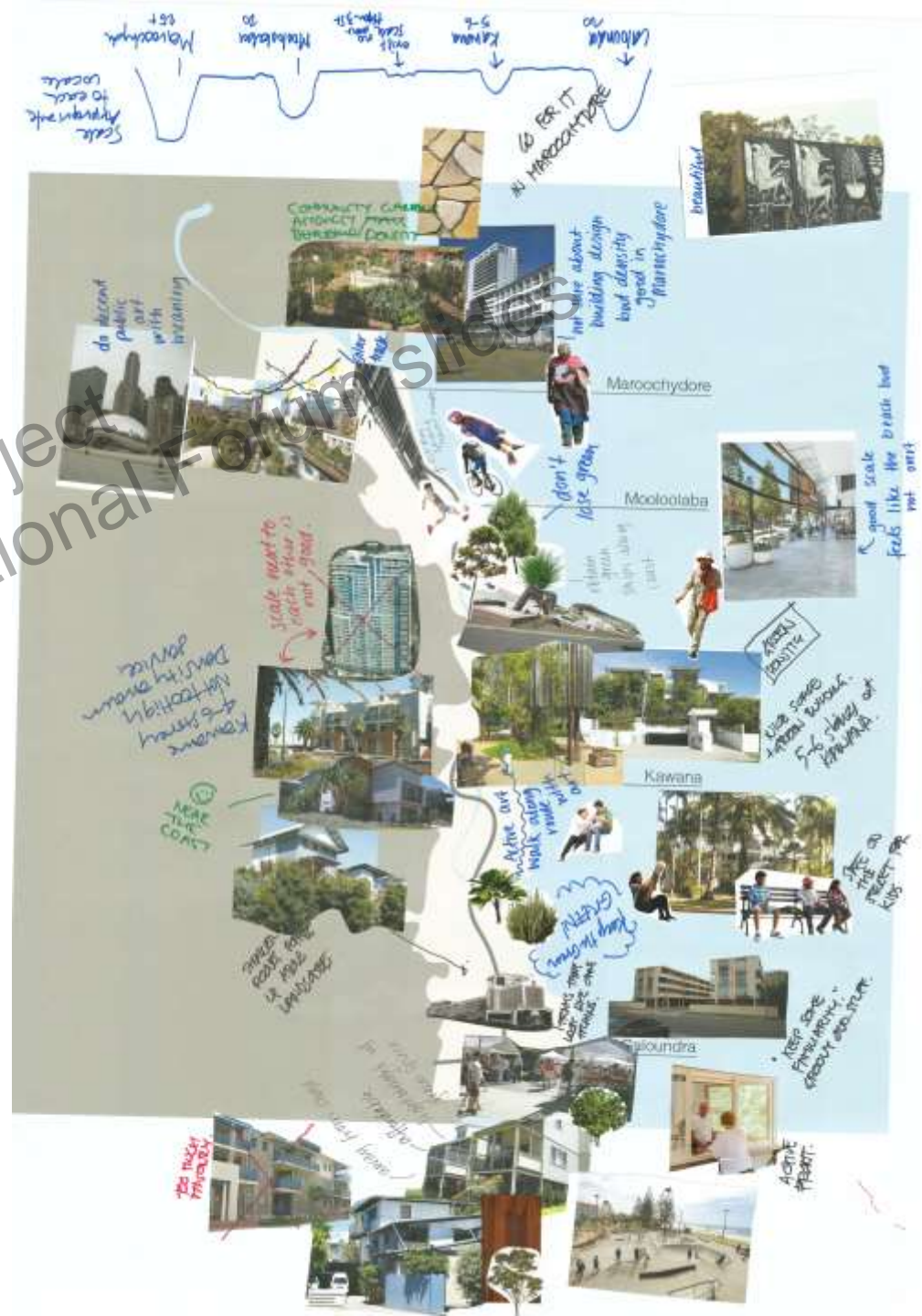
- Residents
- Tourists
- Business
- Others with particular needs

- Images showing types of buildings suited to different locations on the Sunny Coast, and why?
- Are there any images of development you don't want to see, why?
- Show us who you think will live in the different buildings and locations.

3. Creating great places

- What types of public spaces and activities would you like to see and where?
- Select images to show us what the experience could be at the new stations.

4. Three key take homes



How will you
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Lunch

Please bring your lunch back to your table so we can keep working....

How will you
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Session 3

Principles and how to apply them

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How will you
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Defining the principles

Table activity

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Defining the principles

Follow the lead of your table facilitator with this engagement activity.

This will cover three tasks:

- 1 Defining the principles for mass transit
- 2 Defining the principles for urban form and placemaking
- 3 Identifying the common principles.

What's a 'principle'?

Example: When I choose my shoes, I assess my options based on principles:

- *comfort*
- *makes me happy*
- *suits my outfit*

Example: When I'm visiting my in-laws on the Sunshine Coast, I'll pick a day when:

- *The weather will be great*
- *Out of schools holidays times*
- *Not on a long weekend*



Defining the principles for mass transit

Follow the lead of your table facilitator with this engagement activity.

Review the work your table has done thus far today – recorded on the table's posters.

FOCUS ON MASS TRANSIT - Discuss these questions, and summarise your table's agreed principles:

- **What underpinned your approach to each of the sector groups (residents, tourists, business, others with particular needs)**
- **What are the top 3 most important principles?**



Defining the principles for urban form and placemaking

Follow the lead of your table facilitator with this engagement activity.

Review the work your table has done thus far today – recorded on the table's posters.

FOCUS ON URBAN FORM AND PLACEMAKING - Discuss these questions, and summarise your table's agreed principles:

- **What underpinned your approach to each of the sector groups (residents, tourists, business, others with particular needs)**
- **What are the top 3 (most important) principles?**



What are the common principles?

What are the common principles you used to about transport, urban form and placemaking options and opportunities?

Table facilitators (or participants agreed by each table) present quick summaries of the outcomes to the room

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Applying the principles

Table activity

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Applying the principles to a generic mass transit station, its surrounding land uses, and its placemaking elements in the urban corridor

Each table is provided with a base plan for a generic station and its locality for 3 type of the generic places

Each table works up a plan, supported by diagrams for the application of the principles to the planning, design and delivery of:

1. The station
2. Land use around the station
3. Placemaking outcomes

Short presentation by each group

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Specific foci for each table

Table #	Generic locality	Apply principles	Focus on the needs of ...
1	Intersection	In the allocated locality, apply the principles that the table derived in the previous activity for:	Locals
2	Adjoining open space		Local residents and businesses
3	Adjoining open space		Tourists and people with particular needs *
4	Straight stretch of road	- Mass transit - Urban form and placemaking - Esp those common to both	Local residents and businesses
5	Straight stretch of road		Tourists and people with particular needs *

(*) Particular needs could be:

- Those with a disability / young people / elderly people
- Those who are disadvantaged
- Those who don't speak English, and are new to the locality
- Those who are carrying things – strollers, surf boards, walkers, guitars....
- Those heading to the beach/school/institution

Devising a design brief

Table activity

Grab afternoon tea and take it back to your table as you work through this activity



Devising a design brief (summary) for a mass transit station (and route)

Building on the thinking in the previous task, each table identifies:

1. The thinking / planning / design process for delivering the desired outcomes and devises a robust 5 (approx.) step process for the application of the principles to the station, its surrounding land uses, and placemaking elements and
2. Identifying 3 (approx.) critical success factors that could be used to evaluate the success (or otherwise) of the application of the principles.
Eg, “You’ll know it’s been done well when”

And prepares a approx. 5min presentation to the room

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Session 4

Review

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How will you
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way?**

Reflections and take-aways

Live polling and general discussion



Reflections

Each participant is asked 3 questions:

What is the most important thing for the Council to keep in mind with regards to:

- 1. Mass transit?**
- 2. Urban land use?**
- 3. Placemaking?**

Table facilitators' comments

Expert presenters' comments



Takeaways from today

Live-polling

What did you learn from someone else that has made you think differently about the transport needs and priorities for the Sunshine Coast?

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How will you
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Review of the day's outcomes

James Coutts

Sunshine Coast Council

How will you
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Thanks! Travel safe

Sunshine Coast Mass Transit

