

# Gladstone Engineering Alliance

GEA are an alliance of businesses working together to create a stronger Gladstone

A proactive organisation GEA's core services to members include:

1. Supply Chain Optimisation
2. Business Development
3. Professional Services & Higher Education
4. Networking & Communication
5. Advocate & Influence Change



**GEA** GLADSTONE ENGINEERING ALLIANCE INC  
*Peak Industry Body for Central Queensland*

# WE'RE WORKING ON IT

Gladstone Engineering Alliance (GEA) services manufacturing, engineering and service companies active in regional, national and some international markets in coal, steel, mineral processing, transportation and major resource projects.

GEA is responsive to the needs of industry in the region and works with the public and private sector at all levels to offer a supplier service focused on the acquisition of goods, services or works from Members. GEA collectively works with stakeholders

GEA facilitates a wide range of projects and initiative across the region and is proactive in providing relevant advice, statistical information, workshops and networking opportunities to support small to medium business, industry and government.

A proactive organisation, GEA is dedicated to:

- Encouraging business development, innovation and capacity;
- Providing information and communications to develop skills and knowledge;
- Enhancing workforce development higher skills learning;
- Advocating for sustainable regional and economic growth;
- Proactively representing, supporting and promoting the capability, competitiveness and interests of GEA members;
- Sourcing work opportunities and education on supplier expectations.

[gea.asn.au](http://gea.asn.au)  
An Alliance of Businesses Working Together



GLADSTONE ENGINEERING ALLIANCE INC

# Skilling Queenslanders for Work

## Community Work Skills Traineeship Project

# INTERACTIVE VISUAL WALKWAY PROJECT

- The Interactive Visual Walkway Project will develop a mechanism for Gladstone to highlight the strengths of our region through developed digital interactive visualisation and engagement solutions for government, industry, and stakeholders.
- There will be up to five individual screens and one large screen that will have the ability to display a range of stories, data and information.
- Each screen will feature interactive, high-definition display technology, unique in scale and experience to Central Queensland. Once built the system allows us to develop integrated and interchangeable industry, tourism, community, and educational content tailored to market sectors and varied audiences.
- The 'Visual Interactive Walkway' within the 'City Arcade' will assist to reshape the city centre into a vibrant, lively and unique place as well as provide growth in visitor numbers to the CBD and stimulate the local economy. This is in line with the Gladstone Regional Council "Jump Start City Heart" strategy.
- This project will build a stronger regional community through job creation, the use of local suppliers, goods and services and create longer-term benefits to the Gladstone community.



GLADSTONE ENGINEERING ALLIANCE INC

# The Interactive Visual Walkway

Engaging Gladstone's Industry, Communities, and Visitors

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# THE BENEFITS OF THE INTERACTIVE VISUAL WALKWAY

- The project strongly aligns with the Gladstone Regional Councils - 'Jump Start City Heart' tourism strategic priority and will assist to deliver three principal contributions to regional benefit.
  - First, the project will directly increase local tourism through engagement with our community, creating a free interactive learning centre for our region.
  - Second, the display will promote the investment sectors within the region; Energy and Bio-Futures; Engineering and Heavy Industrial; and Food & Agribusiness; by promoting and educating stakeholders and community about Gladstone's strategic assets, including: industry and world-class port infrastructure; the vibrant Southern Great Barrier Reef and national parks; and the region's global connections.
  - Third, the Display will improve digital connectivity and regional understanding for community, investors and tourists on a domestic and international stage.
- Since the cruise ships commenced visiting Gladstone, we have greeted approx. 28,000 passengers and crew from the past 14 ship visits.
- In 2018/19 there is a further 15 ships scheduled with the visitation numbers expected to be around 27,000 people to disembark.
- In addition, we have a huge number of grey nomads, and visiting tourist travelling through the Southern Great Barrier Reef (Over 2M, a record in 2017) that could benefit from this initiative.
- GEA also conducted a qualitative survey from visitors and locals to understand what services and offerings would attract them to the CBD. The responses included:
  - promotion of the main street; tourist information about the local region; and information about the history of the Gladstone region.

## LOCAL SCHOOLS ALSO BENEFIT!

Local High Schools within Gladstone will also see the benefit to students of the S.T.E.M. program which will attract at least 4,000 school students (all ages) into the CBD.



# INTERACTIVE VISUAL WALKWAY DESIGN

One extra large fully  
interactive screen –  
Dimensions – Approx.  
165” x 165”

Five individual fully  
interactive screens  
Dimensions – Approx.  
55” each screen



INDUSTRY OF GLADSTONE GALLERY WALKWAY  
INTERACTIVE VISUAL DISPLAY  
ARTISTIC IMPRESSION ONLY

The Interactive Visual Walkway is modeled on “The Cube” the centerpiece of the Science and Engineering Centre at QUT, Gardens Point. This would be the first immersive learning and display centre in Central Queensland.



Large-scale, digital interactive visualisations and content engage all audience types.

Since 2013, The Cube has presented project exploring The Reef, dinosaurs, robotics, chemistry, and space and GEA have the opportunity to use this same software.

All projects align to the National Curriculum, executed through the STEM Education program



# The Virtual Reef



# DinoZoo



# Code-a-Bot

[Code-A-Bot](#) has a strong environmental message teaching visitors to code, based on simple programming language featuring drag and drop, and the goal is to create efficiencies in a recycling plant for the future.



# myGlobe

myGlobe is an interactive spatial data visualisation platform focused on creating compelling narratives to engage communities, organisations, and decision makers.

myGlobe has provided a distinctive edge government and industry users, and is proposed as a key content piece for the Interactive Walkway

myGlobe can:

- Show how industry is connected to the community
- Find out what clients and their community need
- Support consultations
- Help build awareness and manage any perceptions
- Build interest and motivate audiences to contribute to Gladstone's growth





### Introduction

Global demand for commodities and Asia's growing middle class



Global demand for commodities is expected to increase by more than 50% by 2025, with 3 billion people moving into the middle class



RESOURCES: RELIABLE SOURCE  
Queensland's track record in supplying major resources

PRODUCTION

CASE STUDIES

OPPORTUNITIES



### Additive Manufacturing

#### Innovation Through Better Designs

In additive manufacturing, 85% of about design-led product development and testing is constrained by conventional manufacturing. It's a challenge to how we think about manufacturing and change the relationship with your customer and market.

Reduce Strength of Additive Manufacturing Processes

- Custom
- End usability
- Cost
- Speed
- Quality
- Flexibility

Next Digital Things

- 3D Printing
- 3D Scanning
- 3D Modeling
- 3D Printing
- 3D Printing

### Additive Manufacturing

#### Who's doing it?

Early adoption of AM was limited as game-changer in prototyping and design processes, but technology was not ready for mass production. As technology has improved, more and more industries are adopting, seeing massive savings in operating costs, and reaching the market faster with better products.

**Industries Embracing AM**

Industry	Percentage
Motor Vehicles	12.3%
Medicinal	13.7%
Other	3.5%
Architecture	3.5%
Government	6.4%
Academic Institutions	6.4%
Consumer Products	18%
Industrial/business machines	18.9%
Aerospace	12.3%

**Globe Legend**

- Boeing manufacturing
- Image Media
- Video Media

**Government**

**Industry**

**Research**

PHOTONICS

ADVANCED MATERIALS

DIGITAL TECHNOLOGY

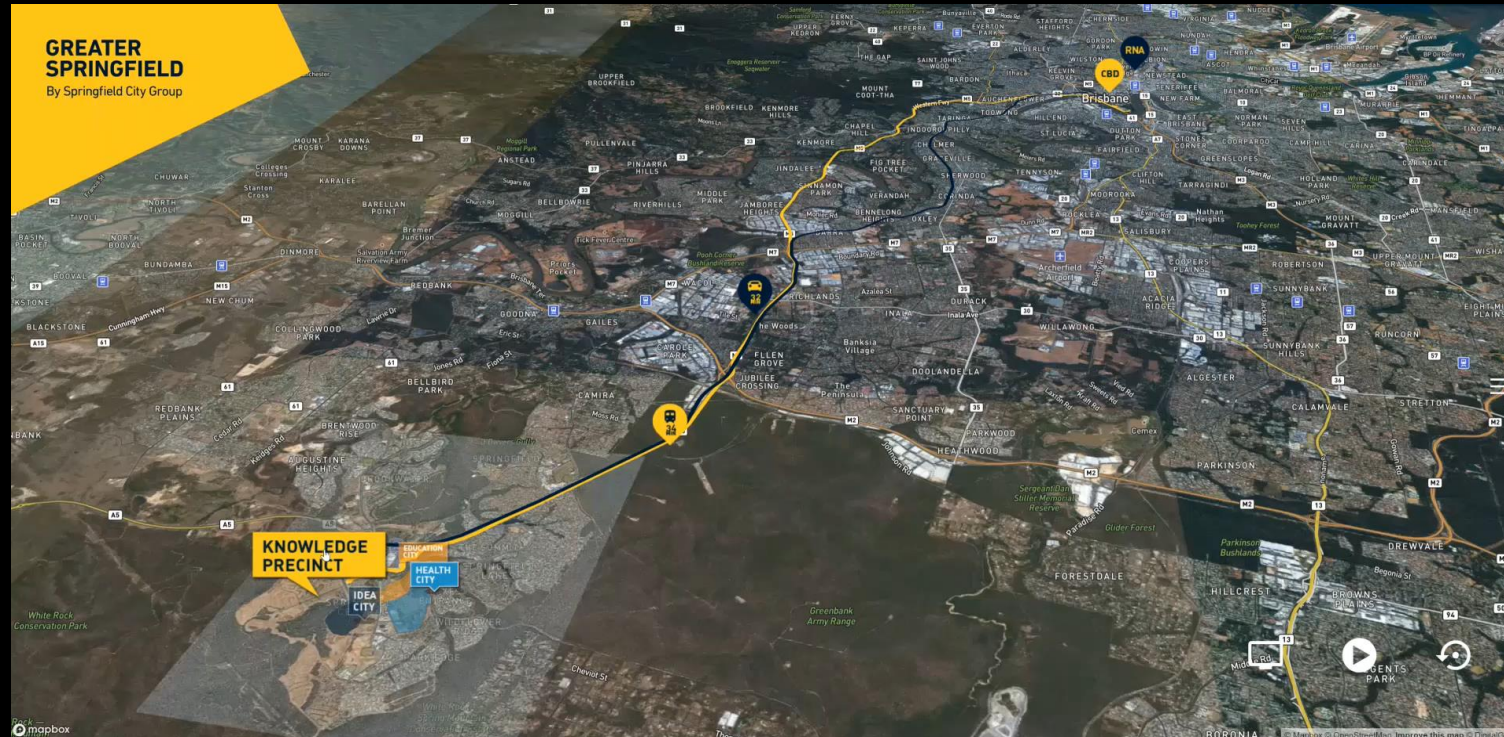
WHAT IS IT?

WHY DO IT?

IS IT DIFFICULT?

WHO'S DOING IT?

# Prototype 'Virtual Tour'



ViseR developed a virtual tool facility within myGlobe to support the Springfield City Group when presenting their masterplan.

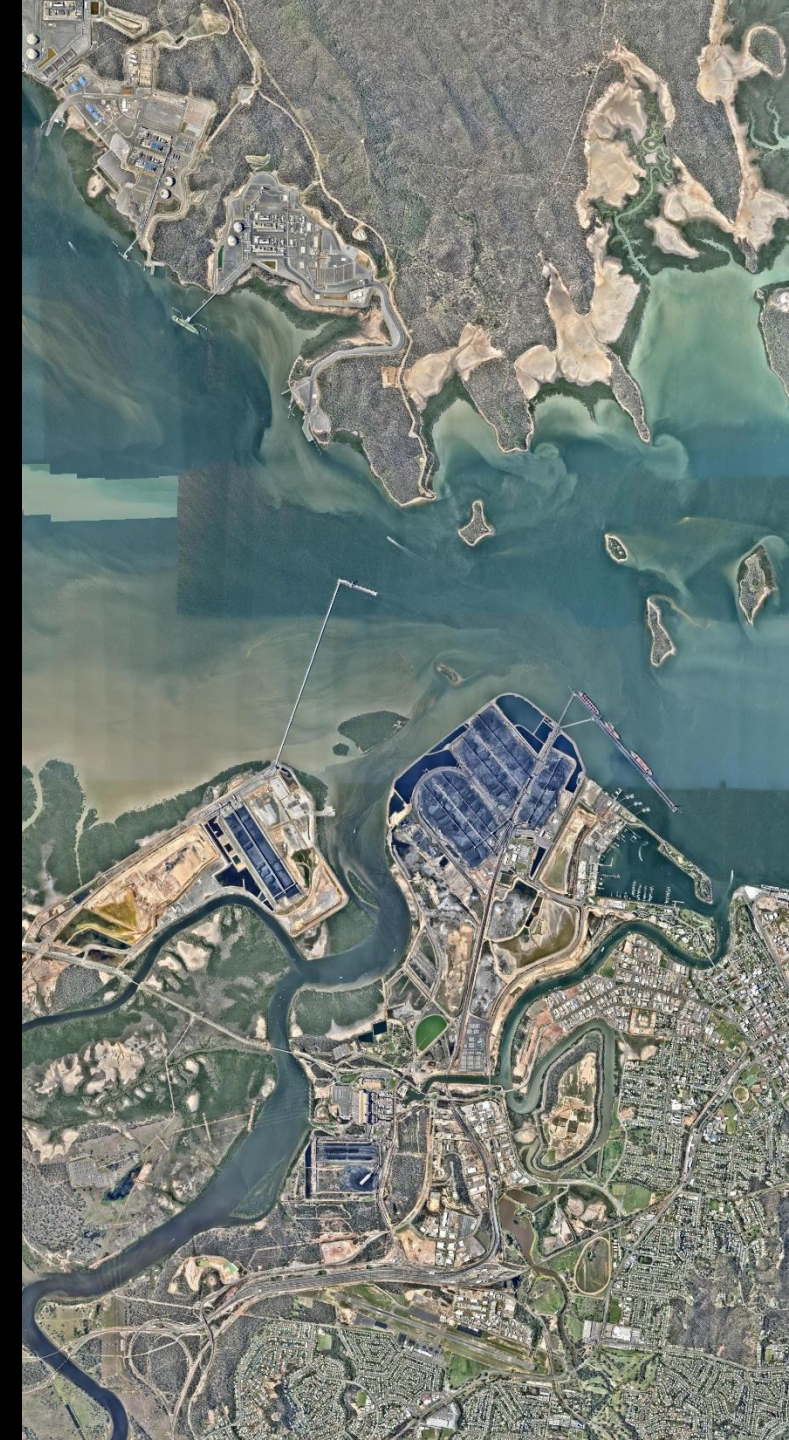
Through an interactive touch screen, the user selects markers on the map to 'fly' to a region and load specific content in the side panel.

This tool is ideal for engaging new investors visiting the Gladstone region, complementing on-site visits.

It's also a very compelling user experience for any audience to learn about developments in the region.

# Spatial Image Test: Curtis Island 2012 to 2017

- The following imagery shows the Curtis Island and mainland area changing over a number years. Images provided by Nearmap.
- Using the most recent imagery possible provides GEA and stakeholders with a valuable narrative of Gladstone's growth and industry expansion
- The Virtual Tour feature of 'myGlobe' can use these integrate these services with ease.



























# Gladstone Regional Council Investment

GEA has been successful in securing some funds through the Regional Jobs Investment Package (RJIP) Bowen Basin to create an 'Interactive Visual Walkway' in the 'City Arcade' that is different to anything currently available in Central Queensland and provides a platform for promotion and information for our community through a fun, exciting visual concept.

The following investment budget includes the costs associated with development and management of the 'Interactive Visual Walkway' project.

Funds secured through RJIP	\$150,000
Funds provided by GEA	\$50,000
Funds sought through Council	\$100,000
<b>TOTAL PROJECT COST -</b>	<b>\$300,000</b>

## SCHEDULE OF WORKS

Phase 1: Systems Design	Week 1-3	July 2018
Phase 2: Procurement	Week 4-9	August 2018
Phase 3: Installation	Week 10	October 2018
Phase 4: Commissioning	Week 11	October 2018
Phase 5: Post-installation QA	Week 11 – 12	November 2018
Phase 6: Interactive Software Development	Week 3-12	July 2018 – January 2019
Phase 7: Maintenance Plan	Week 13 – 5 years	January 2019 - December 2024