

Cross Island Legacy Committee

Land Use Recommendations

May 2017



Process Overview

Background

- The Cross Island land reclamation process commenced in November 2015 and was set to be completed in July 2016 at a cost of \$39 million
- The original plan (rehousing Marine & Ports, Spar Yard and other maritime related activities) for Cross Island was approved in 2009, but was subsequently overturned in late 2015 primarily due to insufficient consultation and deficiencies in the Environmental Impact Study
- As a result, the volunteer Cross Island Legacy Committee was formed by WEDCo and comprised of key stakeholders to identify a viable use for the land
- Cross Island will be used for the AC35 (2017) and may be used for AC36 should it be awarded to Bermuda again

Approach

- The Committee's aim was to recommend an idea(s) to the WEDCo Board that is viable, sustainable, and ultimately creates a positive legacy for both Dockyard and Bermuda
- More than 300 ideas were submitted by the public and the Committee agreed that they will assess ideas based on 5 weighted objectives
- The Committee individually reviewed and scored each idea against the agreed upon weighted objectives
- Scores were collated and the top 25 ideas were categorized and reviewed by the Committee to conduct a deeper dive into their viability
- Key industry representatives were engaged as part of conducting high level snapshots of these ideas
- Snapshots were presented to and discussed by the Committee; the Committee then re-scored the remaining ideas to identify final recommendations to submit to the WEDCo Board

Idea Evaluation Objectives & Weightings

Economic (25%)

- Provides economic benefits to Bermuda

Environmental (20%)

- Is sensitive to the environment, surrounding historical significance, and marine habitats

Financial (16%)

- Delivers a good Return on Investment (ROI) for Bermuda
- Is financially viable

Social/Cultural (19.5%)

- Is connected to Bermuda's heritage and culture
- Provides social benefits to Bermuda

Structural (19.5%)

- Is a good fit for the location, physical site, and exposure to weather and elements

Cross Island Legacy Committee Members (Volunteer-based)



Wayne Caines
Chairman
SENIAC Consulting



Roland Andy Burrows
Bermuda Tourism Authority



Aideen Ratteray-Pryse
Department of Planning



Kirk Outerbridge
Department of Works &
Engineering



Phillip Seaman
PJ Designs & WEDCo Board
Member



Joanna Cranfield
WEDCo



Elena Strong
National Museum of Bermuda



Jonathan Starling
Greenrock Bermuda



Rees Fletcher
ACBDA Legacy &
Sustainability Committee



Garry Madeiros
ACBDA Legacy &
Sustainability Committee

The volunteer committee was supported by Deloitte Consulting who project managed the process

Idea Generation & Public Consultation

The Cross Island Legacy Committee was committed to ensuring the process to solicit ideas was transparent and consultative and conducted various public consultations and engagements

Public Activity Summary


 **41** Public meetings with stakeholders & industry experts

 **12** Press releases, radio & video interviews

 **10** Email campaigns

 **6** Stakeholder events & information sessions

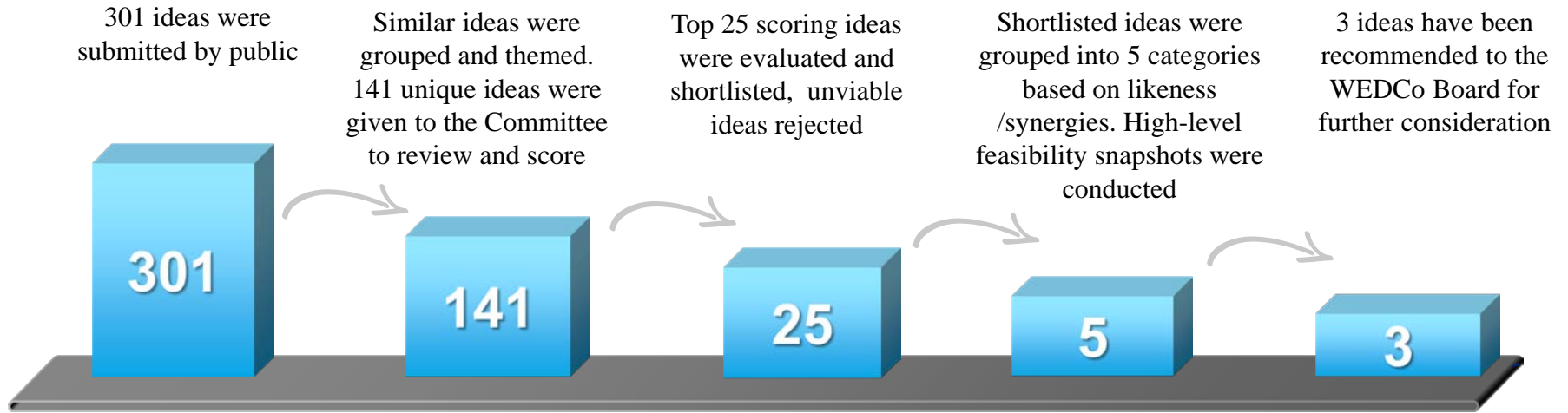
Facebook Activity Summary

 **717** Page likes

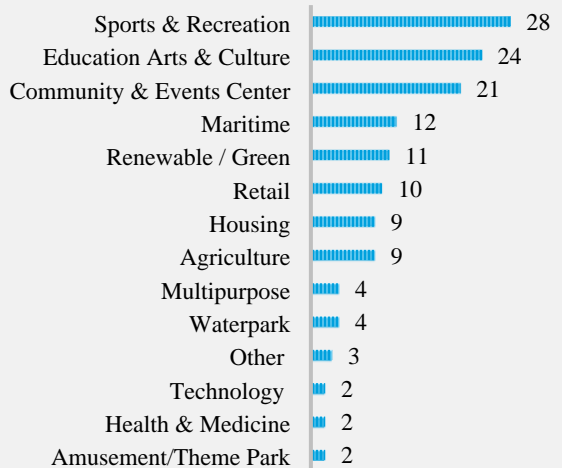
779 Reactions & comments to posts

134K Post views

Ideas Snapshot



No. of Unique Ideas Submitted by Theme



Top 25 Scoring Ideas (in order)

- Oracle Racing Academy
- Eco Trade School & Education Centre
- Maritime Hub
- Vertical Marine and Aquaculture Farm
- Shipyard
- Marine Services
- Sailing Centre
- Coral Husbandry
- Marina Resort and Yacht Club
- Green Grow
- Multi-Hull Training Centre
- Bermuda Academy of Boat Building
- Open Air Concert Theatre
- Convention Centre
- International Mega Yacht
- Boardwalk and Entertainment Centre
- Container Tech Campus
- Ocean Plastics Lab
- Technical University
- Maritime Cluster
- Major Event Hosting Organisation
- Marine-cultural Theatre
- Event Venue
- Cross Island Arts and Cultural Centre
- Conference and Event Cultural Centre

5 Shortlisted Categories

-  Blue/Green Business Hub
-  Renewable Energy
-  Sailing Facility/Maritime Hub
-  Large Event Venue
-  Mixed Use Development



Recommendation Overview

The Committee's recommendation for Cross Island was identified as an integrated Blue/Green Business Hub potentially including Aquaculture, Indoor Agriculture, Renewable Energy, and additional similar synergistic businesses. The Committee believes that synergies and complementary inputs/outputs make the value of an integrated development much higher than the sum of the individual elements.

Aquaculture

- I.e. cultivating fresh and saltwater populations of fish, shellfish, plants, algae and other organisms in controlled conditions
 - Marine species are raised in a hatchery/nursery and are then taken to the ocean for grow-out to be harvested for market at full size
 - There are multiple ways of implementing aquaculture facilities and it has the potential to align with other agri-related businesses (i.e. Indoor Agriculture) to not only maximize revenue but establish a closed circuit operation and provide cost savings (outputs of one operation become inputs of another)
 - The Bermuda Government has previously considered investor incentives for a local aquaculture industry
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Indoor Agriculture

- There are various methods to sustainably grow plants intensively year-round in a controlled indoor environment
 - Nutrients for feeding plants can be sourced from fish waste, animal waste or other nutrient sources
 - Indoor Agriculture has been noted as one way in which agricultural products can be sustainably grown, with others including geponics, or aquaponics also being potentially viable
 - Idea can also incorporate other agri-related businesses (i.e. aquaculture) to maximize revenue and establish a closed circuit operation providing potential cost savings (outputs of one operation become inputs of another)
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Renewable Energy

- Renewable energy has the potential to offer both a lower cost energy source for agriculture and aquaculture operations on Cross Island but could also provide potential additional energy cost savings for WEDCo and its nearby properties
 - Given its location and structural constraints, solar was recommended as likely the most viable option over wind or other renewable energy sources
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Recommendation Benefits

The Committee recognizes that additional analysis and research will need to be conducted to further assess the viability of the recommended idea, however based on the high-level snapshot conducted, the Committee has identified the following as benefits for a blue/green business hub on Cross Island:



Economic

- ✓ Labor intensive operations in agriculture and aquaculture has potential to generate new jobs and new types of jobs, including support industry functions
- ✓ Provides opportunities for local entrepreneurs, local businesses and investors
- ✓ A working population in Dockyard has the population to support other local businesses i.e. restaurants, shops, transport etc.



Environmental

- ✓ Innovative, forward thinking and green businesses
- ✓ Operation can be designed to have minimal negative environmental impact
- ✓ Positive environmental impacts include food security, public health, and reducing fossil fuel use



Financial

- ✓ 90% of local demand is met by imports = demand exists for these products
- ✓ Indoor agriculture and aquaculture can be a highly productive use of the land



Social/Cultural

- ✓ Significantly increases local food production and food security
- ✓ Ability to support and partner with local operators and vendors including farmers, fisherman etc.
- ✓ Educational opportunities and new science research



Structural

- ✓ Site constraints (weather, access) would likely not impact operations; structurally can be built to withstand environment
- ✓ Aligns to WEDCO's master plan of Dockyard as a 'Live, Work and Play' destination

Next Steps



The WEDCo Board will now seek to conduct further analysis and research on the Committee's recommended idea to better understand the viability of the Committee's recommendation. The Board will begin conducting next steps post AC 35.





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