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# Designing and Planning Beach Precincts

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## ABSTRACT

*Urban design and planning theory and practice reflects the different cultural contexts, locations, historical origins and political intents within which they are produced. This paper has emerged from a mixed methods case study of the urban design of three different beach precincts on the Gold Coast, Australia. The intent of the research was to understand how people value, use and relate to urban beach precincts so that their design, planning and development may functionally reflect the role that they play in people's lives.*

*The author's case study research of three Gold Coast beach precincts found that the governance of an accessible walkable public realm is the key to making beach precincts inviting, comfortable and secure for egalitarian use of the inherent values of a special case of development. These research findings led to the development of an urban design model which could sustain the values most associated in the research with beach precincts: the ability of people to relax, restore and connect to nature, the genius loci and cultural context of place.*

*A research-based urban design and planning model for beach precincts was developed that supports the political intent of egalitarian public access to activity, amenity and facility. This model explicitly articulates the need to incorporate research in the design and planning of beach precincts that identifies the needs of the constituency of disadvantage: children, carers, seniors and socially, economically, perceptually and mobility-impaired people, including women in all categories but particularly older females.*

**Keywords:** Activities, amenities and facilities, beach precincts, egalitarian access, restorative environment, urban design and planning guidelines.

## **Introduction**

Urban design and planning theory and practice reflects the different cultural contexts, locations, historical origins and political intents within which they are produced (Mumford 1961, Fishman 1982). This paper has emerged from a mixed methods case study (Yin 2009) of the urban design of three different beach precincts on the Gold Coast, Australia. The intent of the author's research was to understand how people value, use and relate to urban beach precincts so that their design, planning and development may functionally reflect the role that they play in people's lives.

The case study examined the complex relationships between the urban design attributes and spatial arrangement of beach precincts and public access to activity, amenity and facility. It did this using typological (Cartlidge 2011a) and urban design tools of analysis developed by the author to reveal the values, attributes and characteristics of different types of beach precinct. Literature reviews of academic and informal sources described differing narratives surrounding public access to the beach and preferred amenities and activity (Altheide and Schneider 2013). Structured field observations examined how people behave in the public spaces of the beach precinct in relation to the different forms, locations, edges and transitions of the different types of beach precincts (Gray 2009). Finally, the preferences and opinions of individuals (Oh, Draper and Dixon 2009, Raybould and Lazarow 2009) and professionals were sought for their preferred urban design characteristics, governance, activity and amenities of beach precincts via a questionnaire and a Policy Delphi group process (Cartlidge and Armitage 2014).

This first part of this paper identifies the constituencies who have been advantaged and disadvantaged by contemporary and historical urban design and planning practices for beach precincts. It also describes the typology of form, use and transition of beach precincts that are important in understanding how and where this occurs. The second part of the paper briefly describes the urban design principles that can be used in constructing urban design and planning guidelines and schemes for those precincts to produce responsible (Haas and Olsen 2014) and responsive future developments (Bentley et al. 1985).

In conclusion, the paper will present a model for values and researched-based urban design guidelines and planning processes. These will have explicit egalitarian political values to ensure that beach precincts maintain public access to activity, amenity and facility that will be essential for Australian seaside regional centres to respond to the needs and desires of future demographic and cultural changes.

### **Constituencies of Advantage and Disadvantage**

The case study research found the urban design of the beach precincts of the study favours the activity interests of active adult males, creating constituencies of advantage and disadvantage. They are constituencies rather than communities, as people can move in and out of them and only share disadvantaged access to the public spaces of the beach precinct as a common characteristic of membership of the constituency. The constituencies are summarised as:

- **Constituency of Advantage:** beach suburb residents, beachfront residents and property owners, tourism operators, real estate interests, cyclists, surf lifesaving clubs and their members, the physically fit and mobile. This constituency of advantage is also likely to be overrepresented in the urban design, planning, management and governance of beach precincts (Mees and Groenhart 2012).
- **Constituency of Disadvantage:** the constituency of disadvantage identified in the thesis is a broad grouping that includes children, carers, seniors, socially, economically, perceptually and mobility-impaired people, women and in particular older women, and, in the context of the Gold Coast, all those people who live in inland and hinterland suburbs.

### **Typology of Form, Use and Transition in Beach Precincts**

The case study identified from the typological and urban design analyses that the key spatial characteristics of beach precincts for public access to amenity and activity are to be found along the pathways through the transitional corridors located between public and commercial and built and natural forms. These are the:

- **Transitional Locations** found at social nodes, beach access points and gateways where facilities provide access to specific activities and amenities;
- **Beachfront Transitional Corridor** found along the transverse path between the access form and the beach in places with public foreshore spaces;
- **Gateway Transitional Corridor** found along the transect path between the built and access form, and
- **Transitional Edges** - the interface between public and private/commercial property and the different forms of the typology.

The most important transitional space in a beach precinct is the beachfront transitional corridor (Figure 1). It is in this corridor that the values of the beach precinct peak, as does the political conflict over its control (Cartlidge 2011b). All the social, recreational and restorational values (Kaplan, Kaplan and Ryan 1998) of the beach precinct are determined in this corridor and then modified or supported in the other transitional corridors, locations and edges of the precinct.

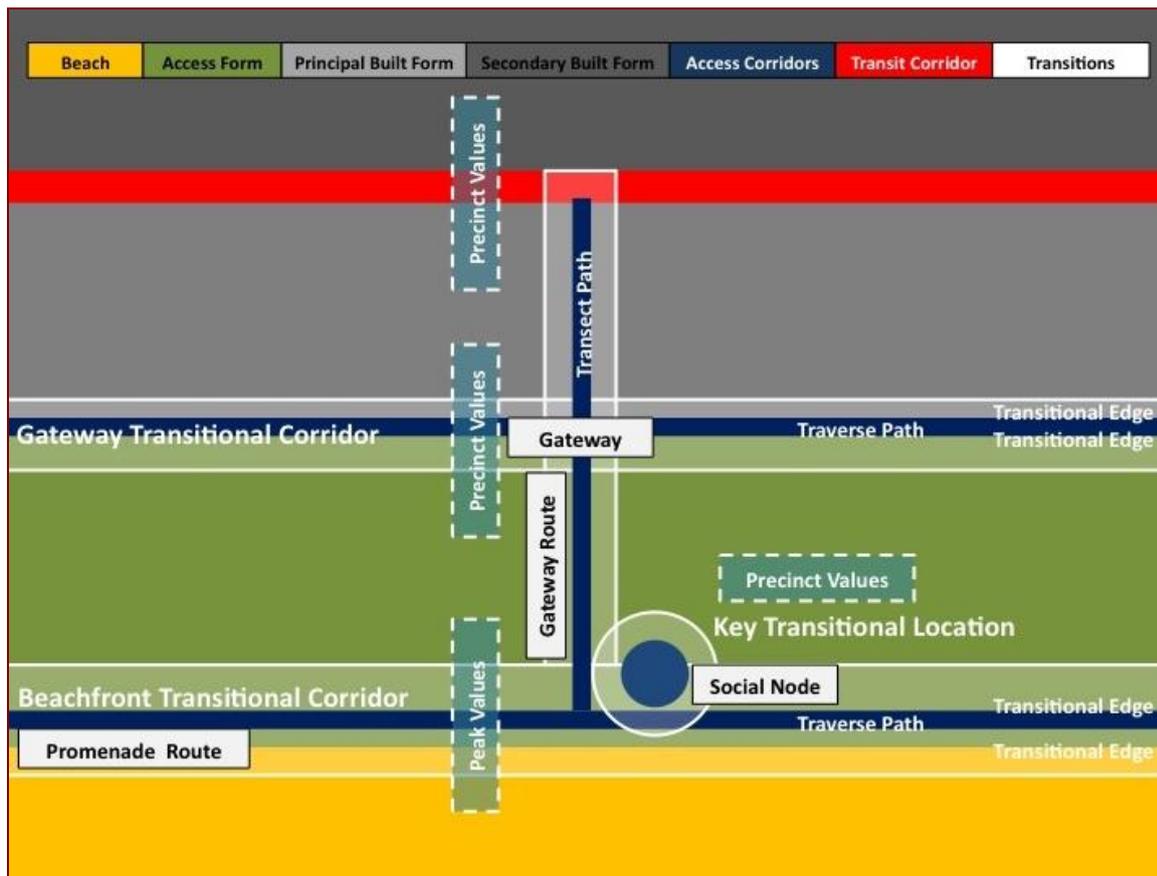


Figure 1: Typology of Form, Use and Transition of Beach Precincts (Author 2014)

The access form controls the nature of public access to the beach and the foreshore and is seen in some jurisdictions as only suitable for essential public infrastructure, recreational and temporary use (Shores Act 1988). The space from the beach to the first permanent buildings needs to be managed to respond to climate change, flood and erosion and prevent excessive urbanisation (Cartlidge and Armitage 2014).

### Urban Design Principles for Beach Precincts

The research identified attributes and characteristics of urban design within the guidelines that resolve tendencies for conflict between different people's use of place and the physical form of the spaces and places of the public realm (Alexander et al. 1977). Five urban design

Australian Regional Development Conference  
Economic, Planning, Environment, Community - Where to from here?

principles were developed during the research for the analysis of the public realm of the beach precinct from the perspective of a walking visitor. These are governance, accessibility, inviting, comfortable and secure. The urban design principles originate from a combination of the 'requirements' of a restorative place as described by Kaplan (1995) as 'being away', 'fascination', 'extent' and 'compatibility' and a textual analysis of selected urban design guidelines.

Australian and overseas urban design guidelines were examined for the attributes and characteristics of the principles included in the 'Agenda for Urban Quality in Queensland' (UDAL Qld 2005); The 'Fifteen Qualities of Good Urban Places' (Gold Coast City Council 2009); the Queensland Government sponsored 'Crime Prevention through Environmental Design for Queensland' (CPTED) (Lake et al. 2007); and the design principles of 'Healthy Spaces and Places' (Planning Institute of Australia 2009). The overseas design guidelines examined included the 'Principles of New Urbanism' (newurbanism.org 2012); the 'LEED 2009 for Neighborhood Design' neighbourhood development checklist (U.S. Green Building Council 2008); the 'Urban Design Compendium One' (Llewellyn Davies 2007) and the 'New Zealand Urban Design Protocol' (Pirrit et al. 2005).

The case study indicated that the **governance** of a walkable and **accessible** public realm were the peak urban design principles in any public space design of a beach precinct and if the design solution did not exhibit characteristics of these principles then the beach precinct has little or no value to the public. Depending on how well a beach precinct meets the needs of the peak urban principles as a walkable place then the beach precinct urban design principles of **inviting**, **comfortable** and **secure** which are related to the purpose of visit to beach precincts for their social and restorational values can be activated in different ways.

The peak urban design principles can be adapted to produce urban design guidelines for the public realm of other places besides beach precincts. However, **walkability**, as the peak attribute, is the unifying attribute of place that allows all the other urban design attributes, values and principles to be achieved. Briefly these can be summarised as:

- **Governance**, as a design principle, is how the public and private spaces of the precinct are arranged, apportioned, provisioned, financed and managed. Governance is how movement, access to amenity and activity are permitted or prohibited and how a person's needs and desires, activities, behaviours and preferences are enabled or

restricted. Governance of the public realm of a beach precinct has the attributes of walkable, suitable and available.

- **Accessible** as a design principle, is concerned with how people move around in the beach precinct and how they can chose to use its public spaces and the 'extent' of desirable views within and from the beach precinct. The urban design principle of accessible is described by three attributes of accessibility extracted from the guidelines: connected, permeable and openness

The beach precinct urban design principles were constructed from the identified values and characteristics of the beach precinct as an attractive, safe place capable of meeting walking visitors' needs for social, recreational and restorative use. The attributes of the urban design principles of a restorative, diverse beach precinct that meets human needs were determined to be inviting, secure and comfortable.

The beach precinct principle of **inviting** comprises the characteristics of the urban design attribute of **attractive** along with the Kaplan's (1995) restorative requirements of '**being away**' and '**fascination**'. The beach precinct principle of **secure** is comprised of the urban design attributes of **safe** and **supported** and the restorative requirement **compatible**. Finally, the beach precinct principle of **comfortable** is comprised of the urban design attributes of **sociable**, **opportunity** and **choice**. The characteristics of these principles are summarised as:

- **Inviting** as 'being away' from the usual urban environment, in a sensually attractive, restorative environment with characteristics of place that allow for people to be fascinated by the forms and locations of the beach precinct, inviting people to visit, stay or linger;
- **Secure** beach precinct that is a place to visit, related to the environmental design of places and spaces to be considered as safe, supported and compatible with intended behaviours and activities for egalitarian use; and
- **Comfortable**, finally, people are assumed to prefer a place that allows them to choose a comfortable degree of social interaction with others, with the opportunity and choice of appropriate activities suited to the purpose of visit.

Having concisely described who is affected by the urban design and planning of beach precincts and where this happens, we now move on to consider how the urban design of

beach precincts can provide ways to produce beach precincts that meet people's physiological and psychological needs (Maslow 1943).

### Proposed Model for Urban Design Guidelines for Beach Precincts

An urban design model for the production of urban design guidelines to guide development in beach precincts was formed by the author founded on the findings of the case study. This model explicitly supports the political intent of egalitarian public access to activity, amenity and facility (Figure 2).

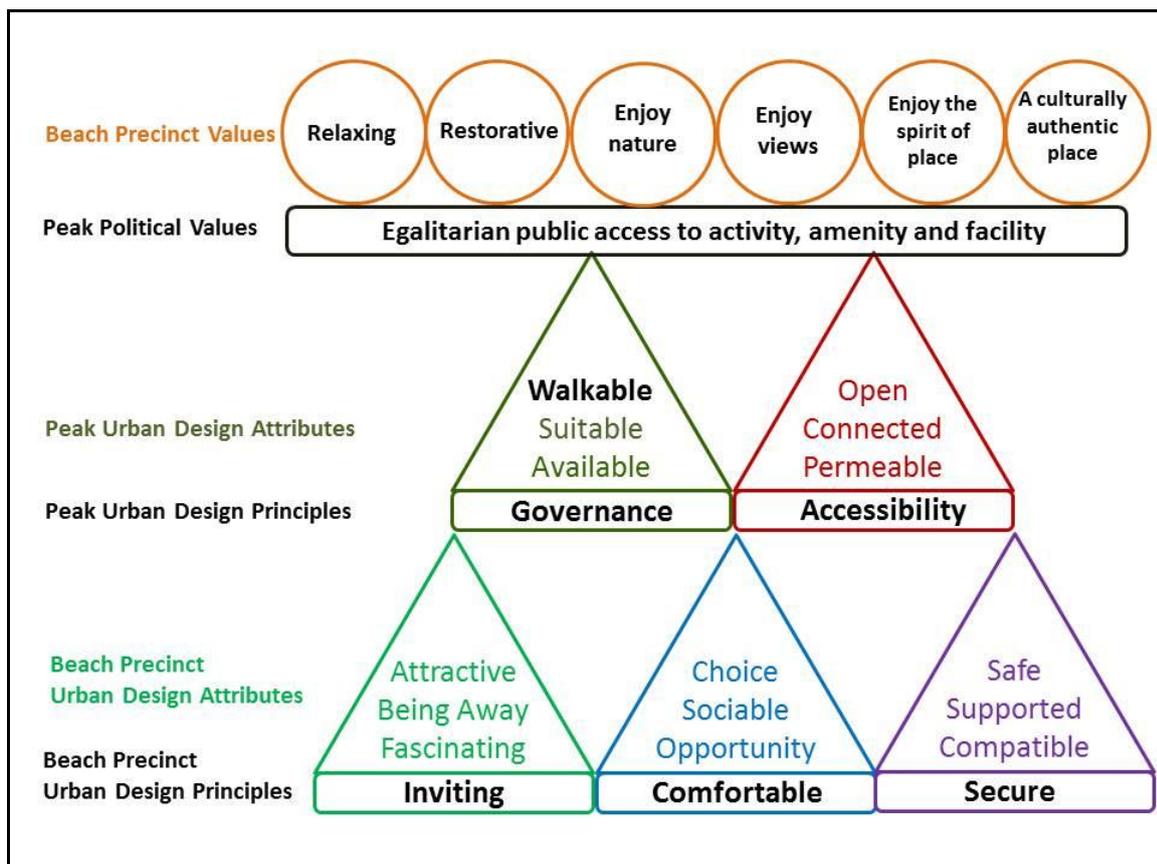


Figure 2: Proposed Model for Urban Design Guidelines for Beach Precincts (Author 2014)

The structure of the model rests on a base of the beach precinct urban design principles of inviting, comfortable and secure and their associated attributes which support the peak urban design principles and attributes. Resting on top of the peak and beach precinct urban design principles and attributes is a simple political mission statement applicable to any beach precinct.

This mission statement can be modified to suit local political and cultural values. Balanced along this political platform are the values most associated in the research with beach precincts: the ability of people to relax, restore and connect to nature by the amenity of views that is consistent with the spirit of place and an authentic cultural context. These values of

place are thought to be essential to any iteration of local beach precinct design, but they may be changed to suit the particular values of other places.

The beach precinct and peak political values could be varied to accommodate established uses such as surfing, or economic objectives such as a precinct with existing international tourism or commercial destinations. Some values could also be varied if social objectives could be met by a development proposal or historical or indigenous values of place are protected or enhanced.

The proposed urban design model has limited application for beach precincts without a public foreshore park or significant public foreshore spaces. In such a precinct achieving egalitarian access to activity, amenity and facility in a walkable accessible public realm is considered by the researcher to be difficult, if not impossible, We now move on to consider the values-based urban design and planning environment in which the model for urban design guidelines would best operate.

### **Values based processes of urban design and planning in beach precincts**

The oversight and responsibility for an appropriate urban design and planning process is currently under the authority of local and state government in Queensland (Queensland State Government 2010). Changes to local and state planning schemes would be needed to enable the design and development of beach precincts to be aligned to the values of the urban design principles identified in this research.

Urban design is not a mandatory component of planning processes and few local councils have the resources, knowledge or skills to incorporate it into their schemes or policies (O'Hare 2006). This was also recognised by the Policy Delphi group members during the case study and they recommended that beach precinct planning should be conducted by either a commonwealth or state coastal commission in the context of a National Coastal Park (Cartlidge and Armitage 2014). However, a commonwealth coastal commission would require changes to the constitution, making a state coastal commission, similar to the Californian Coastal Commission, a more likely option (Californian Coastal Commission 2012).

Whether state or national, a coastal commission would allow the development of a research and values-based process for the urban design and planning of beach precincts. It could also minimise the effects of development on the environment and reduce the liability of the nation for severe weather events, expected sea level rise and associated erosion and

Australian Regional Development Conference  
Economic, Planning, Environment, Community - Where to from here?

flooding of public and private infrastructure and buildings located in inappropriate locations (Committee on Coastal Erosion Zone Management 1990).

This coastal commission would rely on the formation of coastal commission research and design teams to make urban design a mandatory component of urban planning. The teams would use the model for urban design guidelines to determine the values, attributes and principles appropriate to individual precincts. This would allow the production of urban design guidelines and planning schemes that explicitly took into account the needs of the constituency of disadvantage (Haas and Olsson 2014). These teams would be available to small and large coastal communities in each state. The roles and professional composition of a suitable multi-disciplinary team for this task is initially thought to be:

- **Determination of the Beach Precinct and Peak Political Values:** This concern is seen as the field of expertise of the political functionaries, land use planners, developers, and financiers of the project. Professional assistance is obtained from the local business community and any gatekeeper organisations active in the beach precinct. This network is necessary to create and support the appropriate variety of opportunity and choice for the beach precinct to be viable. The coastal commission urban design and planning team would also be responsible for ensuring that local interests do not subvert the process for economic gain (Salvesen 2005).
- **Survey and Assess the Beach Precinct and Peak Urban Design Principles:** This concern is seen as within the fields of expertise of the urban designer, landscape architect and planner for the public spaces and places of the beach precinct, in particular the transitional corridors, locations and edges. The architect and urban designer are required for the design of appropriate edge transitions from private/commercial spaces to public spaces, and the transport planner for the route connections within the precinct and to its adjacent settlements and beyond.
- **Represent the Constituency of Disadvantage:** An important consideration in any design process for beach precincts is that the constituency of disadvantage be able to benefit from the identified beach precinct values and the activation of the urban design principles of inviting, comfortable and secure. It is thought that this would be the role of the community planner in collaboration with the urban designer/planner. Substantial input should also be sought from urban and environmental behavioural scientists, the local community, especially the local arts, activity and environmental groups, and other special interest groups as appropriate to place, such as local indigenous communities.

After the production of urban design guidelines and schemes for beach precincts by the research and design teams, a development approval process would be necessary to ensure that any development complied with the guidelines and schemes. A suggested development approval process that could achieve this objective is discussed next.

### Suggested development approval process

In order to ensure that the urban design guidelines and schemes produced by the research and design teams for different beach precincts achieve their objectives; suitable controls on development approval are needed. Figure 3 shows the process for development approval and its relationship with a design project consultation process explained later in the paper.

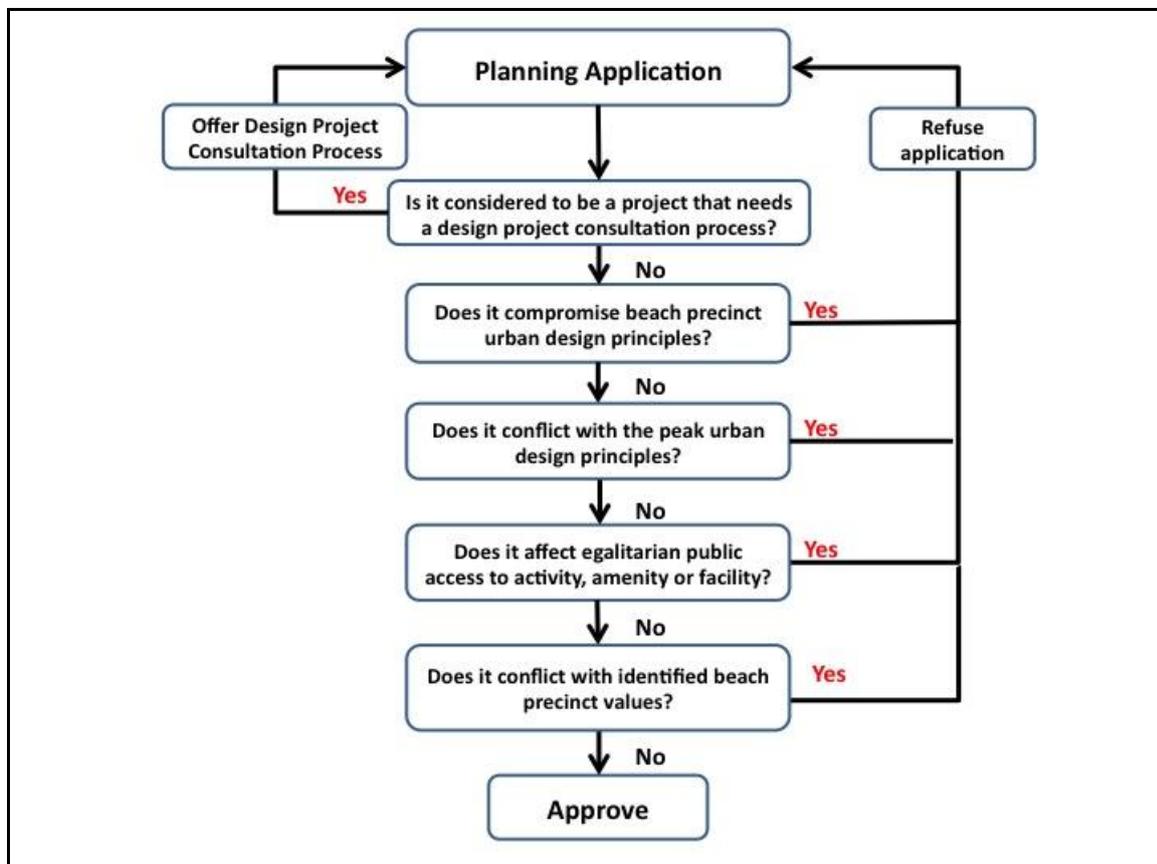


Figure 3: Proposed Development Approval Process for Beach Precincts (Author 2014)

The planning application would be subject to a simple approval process. If the application was a substantial project that would materially alter the nature or use of place, or impact the precinct by changing use or the nature of place in the transitional corridors, locations and edges of the beach precinct, the applicant would be offered a design project consultation process. If the application compromised, conflicted or affected egalitarian access or the principles or values of the guidelines or schemes the application would be refused.

If a project is refused, explanations should be given that clearly articulate the reason for refusal and advice offered on how the application may be altered to gain possible approval. Unlike the current permissive planning approval process in Queensland, a development application that is clearly unsuitable could be rejected, either without recourse or with advice, if it does not meet the values and principles identified for that beach precinct.

### Proposed Urban Design Consultation Process

The proposed urban design project consultation process is oriented to produce suggestions that improve or modify the design of development proposals appropriate to the development of a responsible and responsive beach precinct. The urban design consultation process would have four stages: a research stage, a design stage, a consultation stage and a public stage. This is intended to improve the quality of development proposals through a process of collaborative research and education of all parties involved (Figure 4).

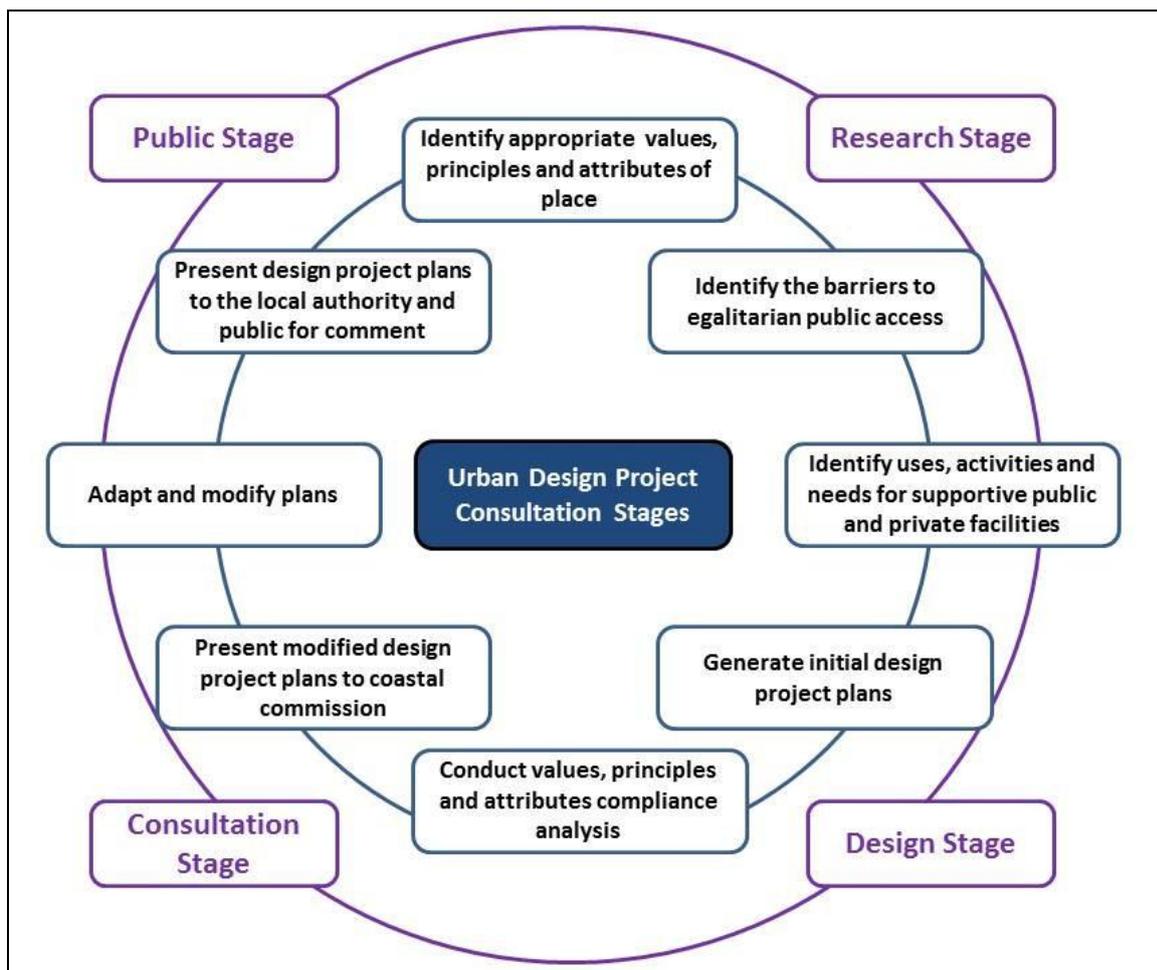


Figure 4: The Urban Design Project Consultation Process Stages (Author 2014)

## Australian Regional Development Conference Economic, Planning, Environment, Community - Where to from here?

In keeping with the intent of the urban design model for beach precincts, the research stage would respond to the development proposal by identifying the barriers to egalitarian public access produced by the proposal. It would also identify any uses, activities and needs that are enhanced or compromised by elements of the proposal.

The research stage would be followed by a collaborative principles and values compliance analysis. This would identify the positive, neutral and negative elements of any initial design project plans and the way they impact or enhance the urban design guidelines for the particular beach precinct, so that the process of compliance to the urban design guidelines and schemes for that precinct is clear to all parties.

The consultation stage would see any design project plans for the proposed development being sent to the coastal commission for analysis against higher order requirements of coastal planning developed by the commission. The coastal commission could reject, provide advice or suggest modifications to the design of the proposal at this stage. If plans were accepted by the coastal commission they could then be forwarded to the local authority and public for comment.

Public comment would be for the purpose of reviewing the preferences for use and activity that had not been revealed during the previous stages, so that they can be incorporated into the design of the development and not necessarily as a form of veto. Any modified proposal would still need to meet the intention of the beach precinct planning scheme. It could be rejected by the coastal commission after the consultation process with clear reasons given for the refusal.

This does not mean that applications need to meet a pattern book approach to urban design. It is intended that development should be allowed to evolve to meet changing cultural and social needs and desires. The process should also allow for cultural innovation that does not compromise the principles of egalitarian public access, conflict with the articulated values of place, exclude the constituency of disadvantage or compromise desirable existing urban design attributes.

### **Concluding Comments**

The proposals contained in this paper for the urban design and planning of beach precincts arose from the case study of three Gold Coast beach precincts. The localised, political conflict identified in those precincts are in many ways a microcosm of a global struggle over the use and distribution of important benefits and resources found in the wider society

Australian Regional Development Conference  
Economic, Planning, Environment, Community - Where to from here?

(Graham and Aurigi 1997). It is evident that many of the same conflicts exist in the design and planning of beach precincts on the Gold Coast as in other seaside places.

It is finally proposed that regional beach precincts will be highly valued, resilient and sustainable for residents, tourists and visitors if a principled approach to urban design, planning and development is taken by governance decisions that ensure egalitarian access and create inviting, comfortable and secure seaside destinations.

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