

Baukultur" as an impulse for growth Good examples for European Cities

Selected case studies



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4 Introduction

### Introduction

#### **Study objective**

Integrated urban development is one of the focal areas of the German Presidency of the European Union in 2007.

In this context the German Federal Ministry of Transport, Building and Urban Affairs has chosen to focus on architecture and 'Baukultur' as aspects of integrated and sustainable urban development.

'Baukultur' – the quality of built environment as a whole - can be seen as an integrated political approach to sustainable urban development. The term Baukultur describes engagement with the built environment - including the built products as well as the processes managing their procurement and maintenance. Baukultur encompasses all factors that influence the built environment including, amongst others, architecture and engineering, infrastructure, town planning, urban design and landscaping, building maintenance and building economics.

The aim of this study is to use the analysis of built examples to confirm the central thesis: *Baukultur* makes a valuable contribution to the economic, social and sustainable development of the European city. An investment in *Baukultur* through quality driven planning, procurement and management processes as well as high quality built structures is, in fact, a strengthening of the European city.

#### Methodology

Relevant examples of urban regeneration in a variety of European cities have been chosen to document that *Baukultur* is an impulse for positive economic, social and environmentally sustainable growth. Two examples from outside Europe have been included to demonstrate important and relevant experiences that have been gained elsewhere in the world. All examples reinforce the notion that *Baukultur* is today a relevant factor of European structural and location policy and that it needs to be strengthened.

A variety of relevant factors like programme (e.g. inner city, service or residential), type of intervention (town planning, landscape design, architecture, engineering) or scale (city, district, place) have been considered in this study. Further, each case study is assessed along a series of quality criteria:

Local character
Connectivity
Density
Mixed use
Adaptability
High quality public realm
Integrated decision-making
User participation

Each of these are then assessed for the positive value that they contribute towards, the economic, social and environmental improvements of the city (see matrix p. 31).<sup>1</sup>

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In the concluding chapter of this study a matrix has been developed to enable direct comparison of the case studies and their capacity to spur economic, social or environmental growth.

#### Case studies

The individual case studies selected by the consultant team vary in nature, from the acupuncture approach of Bilbao, the public infrastructure of Bogota, the public spaces and social change projects of Copenhagen, cultural institutions of Temple Bar – Dublin, a design framework in central Berlin, the sustainable agenda of Bo01 in Sweden, or the city wide strategy of Melbourne. All case studies have in common that they have relied on their governments taking a proactive approach to raise the local level of *Baukultur*.

Each case study states the reasons why the interventions were necessary, the specific interventions that were made, what positive impact the interventions have had and what lessons can be learnt from the case studies.

#### **Further information**

Sources of supporting information material and relevant contact details related to the case studies have been provided at the end of this document.

6 Glasgow / Scotland



Buchanan Street is popular after its upgrading.

### Decentralization to contration

'If Cities were judged on the same criteria as diving, namely style and degree of difficulty, then surely Glasgow would be a likely winner.'

Prof. Stuart Gulliver. University of Glasgow

#### Glasgow / Scotland

Over a thirty year period starting in 1945 Glasgow's strategy of recovery was to decentralize into five satellite Towns. During this period Glasgow's population declined from 1 million to 700,000. The new towns were built on modernist principles that isolated buildings leading to social problems found in nearly all developments of this kind. A hurricane in 1968 demonstrated the robustness of construction of the original stone housing and caused a change of heart that led to their reconstruction rather than demolition. At the same time the City's Structural Plan saw a change in policy from decentralization to concentration. The city centre was taken forward in the early 1980's by the Scottish Development Agency with a strategy embraced in the phrase 'Glasgow Can Do It,' which looked to attract business, make aesthetic improvements, create an entrepreneurial environment and promote Glasgow city. The impetus for change was helped along by Glasgow winning the rights to stage the 'Garden Festival' 1988, being awarded European City of Culture 1990 and the UK City of Architecture and Design 1999.



Room for life - many new cafes and public activities.



Public transport is improved and the stations are well integrated with the public spaces.

Local character



Connectivity



Density



Mixed use
Adaptability



High quality public realm



Integrated decision-making



Glasqow/Scotland 7

#### **Key interventions**

The policy change from decentralization to centralization was embodied by some specific interventions;

- 1. Upgrading of the Merchant City as a liveable/ workable city centre neighbourhood.
- 2. Implementation of a quality public realm program.
- 3. Gaining the support of the Director of Roads to a create more balanced movement system.
- 4. Buchanan Street was pedestrianized and upgraded.
- 5. Creation of Grant Street as an inner city urban village.

#### Public space interventions in Glasgow.



Glasgow City Centre 1:10.000

#### **Achievements**

Between 1994 and 2006 Glasgow has undergone a renaissance as 14 hectares of new and improved public realm was added to the city centre. This included the upgrading of 3 squares and 17 streets; the best known of these being Buchanan Street, which has become known as a world class shopping street. Glasgow's retail sector is now the best performing in the UK outside of London.

Its economy has strengthened with the creation of 60,000 new jobs, 72% of them in the city centre and 40,000 being Glasgow residents.

Higher education has increased by 7.5% and the city has become one of the UK's liveliest arts and music scenes.

#### Conclusion

Glasgow is a good example of how if a city starts to believe in itself and build on its strengths it can turn its fortunes around. Its decision to re-house its population using its original building stock and to upgrade its public realm with high quality design interventions reignited the spirit to succeed in its local community. Also important was the courage of influential agents in the form of the Directors of Roads and Scottish Development Agency who first commissioned Urban Designers in the production of a Public Realm Strategy and then assisted in its implementation. This must surely be a first where a Road Authority is the lead agent in upgrading the public realm for pedestrians.

8 Bordeaux/France



Tribunal de Grande Instance. The Law Court of Bordeaux.

## Quality public infrastructure

'The global market is an intensively competitive one. For cities, the battleground is the 'sense of place'. One of the great mistakes of urban planning during the last decades of the 20th century was to construct urban infrastructure with no regard to historic fabric.'

Dr. Tristran Hunt. University of London.

#### Bordeaux / France

Bordeaux's fortunes have historically been tied to its wine industry and port both of which in recent times have suffered from declining markets. With its rich historical architecture dating back to Roman times the Urban Community of Greater Bordeaux (CUB) decided in 1996 to regenerate its fortunes through a program of quality public infrastructure projects. The largest initiative was the construction of one of the most advanced tram systems in the world. Bordeaux also embarked on an ambitious public building and public realm program with one of its most notable projects being the Tribunal de Grande Instance by Richard Rogers completed in 2000.



Quais. The upgraded river front gives new possibilities for the city life.



The new tram is delicately integrated in the public spaces.

Local character

 $\mathcal{A}$ 

Connectivity



Density
Mixed use



Adaptability



High quality public realm



Integrated decision-making



Bordeaux / France

#### **Key interventions**

- 1. By 2007 Bordeaux would have reintroduced 43.7 kilometers of tram track on three lines.
- 2. It was the first City in Europe to introduce a ground-based power supply system for its trams. Removing the need for over head wires. This was done out of respect for its heritage architecture.
- 3. The left bank around the old city started to pedestrianise areas of the central city around the Cathedral and Town Hall using high quality finishes and infrastructure.
- 4. Also the construction of the Tribunal de Grande Instance which completed the legal precinct preserving historic buildings and creating a civic landmark as well as a fine new public space.
- 5. On the right bank of the river the development of new gardens, residential and educational facilities have been the major focus.

New tram lines and public spaces in Bordeaux.



#### **Achievements**

After initial teething problems the three rail tram system which serves the most densely populated areas of Bordeaux now carries 190,000 passengers a day and is set to become the standout urban transport system in Europe in terms of good design and integration into historic neighbourhoods. The reduced car traffic and quality public spaces have ignited a renaissance in the business fortunes of the city which has seen its population grow from 650 000 in 1999 to 710 000 by 2006. The commercial centre of Meriadeck has experienced a 20% increase in business since the introduction of the Tram infrastructure.

Six kilometres of Quay side have been upgraded and the city has improved its links with the river. Bicycle and motorcycle usage has increased by 50% since 1999.

#### **Conclusions**

Bordeaux has through the investment in high quality public infrastructure reignited civic pride in its citizens. The traditional centre of the city has been given renewed importance through the use of good architecture and the improvement of public space around the Cathedral, Courts, Town hall and River. Across the river, on the right bank, new parks, residential and educational facilities have been used to lift the quality of the area. The centre and its adjacent areas have then been reconnected using an excellently designed tram system to symbolize the renewed confidence of the city.

Bordeaux is an excellent example of how good design of all elements of a city can influence the pride and confidence of that city. Civic pride is a strong under current of all successful cities. 10 Melbourne / Australia



### Monofunctional to multifunctional

'After taking a beating for 100 years, Melbourne's central business district is fighting back. New census figures ... paint a picture of a city few would have imagined 30 or even 10 years ago.'

"The Age", 4 June 2003. Article by Royce Millar

#### Melbourne / Australia

In the early 1980's Melbourne was, like many cities, in a state of decline. It was experiencing a reduction in almost all sectors of its economy. It was loosing retail to district shopping centres, residential to suburbs and was increasingly becoming a dead mono functional business centre. In 1985 a Strategy was put in place to attempt to reverse this trend. A main thrust was the incremental improvement of the City's public realm, combined with a conscious process of action planning to assist in turning around the centres fortunes. One key action was to increase central city residential accomodation. A project, "Postcode 3000," had the aim of increasing the population of the central city from 800 to 8000 residential units over 15 years. In addition an ambitious Arts and Culture program was implemented and small businesses were encouraged back to the city. Street furniture, tree planting, improved sidewalks and street trading were all designed to a high quality and with greater coverage.



Residential. 10,000 new apartments in the central city.



Public Spaces. 71% more quality spaces for people.

Local character



Connectivity



Density Mixed use



Adaptability



High quality public realm



Integrated decision-making

User participation



Melbourne / Australia 11

#### **Key interventions**

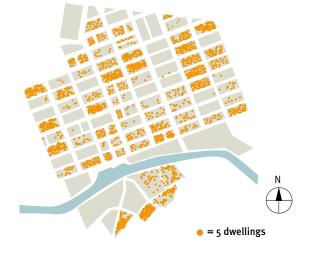
In order to achieve an increase in its residential population and develop a mixed use central city with greater densities, interventions were made at six levels;

- 1. Financial incentives a 3% tax for the provision of open space was removed and building and planning fees removed.
- $2. \, Technical \, support \, \hbox{-building and planning regulations were} \, amended \, to \, favour \, residential \, development.$
- 3. Streetscape improvements the City upgraded the adjacent public realm so as to complement and support the developer's investment.
- 4. Promotion the City put together a comprehensive marketing strategy.
- 5. Pilot Projects the city converted a number of buildings in order to illustrate the potential building stock available for reuse.
- 6. The City actively encouraged the recycling and additions to existing vacant or under utilized office buildings.

 $Dwellings\ in\ Melbourne\ city\ centre,\ 1983.$ 



Dwellings in Melbourne city centre, 2002.



## Achievements The project star

The project started in 1990 and by 2002 had seen the residential stock increase from 800 to over 10 000 units in the central city. This also led to the opening of over 30 new convenience stores and supermarkets. Bars, cafes and restaurants increased from 580 to 1.200 at the end of the 1990's. Side walk cafes grew from 110 in 1993 to over 400 by 2002. Municipal taxes charged to landowners were reduced from 13% of the improved value in 1995 to less than 6% by 2006. Streetscapes and building stock was upgraded and vacancy rates in commercial buildings reduced from 14% in 1992 to 6% by 2004. The decline in retail space was halted and 2004 saw a modest increase in retail floor space. Postcode 3000 was a key project in the turn around of central Melbourne.

#### Conclusion

This project saw Government intervention in favour of residential development combine with innovative architectural and development solutions. During the process the government was able to refine its building and planning regulations to streamline the development process. Its building surveyors became proactive looking for ways to assist desirable development. Architects developed new living models and found innovative ways of recycling and extending redundant commercial building stock. Developers discovered new ways of minimizing risk through finance models that saw the early involvement and commitment of future owners – buying off the plan.

The overall program had financial benefits for all participants, improved social outcomes for the citizens and the city and positive environmental outcomes through reduced energy consumption due to higher densities close to essential services and recycling of old buildings.

12 Central Berlin / Germany



## Quality through consistency

'And yet this curious regulation (set eaves height) did have one positive effect. It brought a more human dimension to an urban district than wouldn't have been the case if we had only tried to build high.'

Dr. Manfred Gentz. Chairman Daimler-Benz Board.

#### Central Berlin / Germany

The successful rebuilding of central Berlin is in a large part attributable to the consistency and confidence with which simple but effective planning controls have been applied. In hind sight we recognise that to build a good city you need to build good streets, especially as streets make up 80% of any city's public space. Berlin has achieved this through the application of a 22 metre eaves level in the central city. Berlin sits alongside Paris, Prague, Vienna and Barcelona as clear examples of how height controls have had a positive impact not only on a city's built form but also the vibrancy and livability of the areas they create. These principles are most easily applied where an existing fabric exists but come under pressure when large scale redevelopment sites are considered. In Berlin's case the redevelopment near Potsdamer Platz was just such a case - fortunately the client in the form of the Senate had strong convictions about the importance of clearly defining the envelopes within which development could take place, in order to reflect the mid-rise nature of the central area of Berlin.



Old and new provide a feeling of continuity and change.



Consistent eaves height reinforces the streets as the major public place.

Local character



Connectivity



Density Mixed use



Adaptability



High quality public realm



Integrated decision-making



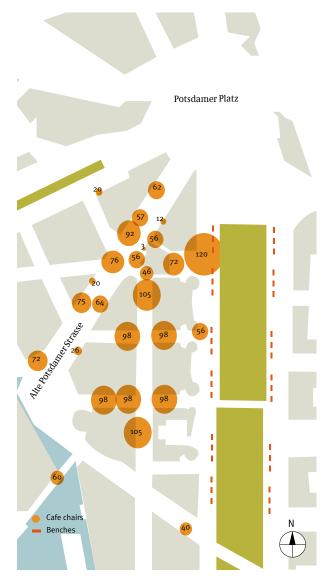
Central Berlin / Germany 13

#### **Key interventions**

The parameters for the area near Potsdamer Platz were developed by the client and outlined in the preliminary design by Himler and Satter. These were:

- 1. Blocks of building initially set at  $50 \times 50$  metres with a consistent eaves height of 26 metres.
- 2. Street widths were to be half the height of the buildings.
- 3. Two tall buildings were to form the gateway from Leipziger.
- 4. The area was redeveloped as a mixed use area and retail uses were to meet the needs of all sectors of the community.
- 5. Car parking was restricted to 2500 spaces on site.
- ${\bf 6}.$  Haus Huth the only historic building was incorporated into the scheme.
- 7. The implementation of the plan commenced under the guidance of monthly workshops with all players.
- 8. The building of the U-Bahn line 3 under Potsdamer Strasse was an integral part of the redevelopment.

New life near Alte Potsdamer Strasse.



Alte Potsdamer Strasse / 1:4.000

#### **Achievements**

70,000 people visit Potsdamer Platz every day of which 40% are tourists.

The area is Berlin's centre of film with 40 screens in 3 cinemas, a Film Academy, Imax, and Film Museum and it is regarded as a must see by visitors. Potsdamer Platz is considered one of Berlin's top shopping areas. The streets have become popular outdoor eating places. Where the number of café chairs is equal to some of the most popular eating streets in Europe.

#### Conclusion

On this difficult site confined by the Philhirmonic and cut through by major road systems the new development is successful in illustrating how large scale redevelopment of a central city site can be achieved by close co-ordination of all players in a city's *Baukultur*. It also clearly shows the importance of setting clear goals, in this case that public life should be played out in the street and not within the buildings. The guiding role played by the client to ensure this goal was achieved should not be under estimated. The end result is one where the overall built fabric of the area works in concert to produce a public realm that supports activities that are attractive to the general population. The simple formula of setting eaves heights, street widths and ensuring all buildings build up to their street frontages and open up to the public realm, combined with a good selection of mixed uses has produced a successful piece of urbanism.

At a time where many cities are seeing high rise development as a solution to modern development Potsdamer Platz is a sobering example of how the consistency of the public realm is of greater importance than individual architectural statements.

4 Bo01/Malmô/Sweden



 $Tall\ buildings\ at\ the\ seafront\ create\ shelter\ for\ the\ smaller\ buildings\ and\ public\ spaces\ within\ the\ area.$ 

## Shipyards to sustainability

'The Bo01, to Malmoe's considerable credit, tangibly demonstrates... that an ecological and sustainable city is imaginable, and indeed achievable. Bo01 has set in motion, both in process and built form, a dialogue about what a city is and could be... about how we might find our way out of the environmental abyss'

Timothy Beatley, 'Envisioning Future cities – a comment on Boo1'

#### Bo01/Malmö/Sweden

In 1973 Malmoe's economy was based on its capacity for ship building. By the 1980's Kockum, the biggest shipyard in Scandinavia, had closed and 25% of its workforce, 40,000 people had lost their jobs. Faced with this situation Malmoe needed to redefine its role. The strategy implemented had three goals. Firstly, it decided to tie is destiny more closely to Denmark, of which it had once been a part. This was achieved between 1991-2000 through the construction of a bridge between Malmoe and Copenhagen which resulted in the two centres being 16 kilometers apart by road and rail. Malmoe effectively became a satellite of Copenhagen. It then decided to pin its future to becoming a knowledge City. It ran a European competition for a new University which was to be located in the then redundant dockyards. The final goal was to win the rights to the 2000 Swedish Housing Exposition. Not only was this to continue the Swedish tradition, started in the 1920's, for innovative housing solutions but it was also to create the most sustainable city neighbourhood in Sweden and possibly western Europe. This became a reality with the Bo01 project.



The promenade. One of the popular attractions within the area.



Modern dwellings with panoramic sea view.

Local character



Connectivity (internal connectivity



Density



Mixed use
Adaptability



High quality public realm



Integrated decision-making



Bo01/Malmö/Sweden 15

#### **Key interventions**

- 1. To build a sustainable neighbourhood that dealt with sustainability holistically from the decontamination of soil, planning, traffic, waste, density, mixed use, water, energy and information dissemination.
- 2. The area was to be designed to be both an exemplar of urban design as well as sustainability.
- 3. Overall master plan with defined building envelopes, determined to protect open spaces from the wind.
- 4. Procured to be through small development parcels so as to ensure a variety of style and product.
- 5. Different architects to be used for each small parcel.
- 6. Quality assured through use of quality guidelines administrated by client.

Small scale development packages provides variety in Bo01.



#### **Achievements**

The project was financially successful and achieved its environmental goal of being 100% self sufficient in energy, assisted by the construction of an adjacent windmill.

It achieved a density of over 125 units per hectare with a mixture of uses, 45% of its accommodation for students and the remainder are families and empty nesters. It has become known as one of the most successful urban developments in 21st century evidenced by over 200 technical visits and study tours since its completion. The majority of units sold well and resales have continued to receive high prices. The quality of public space is very high.

#### Conclusion

Bo01 illustrates all the characteristics of successful development. It is an exemplar of how the fields of good architecture, urban design and sustainable development are converging. It questions the approach of large scale uniformed development solutions and proves that small scale varied packages are both financially achievable and arguably more profitable in the long run. Its investment in high quality, built to last, public spaces both at its waters edge and internally have added value and liveability to the overall development. Bo01 is arguably one of the most important urban developments in Europe this decade.

16 Temple Bar / Dublin / Ireland



### From blind spot to city of culture

'The Temple Bar area in Dublin is a well known example, where culture has provided the vehicle, generating power for starting up new transformation processes in the city, and thus making the city able to adapt to new post-industrial circumstances'

Prof. J. Kvorning, 'Urban Restructuring & Cultural Planning'

#### Temple Bar / Dublin / Ireland

The first step in the remarkable urban transformation of Temple Bar was an international competition organized in 1990. Prior to this the area of Temple Bar had been land banked for redevelopment as a transport terminal and during the period of land accumulation properties were leased to students and artists at low rentals. This short term strategy was to influence the final success of the area. What emerged was a highly creative community that brought a new vitality to inner Dublin leading to its nomination as 'European City of Culture' in 1991. Following this recognition and with assistance from the European Union it was decided to shelve the proposal for the transport terminal and through the formation of a redevelopment company, 'Temple Bar Properties Ltd.' to sensitively regenerate the area as a residential and cultural precinct.



'Wall of Fame'. Temple Bar is transformed into a cultural centre.



Connectivity. Pedestrian Bridge links to the rest of the city.

Local character



Connectivity



Density
Mixed use



Adaptability



High quality public realm



Integrated decision-making



Temple Bar / Dublin / Ireland 17

#### **Key interventions**

Temple Bar Properties ran a competition for the Urban Design frame work. The objectives of the framework plan were;

- 1. The regeneration of a residential population in Temple Bar.
- 2. Consolidation of its existing character.
- 3. Conservation of the urban fabric and the integration of renewal proposals.
- 4. Development of new cultural institutions to consolidate the emerging cultural identity of the area.
- 5. The creation of three new public squares developed with individual identities and arranged to reinforce the east west spine.
- 6. Implementation through the formation of a development company.

New Public spaces and cultural institutions in Temple Bar.



#### **Achievements**

Improved permeability through upgrading east west pedestrian link, new pedestrian bridge, links cut through existing blocks, new curved east-west street and Parliament Street reinstated as north south link. Increased density has re-established a living city with a community of 5,000 citizens, including 3,000 residents.

Introduction of a greater mixture of uses has reinforced a sense of place and vitality from a combination of retained and new uses all of which has helped reinforce the existing street patterns.

The application of a strong conservation program based on minimal demolition - in favour of imaginative refurbishment and releasing the potential of derelict sites.

The development of priority projects including cultural institutions, new public squares and a new pedestrian bridge over the Liffey using the mechanism of a development company for implementation while returning a profit.

No one wanted to invest in the area to start with, but the public investment in a few key cultural institutions made the investors realise the potential of the area.

#### **Conclusions**

The incremental process of change through the introduction of new cultural institutions, improved public spaces and a mixed use community managed by a development company has proved to be a very successful model for inner city regeneration. So successful that many Dubliners feel the area is too popular and that 'outsiders' out number the locals. The key lessons are that rental structures and access to appropriate facilities that favour creative communities can be an important catalyst in the regeneration of blighted inner city areas.

18 Bogotá / Colombia



 $\hbox{`CicloRutas'\,} 297\,\hbox{km of a new comprehensive bicycle network that links the suburbs with the city centre.}$ 

## People, places and transportation

'The ciclorutas, an extensive network of cycle paths initiated two decades ago, have become one of the city's most successful initiatives to make Bogota more sensual and more public'

Armando Silva 'Cities-Architecture & Society', Venice Biennale o6

#### Bogotá / Colombia

Since 1998 numerous urban renewal projects and a focus on public transportation have greatly improved the quality of life in Bogota. Government Agencies working with the local community have improved public space in the city, adopting the philosophy that 'an improvement of public space improves the quality of life and generates social equity.' New public spaces have been created. A Plaza in the centre that had been taken over by vendors was recovered. Over 600 buildings were demolished in the most derelict, crime-ridden neighbourhood and the area redeveloped as a large park and plaza, helping breathe new life into downtown Bogota. Car usage was severely restricted: 40% of all cars must be off the streets during peak hours and a car free day was adopted through a referendum. These measures were complemented by investment in public and sustainable transport such as a high quality bus-rapid-transit system. The Government also developed other community infrastructure such as schools and libraries.



'TransMilenio' Bus system is improved and today very popular.



Road before / road today - space for walking and cycling.

Local character
Connectivity

Density (existed already)

Mixed use (existed already)

Adaptability

High quality public realm

Integrated decision-making

User participation

Bogotá / Colombia 19

#### **Key initiatives**

- 1. A city park system developed integrating various open spaces to provide quality while restoring the ecological balance.
- 2. Three major libraries were built.
- 3.48 new public schools built.
- 4. Low cost housing upgraded.
- 5. 1200 billboards have been removed to improve the visual environment.
- 6. TransMilenio bus rapid transit system opened in 2000. The busses drive in dedicated lanes and carry 160 passengers in each bus.
- 7. CicloRutas a comprehensive network of cycle ways developed between 1997-2001.



Poor suburban areas linked with the wealthier city centre via bicycle routes and public transport (see aerial photo top left).

#### **Achievements**

From 1989-2000, the amount of green space per person has increased from 3.2 sqm. to 5.9 sqm. with a target of 16 sqm. Bicycle usage has increased 900%, from 0.5% to 5% of the population with over 300 kilometres of new bike paths. 80% of the population use public transport and by 2025 the TransMilenio system will have 388 kilometers on 22 separate lanes of new mass transit system. Over the past decade crime has dropped by about 70% and kidnappings decreased by 87%.

#### Conclusion

Bogota has over the last decade reinvented itself through its public infrastructure projects aimed at benefiting the majority of its citizens. A substantial part of its improvement was introduced between 1998-2001 under the strong and often courageous political leadership of its Mayor Enrique Penalosa. It is now the city in South American that is most optimistic about its future. The co-ordinated interventions by Government Agencies working with the people have both empowered their population and given them new found pride. This is evidenced by its numerous car-free Sundays, women-only evenings and Regional days. It is also apparent in its strengthening economy with an increase in the stock market of over 100% in 2005. Bogota is now considered a role model for numerous developing cities looking at sustainable transport systems.



Amager Strandpark. The sea bath is just one of many new facilities.

## Citizen participation as catalyst

'In the Holmbladsgade district a very conscious municipal policy actually has been able to vitalize a completely run down area turning it into a quite interesting area with mixed cultures. The municipality has managed to introduce gifted young architects, confronting them with local people and the task of developing simple cultural buildings ... These simple buildings and participation processes are very much about cultural planning.'

Jens Kvorning, 'Urban Restructuring and Cultural Planning'

#### Holmbladsgade / Copenhagen / Denmark

The city district around Holmbladsgade, part of Amager Island was a deprived neighbourhood of Copenhagen experiencing social problems. The district is a densely populated residential and industrial area and was lacking attractive public spaces and facilities. In the 1990's an extensive urban renewal program was proposed to assist in lifting the profile of the area. The proposal was to use the provision of improved public transport, public space, cultural and sporting buildings as a catalyst for change. In order to develop a feeling of ownership for the interventions citizen participation, including the formation of a local 'youth board', was one of the key platforms in the renewal process. The aim was to combine good landscape and architectural projects with social programmes. Following the extension of the metro, interventions focused on community based projects were introduced - a linear park (Prags Boulevard), library & community center (Kvartershus), youth club (Maritimt Ungdomshus) a cultural and sporting facility (Sportscenter) and a beach park (Amager Strandpark).



Architect: Kristine Jensens Tegnestue

The urban 'park' on Prags Boulevard.



Sportscenter.



#### **Key interventions**

- 1. Introduction of the new metro was the catalyst for change.
- 2. Development of improved public spaces including Prags Boulevard where a regular street was transformed into a 1.8 kilometre-long park linking together activity hot-spots; a garden, sporting courts, skating area and an amphitheatre.
- 3. Development of smaller public spaces with distinctive entrance features located adjacent to the main roads through the area.
- 4. The conversion of an old building into a library and a highly visible new community room have provided a very successful community focus and meeting place.
- 5. Development of sports hall and cultural centre.
- 6. The upgrading of the Amager Beach as a new seaside park and regional destination.
- 7. Construction of a youth boating facility

Upgraded public spaces and new buildings around Holmbladsgade.



City district around Holmbladsgade / 1:20.000

#### **Conclusions**

This is a good example of how improved internal and external connectivity programs linked to active public participation on community and public space interventions have worked to lift an area. The metro stations have become new centres of interest with a ripple effect creating positive economic development in the adjacent areas, as have the community projects such as the library. The large landscape projects of Prags Boulevard and Amager Beach, with their civic qualities, have helped install a pride in the community, which now has something other than sewage treatment to offer the rest of Copenhagen. The local community has strengthened with students and other creative people moving in. There is now a push from the locals to capture a bigger share of the music industry. Inevitably property prices have strengthened but interestingly the local population has to date remained intact.

22 Vauban/Freiburg / Germany



Courtyards and gardens for the residents to share.

### Garrison to sustainable quarter

'Where high-rise was the mark of modernity at the end of the 19th Century, zero emissions will be the mantle of the 21st Century.'

Prof Rob Adams, Director Design and Culture, City of Melbourne

#### Vauban / Freiburg / Germany

The life of cities is both dynamic and cyclical. Changes in local ecomomies, location, technology or even personal preferences can dramatically effect the health of a city. A city will either adapt to these changing forces or fall from grace. With the fall of the iron curtain in Europe the French Armed Forces decided to move out of the German city of Freiburg. Subsequently 6000 French soldiers were relocated and a number of military institutions in the city were permanently closed. Within a short period of time the soldiers and the military vehicles, that were an integral part of public life in post-war Freiburg, were gone. 16.5 ha of partially contaminated land previously used as a military barracks passed into the ownership of the German Federal State. In 1992 Freiburg City Council purchased this land, characterised by beautiful countryside views and populated with mature trees, as an extension to the city fabric. In looking to the future Vauban chose to pin its recovery on the new modernity - the road to sustainability.



Individually styled dwellings gives variety and a feeling of ownership.



Roads are low speed making it safe to walk and cycle.

Local character



Connectivity



Density
Mixed use



Adaptability



High quality public realm



Integrated decision-making



Vauban / Freiburg / Germany 23

#### **Key interventions**

- 1. Freiburg City Council purchased partially contaminated land at from the German Federal State for redevelopment.
- 2. 1994 international ideas competition that asked for proposals to reconnect the garrison into the city fabric, make best use of the surrounding high amenity values and set a benchmark for sustainable planning and development in the city.
- 3. Set in motion an infrastructure programme to build a district heating plant and to establish important social and public facilities like schools and kindergartens.
- 4. The extension of Freiburg's sophisticated multi-modal public transport network (VAG), bicycle and walking network into the previously isolated garrison area.
- 5. Introduction of height restrictions of three to four floors to ensure good climatic performance in outdoor spaces and reserve quality daylight and solar energy for all residents.

Dwellings, commercial and public buildings in Vauban.



#### Achievements

Increased Economic Value through the sale of plots generated DM170m revenue, this public gain was reinvested in the Vauban area.

The local plan integrates the community by managing the ratio of speculative development in order that individual families and groups of families can come together to develop their own homes.

Established a local building code reducing the amount of permissible energy consumption in buildings. Maximum energy use of  $65 \text{kWh/m}^2$  energy per annum, equivalent to 6.51 of oil per annum.

Integration of vehicles parking facilitated in district multi-storey parking structures, with short term vehicular parking at individual dwellings only to load or unload.

#### **Conclusions**

The proactive role of Freiburg City Council in developing the district of Vauban has led to a sustainable local plan that carefully balances the public and private market investments. The city has tightened building codes and encouraged good design by acting as a leading example in new public building structures. Today 2000 of the projected 5000 residents have already moved into their new homes and neighbourhoods. The completion of this large-scale urban regeneration project with a humane and sustainable touch was projected for late 2006.

24 Bilbao/Spain



The Guggenheim Museum.

## Architecture as change strategy

'The new vision would concentrate on place making and public art, on quality of life and urban pride, on accessibility from the outside and mobility inside.'

Pierre Laconte;

'Urban planning and the global economy; what can be done'

#### Bilbao / Spain

In the 1980's Bilbao experienced the collapse of its iron and steel based economy which affected not only the metropolitan area but the whole regional economy. It needed to reshape not only its economy but also its image which had been forged by its industrial past. It responded by moving towards a more serviced based economy. In 1989 the City adopted a visionary master plan which concentrated on the transformation of its industrial waterway along the Nervion which cuts through the central city. It brought together the resources of all the cities landholdings and agencies under one general manager and selected the key riverside site for its most visible act of acupuncture: the Guggenheim Museum which has become symbolic of the new image of Bilbao.



River front before upgrading and the new footbridge.



New promenade is a high quality public space in Bilbao.

Local character
Connectivity

Density (existed already)

Mixed use (existed already)

Adaptability

High quality public realm

Integrated decision-making

User participation

Bilbao/Spain 25

**Achievements** 

#### **Key interventions**

- 1. The assemblage of land and resources under one Government Agency; 'Ria 2000'.
- 2. The winning and then building of the Guggenheim Museum alongside the river and using high profile architects to introduce a design culture.
- 3. Pedestrianization and the building of a priority tram line along its waterfront.
- 4. Modernization of its metro system.
- 5. Containing its growth and infrastructure such as sewage treatment within the city area as part of its sustainability strategy.
- 6. Expansion and modernization of its port.
- 7. Creating better accessibility to and from the city.

New river promenade and the Guggenheim Museum in Bilbao.



Bilbao has managed to raise its profile through the regeneration of its central area and with the opening of the Guggenheim Museum, the Euskalduna Concert and Conference Hall and the Calatrava Footbridge it has increasing visitation which has seen the expansion of its airport to handle up to 3 million passengers a year. It turned its economy from industrial to cultural and service based while improving its public spaces and transportation systems. 93 hectares of industrial land have been reclaimed. Stage one of the Metro upgrade produced 31 million passengers, reducing travel times by 22 million hours and cut 9,000 cars a day from entering the city. Stage two to be completed in 2006 will increase passengers to 60 million.

#### **Conclusions**

Bilbao has transformed itself through the active intervention in its economy. Using public infrastructure and a service based culture it has turned its image into one of a progressive modern city that has used design and strong government intervention as a platform on to the world stage. Its pooling of resources has enabled it not only to produce iconic buildings but also to use the proceeds from the rise in resultant land values towards rehabilitation of some of its declining residential areas leading to reductions in crime and anti-social behaviour. It has a conscious sustainability policy of increasing densities and improving its public transport. Its unified building culture has successfully turned this ugly industrial duckling with a locally based economy into one of Europe's global swans.

26 Toledo / Spain



Escalators glowing in the dark.

## Continuity and change

'One must lose oneself in the ruggedness of the street when, at sunset, the city slackens its pace, and the powers of magic flow forth.'

Rufino Miranda

#### Toledo / Spain

Toledo was the capital of Spain until the 1560's. Its rich history and architectural heritage has seen this city of 60,000 inhabitants gain World Heritage listing, but with popularity comes pressure in the form of 1 million visitors a year, most of whom visit for less than a day imposing on its infrastructure but not investing in its economy. The resulting congestion, particularly from tour buses out of Madrid posed a real challenge for this small city. To counter these pressures the city prepared a Special Plan with over 60 actions relating to housing, public installations, infrastructure and public space. One significant action was to build a new gateway to the city in the form of an escalator to reduce the number of cars and busses entering the central city. Toledo, set on a bend in the Tajo River, is a fortified city whose gateway was a statement of pride as well as a form of protection. This new gateway is a modern expression of this pride and need for protection; in this case protection from vehicular traffic.



Escalators. Freeing up the city's streets from vehicles.



New gateway to castle.

Local character



Connectivity



Density



Mixed use
Adaptability



High quality public realm



Integrated decision-making

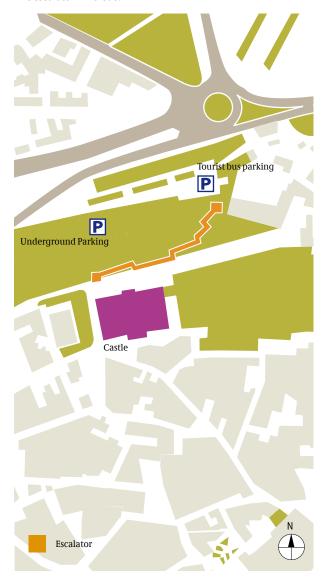


Toledo / Spain 27

#### **Key interventions**

- 1. The most important intervention was to design and construct escalators that link the outside of the historic city on the North with the old castle now used by the provincial government. The new escalators are 100 metres in length and divided into six sections rising 36 meters. They are arranged in a zig zag pattern that enabled the Architect Ellias Torres to both adapt them to the terrain as well as reduce the felling of vertigo by breaking the overall vista from top to bottom.
- 2. The construction of an underground car park for 110 cars and an area for tourist bus parking.
- 3. Provision of a new gateway from the North into an inaccessible part of the historical city.

The escalator in Toledo.



### Achievements

The escalators are used by a minimum of 5000 people a day and up to 40 000 people on some weekends, and the new entry point has helped revitalize a part of the historical centre that had been previously isolated.

The number of cars and busses entering the city centre has been contained.

The quality of the design has been widely accepted by the local population and internationally through a number of awards. The results have been so popular that there are now plans to possibly build another escalator at one of the other entrances to the city.

#### Conclusion

The City of Toledo overcame initial concerns about the possible visual impact and heritage issues that this project may cause and took the step of commissioning this bold architectural intervention. Its sensitive yet modern response has produced a solution that has helped modify the negative impacts of traffic and provide an environmental solution that could be replicated in a number of other sensitive historic sites. The quality of the design has also subtly added to Toledos reputation as a city of quality and shown how modern interventions can be inserted into sensitive heritage sites.

Toledo / 1:4.000



### Traffic space to peoples place

'Despite the open character of the site and many traffic arteries, simple tools turned Sankt Hans Torv into a lively and well functioning urban square. The slightly convex granite floor gives a soft landscape-like quality to the square.'

Jan Gehl, New City Spaces (2003)

#### Sankt Hans Tory / Copenhagen / Denmark

Sankt Hans Torv embodies the concept of how vibrant public life can flourish when it is given space, and how a series of small yet thoughtful and precise interventions can be a catalyst for transforming a former deprived urban area into a better city district.

Sankt Hans Torv is situated in an urban quarter called Nørrebro, outside the medieval city centre of Copenhagen. Nørrebro is a mixed-use neighbourhood with an abundance of dwellings. Most buildings in the neighbourhood date from the 1880s and its housing stock is dense with predominately small (40-60m<sup>2</sup>) apartments. Traditionally Nørrebro was a working class area, but due to the amount of small and affordable apartments, the area today is home to large amounts of students and young people.

Throughout its history, the neighborhood has been run down and lacked attractive urban public spaces. This changed in 1993, when Sankt Hans Torv became the first public space in Nørrebro renovated as part of the city wide urban renewal programme.



An inclusive space. An attractive space for all age groups.



Safety. The square activates the neighbourhood at night time.

Local character



Connectivity



Density Mixed use

Adaptability



Integrated decision-making



#### **Key intervention**

Converting Sankt Hans Torv from its original form as a vehicular dominated traffic intersection to its new function as a square for recreational activities:

- 1. Traffic was rerouted.
- 2. Simple architectural interventions created an attractive and dignified square.
- 3. A slightly convex granite floor gives a soft-scape like quality to the space.
- 4. Public art in the form of an interactive water fountain and seating opportunities under a large existing tree give the square identity.
- 5. Traffic still passes along the southeast side of Sankt Hans Torv but a lively city areas has grown here supplemented with cafes on the sun drenched car-free side of the square.

The new network around Skt Hans Torv.



#### **Achievements**

Two new large cafes opened when the reconstruction of Sankt Hans Torv was completed. The square has had a positive economic effect on its surroundings. The flow of people to and from the square has created a consistent retail base for independent shops and cafes in the neighbouring streets. Today, a decade later, a whole new network of attractive streets has emerged around Sankt Hans Torv.

The popularity of the square has increased the value of private residential apartments in the area. The city district of Nørrebro has experienced the greatest relative increase in house prices in Copenhagen.

Sankt Hans Torv is the cultural and social heart of the area, acting as a popular meeting place not only for the local residents but also for people living in other neighborhoods as well as vast number of tourists. Sankt Hans Torv has become a 'must see place' for travelers interested in witnessing modern city life at its finest.

#### Conclusion

The renovation of Sankt Hans Torv is a good example of how a well designed public space can act as a catalyst for the revitalization of a whole district. The design of the square marks a change in the status of the neighbourhood and symbolises the rebirth of the city district.

### Conclusion

'For too long in Europe there has been not only a neglect of responsibility towards understanding the historical significance of the public space, the on going creation of new places, but cities have not even been aware that it is their responsibility.'

David Mackay, Architect (Barcelona 1991)

The commissioning of this report and these case studies show that this statement is no longer true of some cities in 2007. There is increasing evidence of Governments at all levels taking a more proactive approach to the development of their cities. Often this was forced upon them by the imminent collapse of their cities as a result of sudden or even gradual structural changes in their economies; Malmö with its loss of the shipping industry, Bilbao with the abrupt collapse of the iron and steel-based economy or the more insidious slow changes in cities like Melbourne where the spread of suburbia and the 'donut' effect on the central city that had almost brought it to its knees, meant that some cities were left with no option but to act.

Strong leadership was needed and shown, and is evident in all the projects studied here where committed and influential individuals within each City, have over a protracted period of time managed to hold to a vision and direction through the often lengthy and fraught change process. In fact it would be true to say that the decisions made in case studies described here

were no longer determined by isolated interests but rather by a broader cross section of the local *Baukultur*, including users, led and assisted by governments.

To provide greater clarity and to assist with the formulation of recommendations, this report has been structured around eight factors that assist in creating positive outcomes for cities. These components such as local character, density, mixed use, connectivity and high quality public realm, have been identified by many other experts from around the world. Documentation exists indicating that these components collectively contribute positively to the social, economic and environmental values of cities. The adjacent chart and following text provides a framework for the discussion and summarizes the conclusions of this report.

### Economic Social Environmental

#### Local character

- Promotes local identity
- Provides a point of difference
- Strengthens sense of identity
- Produces choice and variety
- Uses local labour and materials
- Supports recycling
- Assists conservation

#### Connectivity

- Improves access to local facilities
- Improved access within and out of area
- Enhances land values
- Provides greater choice of movement
- Encourages physical movement (e.g. walking)
- Improves natural surveillance and security
- Reduces vehicle emissions through fewer non-work trips

#### Density

- Reduces land required
- Reduces infrastructure
- Maximise casual knowledge transfer & skills
- Reduces travel distances
- Improves social contact
- Provides greater cultural potential
- Improves safety through passive surveillance
- Enhances vitality

- Reduces energy consumption
- Viable public transport reduces emissions
- With uniformed heights can moderate extreme climatic effects

#### Mixed use

- Provides local skillt base
- Allows for sharing of public infrastructure
- Increased viability of local businesses
- Reduces car ownership
- Provides convenience
- Improves access to local facilities
- Increases personal safety
- Increases walking
- Reduces car trips

### Adaptability

- $\hbox{-} Extends \, economic \, life \, of \, buildings \,$
- Promotes local character
- Increases sense of community and change
- Increases use of public space
- Reduces demolition and waste of materials

# High quality public realm

- Attracts people and activity
- Increases economic performance
- Encourages new forms of street activity
- $\hbox{-} Increases use of public space \\$
- Increases pride of community
- Improves potential for social engagement
- Improves cultural activities
- Reduces vandalism
- Encourages tree planting
- Reduces waste to better cleaning and storm water

# Integrated decision making

- Reduces redundant work
- Increases joint responsibility for outcomes
- Promotes team culture
- Improves equity
- Promotes sustainable solutions

- Uses local knowledge
- Promotes ownership of outcomes
- Assists community development
- Promotes leaders in community
- Reduces vandalism

#### **Local Character**

As cities move to greater self expression in marketing themselves in a Global marketplace, the need to build on their unique identity or local character is increasingly important.

The unified aesthetic of an international style is no longer a strong selling point and has in many cases diluted the natural attraction of a place. This is not to say that to be modern is not a positive quality, for it surely is. It is rather the use of modernity in a way that best reinforces the local character that is the real challenge. This is well illustrated in Toledo where its new 'gateway' uses escalators, in this World Heritage City, to open up a new quarter and relieve the traffic congestion that was clogging its arteries. We now realize that a loss of distinctive identity goes hand in hand with a loss of value for the community or city.

#### Connectivity

Good connectivity provides improved access and therefore greater choice. Cities like Bogota show us how important a realignment of accessibility is in rectifying a dysfunctional city. By redressing the imbalance between the private motor vehicle and other forms of transport the city has become a more successful and safer place for its citizens. Clearly the lesson of all these studies is that well connected, active streets that provide a balance between all modes of travel, particularly walking, are the glue that holds our cities together. Design a good street and you design a good city.

#### Density

Compact cities that optimize the use of their public infrastructure are the new modernity. Cities that promote low density urban growth allocate between 12-16% of their annual budget to transport resources, whereas those that opt for higher densities may reduce this to between 4-8%. Glasgow's switch from a policy of decentralization to centralization has seen a marked

improvement in its financial and social well being. High density is not to be confused with high-rise as many of our densest cities, such as Barcelona are no higher than eight stories and exhibit all the positive qualities articulated in this report. An optimal density will emerge as one of the key drivers of both financial and environmental sustainability in the near future. Economy of infrastructure and land use will combine with uniform building heights to help moderate the increasing unpredictability of climate change.

#### Mixed use

The vibrancy of mixed use cities is also emerging as a key component of successful projects. The livability of these areas is a combination of the positive values that accrue from mixed use; a stronger local economy, social diversity and improved safety. A good example is seen in Melbourne, which in a 20 year period has turned a decaying business centre into a vibrant activity centre, three times named as the world's most livable city. Potsdamer Platz also illustrates how mixed use has helped draw people back into its streets and shops and revitalize this important site in central Berlin.

#### Adaptability

It is increasingly important that both our buildings and public places are capable of meeting the changing needs of our cities. Copenhagen has shown how traditional spaces and structures can be remodelled to breathe new life back into degraded areas. Sankt Hans Torv, Prags Boulevard and Amager Beach-Park are spaces that have been dramatically transformed, while alongside these a library, community room, youth centre and new sports hall developed in new and existing

buildings have supported the regeneration of their neighbourhoods. Clearly our *Baukultur* is starting to consider the need to recycle and adapt our buildings.

#### High quality public realm

Bordeaux, Bo01 in Malmö and Bilbao have like all the case studies relied on a public realm of the highest quality to promote their cities; Bordeaux with its sophisticated tram system that sits lightly in its heritage setting, Bilbao with the Spanish flair for a strong statement supported by real artistry in execution and Bo01 where good 'built to last' design is a hall mark of its public spaces. Quality has always been a sign of cities that care, not only as a symbol of civic pride but also as a sign of responsibility to build well for the future.

#### People and process

It is necessary to note that all of the case studies illustrated required continuous incremental intervention over extended periods of time. While there have been the one off grand gestures such as the Guggenheim Museum in Bilbao, these have been accompanied by a number of other initiatives, without which even the one off grand project may have failed. The need for integrated decision making and commitment to a shared vision by all parties, not least the end users or public is also characteristic of all the studies illustrated here. The pressure for quick fix single purpose solutions, a by-product of the Bilbao phenomenon, is ever tempting in this debate as is evidenced by the current fashion for distinctive high-rise buildings. Long term solutions built on local knowledge and an integrated process are more likely to yield value.

#### Need for a positive 'Baukultur'

The value of a positive *Baukultur* has been present in all the case studies and an attempt has been made to illustrate the positive value of the qualities in the summary listed above.

Growing concerns over climate issues such as global warming and the dramatic increase in urban population (for the first time in the world's history more people are living in urban than rural areas), make it more

important than ever to encourage the efficient, sustainable and livable design of our cities. Fortunately, the known factors that create good urban environments are the very factors that also promote sustainable cities.

Creating good cities is an ongoing and time intensive process that demands visionary leadership and hands on decision making. A city is like a living organism that tends to develop very easily by itself. Those that lack a clear framework for development, however, often fail to promote a high quality of life and an inclusive environment for demographically diverse citizens. Creating a high quality city that is livable, sustainable, and robust enough to respond to rapidly changing advancements in technology and culture, demands flexibility and strong leadership. A clear vision must be established in terms of qualities the future city should have, but the plan should also be flexible to ensure innovative ideas for achieving the vision over time.

The purpose of this report has been to inspire and provide insight into various successful city strategies for urban regeneration. When transforming existing cities and building new ones acquiring inspiration from other cities is a good starting point, but each city must accentuate its own unique amenities to awaken its inherent latent potential. Discussions of how to improve each city's unique local *Baukultur* is essential and the authors hope that this report has created inspiration to begin the process.

A global society composed of several livable, vibrant, inclusive and sustainable cities is attainable. It is our responsibility to take the initiative and ensure cities of the future will provide and promote high quality environments to live, work, and play for future generations.

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