Chapter 1 : Lack of social infrastructure affects community wellbeing | Future Communities

Social Infrastructure is a subset of the infrastructure sector and typically includes assets that accommodate social services. As set out in the table below, examples of Social Infrastructure Assets include schools, universities, hospitals, prisons and community housing.

Classifications[edit] A US National Research Council panel adopted the term "public works infrastructure", referring to: This results in three major tasks: According to Gianpiero Torrisi, Institutional infrastructure is the object of economic and legal policy. It compromises the grown and sets norms. The first characteristic deals with the basic needs of human life. The second characteristic is the non-availability of infrastructure goods and services. This includes roads, highways, bridges, airports, water distribution networks, sewer systems, irrigation plants, etc. These being schools, parks and playgrounds, structures for public safety, waste disposal plants, hospitals, sports area, etc. Income, Low volatility of returns, Diversification, Inflation Protection, and Long-term liability matching. For instance; roads, highways, railways, public transportation, water and gas supply, etc. Basic[edit] Basic infrastructure refers to main railways, roads, canals, harbors and docks, the electromagnetic telegraph, drainage, dikes, and land reclamation. The things in the world we come across everyday buildings, roads, docks, etc. So, complementary infrastructure deals with the little parts of the engineering world the brings more life. The lights on the sidewalks, the landscaping around buildings, the benches for pedestrians to rest, etc. Related concepts[edit] The term infrastructure may be confused with the following overlapping or related concepts. Land improvement and land development are general terms that in some contexts may include infrastructure, but in the context of a discussion of infrastructure would refer only to smaller scale systems or works that are not included in infrastructure, because they are typically limited to a single parcel of land , and are owned and operated by the land owner. For example, an irrigation canal that serves a region or district would be included with infrastructure, but the private irrigation systems on individual land parcels would be considered land improvements, not infrastructure. Service connections to municipal service and public utility networks would also be considered land improvements, not infrastructure. Public works generally refers to physical assets needed to deliver public services. Public services include both infrastructure and services generally provided by government. Ownership and financing[edit] Main article: Infrastructure and economics Infrastructure may be owned and managed by governments or by private companies, such as sole public utility or railway companies. Generally, most roads, major airports and other ports, water distribution systems, and sewage networks are publicly owned, whereas most energy and telecommunications networks are privately owned. As of [update] in the United States for example, public spending on infrastructure has varied between 2. Types[edit] Engineering and construction[edit] Engineers generally limit the term "infrastructure" to describe fixed assets that are in the form of a large network; in other words, hard infrastructure. Civil defense by country Civil defense planners and developmental economists generally refer to both hard and soft infrastructure, including public services such as schools and hospitals , emergency services such as police and fire fighting, and basic financial services. The notion of infrastructure-based development combining long-term infrastructure investments by government agencies at central and regional levels with public private partnerships has proven popular among economists in Asia notably Singapore and China , mainland Europe, and Latin America. Military[edit] Military infrastructure is the buildings and permanent installations necessary for the support of military forces, whether they are stationed in bases, being deployed or engaged in operations. For example, barracks, headquarters, airfields, communications facilities, stores of military equipment, port installations, and maintenance stations. Green infrastructure Green infrastructure or blue-green infrastructure highlights the importance of the natural environment in decisions about land use planning. Examples include clean water and healthy soils, as well as the more anthropocentric functions such as recreation and providing shade and shelter in and around towns and cities. The concept can be extended to apply to the management of stormwater runoff at the local level

through the use of natural systems, or engineered systems that mimic natural systems, to treat polluted runoff. However, the Marxist notion of "base" is broader than the non-Marxist use of the term "infrastructure", and some soft infrastructure, such as laws, governance, regulations, and standards, would be considered by Marxists to be part of the superstructure, not the base. Still underlying these more conceptual uses is the idea that infrastructure provides organizing structure and support for the system or organization it serves, whether it is a city, a nation, a corporation, or a collection of people with common interests. Examples include IT infrastructure , research infrastructure, terrorist infrastructure, employment infrastructure and tourism infrastructure. Infrastructure investments and maintenance can be very expensive, especially in such areas as landlocked, rural and sparsely populated countries in Africa. The returns to investment in infrastructure are very significant, with on average thirty to forty percent returns for telecommunications ICT investments, over forty percent for electricity generation, and eighty percent for roads. In fragile states , over thirty-seven percent of GDP would be required. Some sectors are dominated by government spending, others by overseas development aid ODA , and yet others by private investors. Compared to the global GDP percentages, The United States is tied for second-to-last place, with an average percentage of 2. This means that the government spends less money on repairing old infrastructure and or on infrastructure as a whole. In irrigation , governments represent almost all spending. In transport and energy a majority of investment is government spending. In ICT and water supply and sanitation , the private sector represents the majority of capital expenditure. Overall, between them aid, the private sector, and non- OECD financiers exceed government spending. The private sector spending alone equals state capital expenditure, though the majority is focused on ICT infrastructure investments. China , in particular, has emerged as an important investor.

Chapter 2 : Infrastructure Development

Local Infrastructure development through Integrated Development Programmes (IDP's) Local infrastructure development is a key part of the Integrated Development Programmes (IDPs) of local councils and planning by Districts and Metros.

Node locations Lack of social infrastructure affects community wellbeing There is a strong connection between the quality of social infrastructure in new communities and the wellbeing of new residents. As lessons from the New Towns review identify, new residents need local social networks and shared community experiences to build a sense of belonging and identity in new places , and according to research by the Joseph Rowntree Foundation, schools play a particularly important role in encouraging the kind of informal social contact that is needed in new communities. Evidence from a variety of sources identifies that inadequate social infrastructure is not just an inconvenience for residents but has significant long-term consequences, and associated costs, for new communities. The New Towns review describes how "a spiral of decline" can occur when there are problems with the quality of the physical environment, poor local services and weak social networks in the community. There is little to prevent the families that can from relocating, leaving behind residents who have no choice but to stay in an area. A number of related social problems are associated with new communities that lack good social infrastructure , including isolation, mental health problems, fear of crime, and issues with community cohesion. The term "new town blues " was coined to describe the isolation that many people in the New Towns, in particular young mothers, felt at being separated from friends and family and having few opportunities to meet other people living locally. Doctors began identifying the phenomenon as soon as new suburbs, driven by the expansion of the railways, emerged. Under one roof one would like to see a swimming bath and gymnasium, a cafeteria, a day nursery, the public library, and reading smoking and games rooms. The report also argues for the involvement of existing communities in the planning of both new, and later phases of, housing settlements. Research by CABE illustrates how consideration of social infrastructure and amenities can support wellbeing, health and sustainability agendas. For example, whether children are allowed or able to play safely outside, whether they walk safely to school, whether there is space for activities such as cycling. A recent study of three Bristol streets re-affirmed this pattern, with residents on the quietest streets having more local social connections and being more likely to garden, sit outside and let their children play on the street and go to school unaccompanied. Elsewhere, research on social capital and wellbeing suggests that everyday interactions with friends, family and neighbours play a crucial role in sustaining a sense of community but can be extremely fragile. Research shows that subtle changes in a community can have a significant impact on perceptions of community spirit and thereby, community wellbeing. Work by the Joseph Rowntree Foundation identifies community outreach workers as important to residents in new communities. The need for this type of social or community development was recognised early in the history of the New Towns. Many New Towns recruited teams of social liaison or community development officers, based in local houses, to meet and greet new residents, provide local information and involve residents in decision-making as new com munities grew. Having community development staff in place at the outset pays off handsomely". Marina Scott, Neil Stott and Colin Wiles, Keystone Development Trust Community development, neighbourhood management , community timebanking or volunteer neighbourhood champions are the type of practical supports that can help build a sense of belonging in new communities, and arguably, prevent the feelings of isolation that contribute to the problem of "new town blues ". Neighbourhood-based workers, whether they are volunteers or part of a neighbourhood management team have an important role to play in new communities by creating spaces for people to interact with neighbours through local events, street parties, sports, arts and culture events, consultation and community planning work. These approaches are proven to be effective at engaging residents and helping to support strong social networks and working to breakdown barriers and reduce tensions between different social, faith or ethnic groups. This is particularly important where new communities or settlements

are creating tensions with existing residents. In many cases some support from local authorities and public agencies needs to be in place to facilitate and nurture the mutual support and networks which grow when we feel connections with other people. Jurgen Habermas, the German philosopher called this the "lifeworld". A community development worker has been employed in the new town of Wixams, Bedfordshire , since to act as a facilitator for consultation. Lessons from this example are listed below. This evidence suggests that some kind of community worker role is essential in a new community. Wixams, Bedfordshire - supporting community development A major freestanding development has been in planning for some years and is about to get underway: Read more Neighbourhood management has become widespread as an approach to champion local issues, improve local service delivery, engage residents in decision-making and work effectively in local, multi-agency partnerships. Originally developed as an approach to support the most deprived and disadvantaged places, neighbourhood managemen t is now widespread and comes in many forms from light-touch support across a number of neighbourhoods to neighbourhood or estate managers working for housing associations.

Chapter 3 : New strategy to promote good design - Department of Planning and Environment

infrastructure definition: The definition of infrastructure is the basic facilities and installations that help a government or community run, including roads, schools, phone lines, sewage treatment plants and power generation.

BIG is led by 17 Partners: Bjarke defines architecture as the art and science of making sure our cities and buildings fit with the way we want to live our lives. Through careful analysis of various parameters from local culture and climate, everchanging patters of contemporary life, to the ebbs and flows of the global economy, Bjarke believes in the idea of information-driven-design as the driving force for his design process. He compliments his professional work through previous teaching assignments at the University of Florida, the New School of Architecture in San Diego and his alma mater the University of Virginia. David oversees the design of many prominent cultural and mixed-use projects in Scandinavia, incl. Jakob is also a Board member at Virgin Hyperloop One. Since then, he has been in charge of several prominent developments, incl. Working in both Paris and Copenhagen for many years has given him an excellent knowledge of European culture and building practice. For 5 years he worked closely with Dominique Perrault where he participated on prize-winning projects including the Palais des Sports de Rouen, which he led through all phases to construction, as well as the French Pavilion for the Venice Biennale for which Jakob was Project Leader. Prior to his current role, he worked on a variety of healthcare, educational, and cultural projects around the globe. Beat has more than 20 years of experience as Project Architect and Designer and has sharpened his skills while working on many notable buildings in North America, Europe, and the Middle East. While at Frank O. He has worked closely with Bjarke Ingels on a wide range of projects from the 8 House, a residential building in Copenhagen, to the conceptual design of a mobile gallery for the Tate Modern in London. He has been the Project Leader on a number of competition winning proposals, including the Amager Bakke Waste-to-Energy plant in Copenhagen that doubles as a ski slope, Kistefos Art Museum and a sustainable multifamily residential development in Finland. With a background in energy efficiency research as well as undergraduate studies in economics, Brian brings additional focus on environmental and economic sustainability into all of his projects. Most recently she was the Design Leader for a residential complex in Hualien, Taiwan that seeks to blur the line between natural landscape and the built environment. Ole has vast experience in project management and controlling of both large and small-scale projects. Ole has most recently supervised the completion of the re-programming and extension of the 30 m2 former warehouse Transitlager in Basel, completed in , as well as the Tirpitz Museum that transforms and expands a German WWII bunker fortification into a ground breaking cultural complex. At the moment, Ole is project leader of the Faroe Islands Educational Centre in Torshavn currently in construction and due for completion in Agustin became a Partner in and is currently leading various design competitions, serving as the Partner-in-Charge for the Redskins Stadium in D. C and the F. C Barcelona Camp Nou stadium competition. In addition to his design work, Agustin has also worked as an architectural journalist and has assisted with major architectural exhibitions. Martin moved to New York City in and became a key member of the project team for the 60 m2 mixed-use development Vancouver House in Vancouver, Canada. Martin also worked at Studio Scholz, a design firm in Stuttgart, Germany, and completed various interior design projects independently. Before studying architecture, he was originally trained as a carpenter. After completing architectural studies at California Polytechnic University, Leon has worked with renowned offices in Japan, Scandinavia, and Portugal, designing a variety of cultural, residential and master planning projects around the globe, including the New Oslo Central Station and the Ginza Swatch Building in Tokyo.

Chapter 4 : Hospital | WBDG Whole Building Design Guide

Social infrastructure and amenities are crucial to creating sustainable racedaydvl.comence from the post-war New Towns to more recent new housing settlements has repeatedly shown that local services like schools, shops and public transport, are needed at an early stage in the life of new communities.

Targeting infrastructure development Black communities and settlements: Underdevelopment Apartheid policies resulted in the underdevelopment of black communities and settlements. As a result, we face a huge backlog in all areas of infrastructure. There are different types of infrastructure: Physical water pipes, roads, storm water drains Social houses, clinics, sports grounds, schools Economic business districts, transport systems, telephones - e. The unequal levels of development are easy to see in any South African town, rural area or city â€" formerly white areas have well-kept roads, sports grounds and recreation spaces, everybody has clean water and electricity, there are tree-lined pavements, farms have irrigation schemes and rural roads in these areas are maintained and so forth. Black townships, settlements and former bantustans however, are just the opposite. Changing this legacy will take a long time. However, since , the democratic government has put policies and programmes in place to begin to turn things around. As a result, government over the last ten years have put in place policies to meet the backlogs in infrastructure in many different areas, such as: Electricity and other sources of energy: In addition, government has also put in place programmes to build and upgrade clinics, schools, classrooms, and police stations, to improve roads and other transport infrastructure, provide sanitation, sports and recreation facilities, and improve access to telephones. All of these efforts provide a foundation for infrastructure development, but more needs to be done. We are also faced with new challenges: There are still millions of people who do not have access to clean running water, sanitation, telephones and electricity. Infrastructure programmes for the next decade must ensure that we get rid of these backlogs so that every citizen can enjoy these services. It is no use spending lots of monies on building clinics, schools or roads, or installing water pipes, electricity lines and we allow these to break down, fall into disrepair or be vandalised. Infrastructure must also be upgraded on a regular basis. For example, at present government is paying urgent attention to upgrading the infrastructure for generating and distributing electricity 2. Poverty and unemployment means that some people have received basic services such as access to electricity, phones, water, but are unable to pay for these services. To address this problem, government has introduced an indigent policy for the poorest sections of the population. Since , government started a programme to provide a basket of free basic services electricity, water, sanitation to every citizen. If the cost of water, electricity and telephones and so forth rises, it is bad for everyone. For poor people, because they will then have to spent more on the basics and not afford other things e. It is also not good for the economy generally, because businesses â€" big and small also use these services. The more expensive the services, the more difficult it is for them to make a profit and keep going. Our population growth and changes in demographics such as people moving from rural to urban areas and smaller households mean that government must continue to provide infrastructure for more people and in new areas. Furthermore, our natural resources are not unlimited. We have a shortage of water. Our coal which we use to produce electricity will eventually run out. We need land for housing and business but also for agricultural purposes, for nature reserves and green spaces in urban areas. We must therefore provide and plan infrastructure development and look at alternatives in a manner that does not endanger future generations. The objectives are to move faster towards getting rid of social backlogs e. This should be done in a way that reaches the poor and build integrated and viable communities. It must also help to change apartheid human settlement patterns - i. Government and the parastatals state owned enterprises such as Transnet, Eskom, etc will invest more than R billion over five years in improving roads, rail and air transport, as well as telecommunications and energy. R15 billion of this will be spent on the Expanded Public Works Programme. The table has some of the infrastructure development programmes set out in the Medium Term Expenditure Framework â€" the government budget plan for a three

year period:

Chapter 5 : Friendship Centre | Aga Khan Development Network

Inwood rezoning could increase affordable housing, improve infrastructure the city's Economic Development Corporation has engaged the Inwood community and business owners to give shape to.

Much of this circulation should be controlled. A better environment also contributes to better staff morale and patient care. Increased use of natural light , natural materials, and textures Use of artwork Attention to proportions, color, scale, and detail Bright, open, generously-scaled public spaces Homelike and intimate scale in patient rooms, day rooms, consultation rooms, and offices Compatibility of exterior design with its physical surroundings In addition to the general safety concerns of all buildings, hospitals have several particular security concerns: Protection of hospital property and assets, including drugs Protection of patients, including incapacitated patients, and staff Safe control of violent or unstable patients Vulnerability to damage from terrorism because of proximity to high-vulnerability targets, or because they may be highly visible public buildings with an important role in the public health system. Sustainability Hospitals are large public buildings that have a significant impact on the environment and economy of the surrounding community. They are heavy users of energy and water and produce large amounts of waste. Because hospitals place such demands on community resources they are natural candidates for sustainable design. These regulations put emphasis on acoustic and visual privacy, and may affect location and layout of workstations that handle medical records and other patient information, paper and electronic, as well as patient accommodations. This might require computer alcoves and data ports in corridors outside patient bedrooms. For more information, see WBDG Integrate Technological Tools Need to balance increasing attention to building security with openness to patients and visitors Emergence of palliative care as a specialty in many major medical centers A growing interest in more holistic, patient-centered treatment and environments such as promoted by Planetree. This might include providing mini-medical libraries and computer terminals so patients can research their conditions and treatments, and locating kitchens and dining areas on inpatient units so family members can prepare food for patients and families to eat together. Relevant Codes and Standards Hospitals are among the most regulated of all building types. However, federal facilities on federal property generally need not comply with state and local codes, but follow federal regulations. To be licensed by the state, design must comply with the individual state licensing regulations. Since hospitals treat patients who are reimbursed under Medicare, they must also meet federal standards, and to be accredited, they must meet standards of The Joint Commission. The Americans with Disabilities Act ADA applies to all public facilities and greatly affects the building design with its general and specific accessibility requirements. The technical requirements do not differ greatly from the ADA requirements. Federal agencies that build and operate hospitals have developed detailed standards for the programming, design, and construction of their facilities. Many of these standards are applicable to the design of non-governmental facilities as well. Federal Mandates and Criteria.

Chapter 6 : IBI Group â€" Projects

Pancake development like this is not a prerogative just of this country, however, as I pointed out in my recent columns about Oslo and the Bay racedaydvl.com developments essentially come into existence everywhere due to the same confluence of forces.

Chapter 7 : BIG | Bjarke Ingels Group

The plan is being spearheaded by the Housing Authority of Baltimore City and a team of private developers who aim to connect the city's burgeoning waterfront neighborhoods to Johns Hopkins Hospital.

Chapter 8 : RIBA Competitions

This area has seen a impressive amount of development and currently accommodates a large variety of high quality projects including infrastructure, commercial, residential, public, educational and cultural buildings.

Chapter 9 : Multifamily Housing | Building Design + Construction

"Architecture must address the global housing challenge by integrating critically needed scientific and technical advances in energy, water, and material systems while remaining sensitive to the cultural and aesthetic aspirations of different regions," said Deborah Berke, Dean of the Yale School of Architecture.