

Examine how urban areas have become increasing sustainable essay sample

[Education](#), [Sustainability](#)



Sustainability is the improvement on the quality of life while living within the Earth's carrying capacities. Sustainable development in urban areas are increasing due to people realising that today's quality of life is in need of an improvement, doing this sustainably will improve situations of today in a way that does not have to be paid for tomorrow. This sustainable development phrase is defined as to meet the needs of today without compromising the ability of future generations to meet their own needs, with these needs being something one cannot live without such as food and water. Applying this to urban area examples, many cities have made a great attempt to become increasingly sustainable for the good of their citizens and their social, economic and environmental needs. Firstly, an example would be the city of Curitiba, the capital of the Brazilian state Parana. Curitiba, like any other city, when discovered in the 1600's and named the capital of Parana in 1854, its population rapidly increased as it became more urbanised. From its population being only 120, 000 in 1940, it has since quadrupled into 1965 and since then has trebled to today's population of 1.6 million.

It was faced with the same economic, environmental, social and political issues such as unemployment, slum areas, pollution and congestion and has had increased demands for housing, services and transportation. Some Curitibaños feared that urban sprawl, fewer green spaces and lack of character would follow this rapid increase in population. A team of young idealistic architects and planners led by Jaime Lerner proposed a plan to minimize urban sprawl, reduce downtown traffic, preserve Curitiba's historic district and provide easily accessible and affordable public transit. Since Jaime Lerner has turned Curitiba into one of the most sustainable cities in

the world. In the city centre, the first pedestrian only street with pedestrian malls was built which reduced the amount of traffic and congestion in the city centre which a reduction in pollution would follow. Also the city has an industrial zone to attract business known as the "Industrial city". Roads in Curitiba have been designed to create a direct and high speed route of cars in and out of the city to reduce traffic.

Known as the Sistema Trinario to minimise traffic in the city is a 2 lane central street for buses and local car traffic sandwiched between two wide fast moving one way streets in and out of the city. The organizational, structural, and technological advances of the Bus rapid transit system are the main factors in increasing efficiency and speed of buses in Curitiba. Traffic lights are delayed for oncoming buses, decreasing the amount of time between stops. A computer chip inside the bus signals sensors on the road, which then alert the passengers at the next station if the bus is running on time. In addition, fares are pre-paid, reducing waiting at bus stops, and waiting platforms are elevated to allow for quicker entry and exit to the bus. Finally, the busses have their own lanes, which keep the bus system independent of congested traffic. During the peak hour, buses come every sixty seconds. Despite two thirds of Curitiba residents using public transport, there is still less congestion and cleaner air due to this system and including the road design.

There is also an enormous network of parks around the city which replace previously used land which takes up four times the recommended green space of a usual city. The linear parks are placed along river banks and

valley bottoms to prevent illegal occupation, shanty town growth and prevent the use of it being a landfill site. Plenty of recreational activities such as cycling and sailing take place in the city parks which benefit the locals. The waste disposal in the city is advanced as two thirds of the cities daily waste is processed, and due to the recyclable waste scheme, the accomplishment of the separation of 419, 000 tonnes of recyclable waste was achieved. Another example is the UK recent proposal to pioneer the building of eco-friendly urban areas. When Milton Keynes was built in the 1960's, despite sustainability not being a word that was associated with building plans back then, there were elements in its design and construction that hinted at trying to be environmentally friendly which included much parkland, interspersing of jobs and residential areas to reduce commuting, schools and shops will be within walking distance to reduce the amount of cars on the road, and the construction of energy-efficient housing.

In 2007, the government had an idea of creating small settlements containing between 5000 and 20, 000 homes which would be considered as eco-town with good transporting links between existing towns and cities. England and Wales were invited to bid for cash to build five new eco towns in which houses and infrastructure would be carbon neutral. This would be achieved by having plenty of green areas that would counteract and balance with the carbon dioxide emissions in the urban areas by having plants and trees surrounding it. In contrast to the characteristics of today's urban areas of high density apartments and small dwelling units, the dwellings will be family homes with gardens rather than apartments. Also it is expected that

up to fifty per cent of the accommodation will be affordable housing that is available to people who cannot afford houses on the general market. The design and construction of the houses will be eco-friendly as they will be built using timber as it uses fewer resources to make, it will have solar thermal panels, insulation and double glazing to reduce the use in fossil fuels to provide power for heating.

One eco town is already being built in the north of Cambridge known as Northstowe and others near Bristol are expected to start construction soon. On the positive side, we know that building carbon neutral homes is possible which is encouraging as our homes are responsible for over a quarter of the UK's carbon dioxide emissions however there are still issues with any attempt to make urban areas more sustainable, these include the commuters way of travel to nearby towns and cities being unlikely to be carbon neutral, also the building of these new towns presumably on greenfield sites creates conflict with government policy of giving priority to building on brownfield sites only.

On the whole, whilst the increase in sustainability extremely beneficial for the environment and the people of the major cities that are taking on sustainable development, it is still unlikely for us to meet the needs of today and tomorrow as there is a huge backlog of unmet needs to be cleared as urban areas of the world have been for a long time failing on securing the needs of today such as health and welfare, social, economic, political and environmental needs. Also urban areas will always consume non renewable resources and pollute the environment despite the efforts being made to

avoid them, however the fact that the effort is there is encouraging for our world cities today to become as sustainable as possible.