Urbanization on a Global Level

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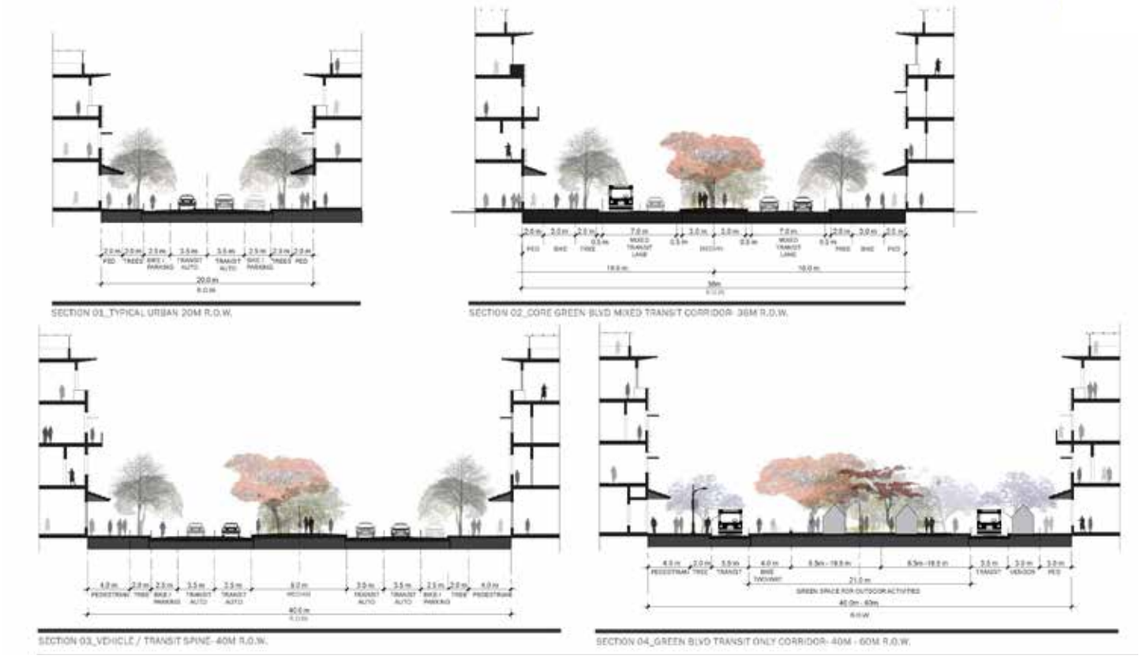
GLOBAL URBANIZATION

Since 2008, more than half of the world's population has lived in cities. In the past, cities were founded on geographic intersections for convenoient trade; now, with improved networks of commerce, including the Internet, it may seem the importance of the city would have diminished. However, urbanization still leverages human social capital for higher levels of prosperity and provides the best platform for creativity and economic development1.

Internationally, the World Bank reports that "higher rates of urbanization… have played a major role in lowering extreme poverty". 2 Urban populations have better access to clean water and sanitation, lower mortality rates and less gender disparity in education. Across the world, there is a correlation between higher density living environments and higher productivity per capita3. Cities with density of population offer greater opportunity through more social connections and interactions with resultant economic outputs at a lower cost of making these connections. There is no reliable substitute for face- to-face interaction, which is most efficient at solving problems and building the trust that is so necessary for commerce. Urban populations are involved in face-to-face interaction on a regular basis, and therefore enjoy a higher exchange of ideas and goods.



URBAN STRATEGIES AT WORK

Cities are also becoming better systems for problem solving than nations4. Global issues of resource shortage, climate change, poverty, insecurity and social strife are better addressed by local customized urban strategies than by monolithic national policies. There is more of everything in the world's cities5, more energy, communication and innovation, but also more of such things as crime and the spread of disease. Careful planning is required to meet the complexities of urban living, to create a stage for human interaction, while ensuring security, privacy and health.

As an example of sustainable urbanism, the new Konza Technology City near Nairobi, Kenya, is intended to accommodate and promote further economic growth in East Africa by establishing a new stage for higher education, technology incubation and clean industry. A university on site will sponsor the level of human resources required to supply this technology incubation and business center. Retail commercial development will be located near the highway interchange for access by non-residents, but retail shops will be mixed in throughout the city for the convenience of local residents.
Because of the importance of entrepreneurism to urban vitality, the informal sector will be embraced; production retail and the trading of goods and services in local neighborhoods will be encouraged with neighborhood retail space located under affordable housing.

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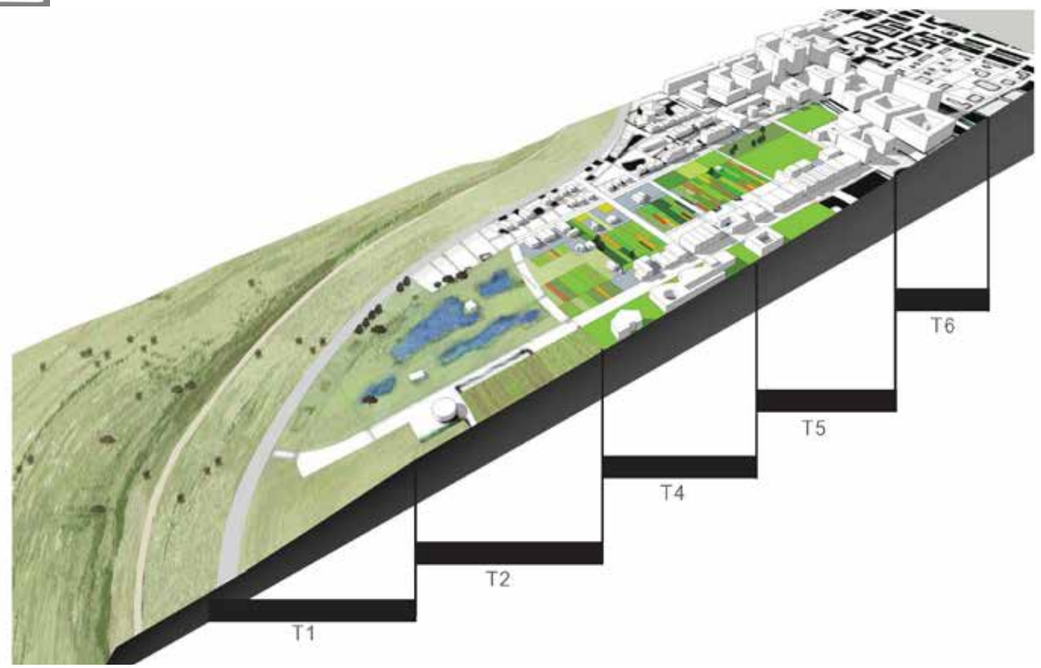
> - Nelson Mandela

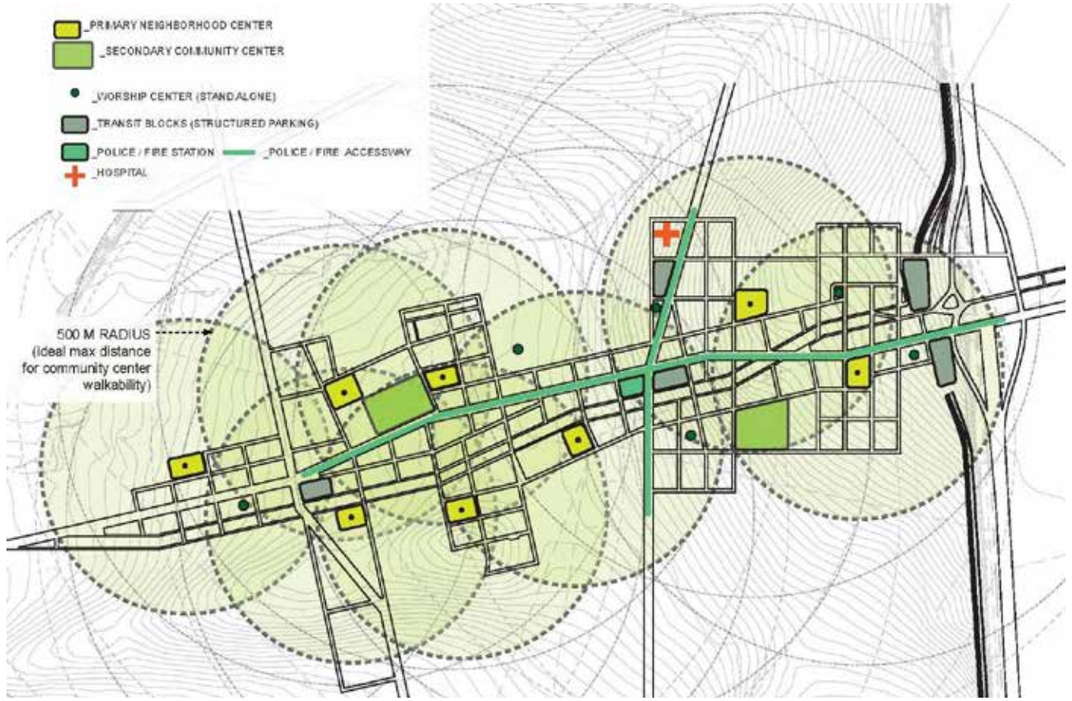


SUCCESSFUL ENVIRONMENTS
People are happiest in places with natural beauty, greenbelts, open space, trails, walking, biking, public spaces, access to arts and public transport6. These characteristics must be integral to the city in order to enjoy the advantages of closer proximity and social capital. Re-establishing defined and walkable neighborhoods with a strong sense of place can form sustainable building blocks of the larger urban environment7.

Because Konza is a green field site, open space can be maintained at an optimum level. A wildlife corridor for the migration of local animals, such as giraffe, is preserved along an established watercourse. Large urban and small pocket parks are located throughout the development, while much of the land between bands of urban development can be used for local food production. Urban agriculture extends the African rural tradition of growing your own food into the city for a stable, inexpensive, fresh and healthy source of nutrition.

Other strategies planned for sustainable operations include: on-site solar power generation, smart city technology (maintained locally), rainwater harvesting, waste water reclamation, solar orientation, shading, day lighting and natural ventilation to reduce power demand loads.

COMMUNITY FOCUS
Young couples often leave the city when having children. Safety and security must be high priorities in the planning of neighborhoods, so children can return to the urban community. Crime prevention should be enhanced by clear definition of public spaces, which are always visible from multiple locations. The private realm must be clearly identified and securable. Convenient access to primary education and healthcare is also essential to the creation of family friendly environments. As Nelson Mandela once said: “There can be no keener revelation of a society’s soul than the way in which it treats its children.”



Konza’s first phase master plan, for a balanced community with a population of 30,000 people, will accommodate a diverse demographic spectrum, which includes service workers, students and children. Therefore, affordable housing and equitable access to public services is planned.
Eight local primary neighborhood community centers with primary school, clinic, worship center, police post and convenience shops are placed for access within a 500 meter walk of every residence to meet most daily needs, requiring less expensive infrastructure. Parking structures at the highway interchange allow arrivals to leave their vehicles and take alternative transportation modes, including walking, biking or public transit along a central green corridor.

SUSTAINABLE EVOLUTION
The city needs to evolve from a linear resource metabolism of harvesting, manufacturing, selling, using, then disposing of unwanted goods into a land fill. A circular resource metabolism reduces the consumption of imported materials, food and energy sources by localizing, reusing and recycling. Green belts in the city generate oxygen and food, while filtering storm water and nourishing biodiversity. Rainwater harvesting can supplement the potable water supply, as renewable energy strategies, such as solar and geothermal maintain self-reliance. Better waste management systems recycle non-organics and utilize organics for fertilizer and fuel.

It is the intent of the Government of Kenya that Konza Technology City become a model for urban development. The principles out of which the design came have universal application. Place-making establishes a location with identity that attracts private industry and employees. A livable community is created with multi-tiered platforms for the exchange of ideas. Mixed-use neighborhoods with conveniently walkable streetscapes and parks increase resident enjoyment, while making efficient use of resources for an economically, socially and environmentally sustainable future.

1 Ed Glaeser Triumph of the City
2 World Bank Developing Countries Need to Harness Urbanization 17 April 2013
3 Luis Bettencourt & Geoffrey West Unified Theory of Urban Living Nature 2010 467
4 Jeb Brugmann Urban Revolution
5 Jonah Lehrer Imagine
6 Dan Buetner Thrive
7 Douglas Farr Sustainable Urbanism

Possible Illustrations (from March 15,2013 Development Guidelines):
P 2-21 walkability diagram
P 2-18 wildlife corridor edge
P 2-24 sustainability concept
P 2-9 green corridor
P 5-5 primary center