AN IDEAL CITY
Andrew W.
At the core of every city is harmony. An ideal city must be harmonious in design; must satisfy the needs of the majority; must satisfy the wants of the populace. It must bend to the beckoning of the environment, rather than oppressing it. Thus, in following these guidelines, an ideal city must minimize traffic, increase connectivity, and provide an efficient system for doing much of anything. But an ideal city must also be possible – technologically possible, that is. A floating city is admirable but not achievable. A city of twenty-one million persons living in harmony would be not only impressive but also quite achievable.

The waterways are the lifeblood of a city. Cities without natural water sources are not only limited in their municipal water department, but also limited in the livelihood of a city. Promenades along lakes and rivers are beneficial to a city and its harmony. Thus, a city must incorporate these from the outset. Rather than paving over rivers and lakes, they should be expanded and connected. Roads and overpasses should keep a distance from them and a green barrier will limit road runoff.

And if waterways are the lifeblood of a city, then roads are the arteries. For a city of 21 million, roads are important. Motorized vehicles will have to move somehow. Rather than minimizing car lanes everywhere, the ideal city must know where cars are needed and where they are not. Car-only expressways are necessary, but at least 90% of the roads here are combined roads, with dedicated bike lanes and sidewalks, and in some, dedicated bus lanes.

Roads come in a variety of types. The first, expressways, are quite simple: 4 car lanes and one dedicated bus lane, on both sides. The second, Major Roads, consists of an 8-meter sidewalk, a 6-meter one-way bike lane, 3 or 4 car lanes, a dedicated bus rapid transit lane, and some sort of elevated structure in the median (metro line, overpass). This setup is mirrored on the other side. These major roads appear as ring roads, or as roads under the expressways. The third, Minor Roads, appear in the highest-density skyline areas and the core CBDs. They consist of an 8m sidewalk, 6m one-way bike lane, and 2 shared bus/car lanes. This is again mirrored. The fourth, Pedestrian Roads, appear along waterways and in the historical district. A 12m bike lane is in the center, and the rest is dedicated to pedestrians. The fifth are District Roads, which are in the higher-density CBD areas. There is a 5m sidewalk on each side, 1 car/bus lane going each direction, and a bidirectional bike lane of 10m.

The city is made of three major Central Business Districts (CBD), in a triangular shape – CBD North, CBD East, and CBD West. Each individual CBD has 2 ring roads surrounding it. This avoids the common issue of having everyone converge on the center in the morning and using crowded roadways to get out in the afternoon. The triangle shape formed by these CBDs makes a mainly residential “suburban” area. However, in this triangle exists several minor CBDs which further alleviate traffic towards the major ones.

CBDs are connected by elevated expressways (overpasses). Under each expressway is a Major Road. The CBD East-West connector interchanges with the G8 motorway, which runs North-South through the city. The CBD North-East connector also interchanges with the G8.

In order to satisfy the transport needs of 21 million people, simply splitting business districts into several and having roads is not sufficient. A 15-line metro system has been built to serve quick transport across the city, and a light rail helps alleviate crowding in a metro system. Express light rail branches off the normal lines for quick and easy transport to important locations. A city-wide partnership with various dockless bike companies allows the populace to ride bikes at a cost of 10
cents, and drop them off along any sidewalk. Extensive bus rapid transit and regular bus systems also help ferry people around the city. Two major rail lines run through the city, with over 50 commuter trains and 400 passenger trains daily. To further discourage the use of personal cars, parking is limited, and private businesses and apartments cannot have excessive public parking spaces. The few parking spots available are costly, and parking in bike lanes or on sidewalks yields a 5000 USD fee, which doubles per offense. Only in large commercial areas are parking areas free and widely available.

To limit suburban sprawl, ring roads are built to reign in development. Additionally, the traditional style of low-rise suburban buildings is illegal. Instead, high-rise 15-20 story buildings are the norm here – any other way would be far too large for a city of 21 million. These buildings are usually duplicated in a large estate, with trees below to provide greenery. While these residential estates are privately owned, regulations require that motorized roads only continue for 50 meters maximum into the estate, and then must go underground or stop. Exceptions are made for especially large estates, but even then, roads are minimized. After that, it is all pedestrianized or designed for cycles.

To avoid the creation of purely residential or commercial districts, regulations require that commercial space be mixed in with estates, and that large estates have an office tower to complement.

To avoid long commutes, people whose wish to move into an apartment less than 8km from their workplace receive a 20% subsidy on prices, and those who wish to do so in the same CBD receive a 5% subsidy.

To harmonize neighborhoods, the residential areas of a CBD may only have the Minor Road as the widest possible road, and even then, these may only make up 2% of total streets. Most roads will have to be District or Pedestrian roads.

To make streets livelier, restaurants can spread out street tables and furniture as long as they leave 4 meters for walking.

To prevent excessive shadows on waterways, height limits are restricted. 5 stories is the maximum height along these areas. The historical district has a limit of 3 stories.

To prevent noise pollution, 2 rows of native trees are required to be planted along highways. Greenways are to be built under overpasses. Ample lighting is to be placed to prevent crime. To further lessen crime, an artificial intelligence based security system with over 5 million cameras will automatically fine illegal driving and also provide video evidence for every corner of the city.

Individual districts will test out brand-new innovations. High-tech districts have solar-panel roads which charge electric cars as they drive. In some areas, roads are closed off to human drivers, and only self-driving cars are allowed, while pedestrians and bikes can cross in scramble crossings, to ensure the smooth flow of all types of traffic. The historical district will continue to expand to test how many people can a pedestrian and cycle only infrastructure system support. Core skylines are built carefully, and buildings there must be submitted to the Municipal Design Office to ensure it harmonizes with the skyline and the people below.
However, technological innovations are not limited in high-tech districts. In major roads of some normal residential districts, half the road has been dedicated to self-driving cars while the other half is given to human drivers. Certain districts are hoping to wean their drivers off human-controlled cars to minimize any crashes.

In order to limit reliance on a centralized power grid, high-tech districts require roofs to be either solar-paneled or placed with plants. The G8 expressway is also completely solar-paneled. Every street lamp has a single solar panel to power itself. For residents without solar panels, a large solar and wind farm 500 kilometers away provides extensive power.

A wealthy city of 21 million would, in theory, have a homeless population from people coming here, unable to find work. Thus, the government maintains a counter of the number of available jobs, and issues residency permits accordingly, along with a residency permit application form detailing if work has been acquired already or not.

Regulations also detail the exact percentages of road types in a certain district. CBD areas may only have 10% of road length being major roads, 30% being minor roads, 52% being district roads, and 3% pedestrianized roads, with 5% allotted for the car-only overpasses that connect each CBD. Suburban areas are more lenient, with 20% allotted for major roads, 50% for minor roads, 20% being district roads, and 8% for pedestrianized with 2% for the overpasses that go through the area. The historical district only has 1 motorized road, a minor road, with the rest being pedestrianized. High-tech districts only have minor roads, district roads, and pedestrian roads. The industrial area, having a much larger transport need, has high-strength roads, most of which are minor or major roads.

Many “sustainable” urban planners attempt to inhibit motorized vehicles that it becomes excessive and deviates from the goal of harmony. A harmonious city will have the right infrastructure in the right locations. An ideal city will have a variety of infrastructure, providing the right number of lanes in each location, knowing when to provide car-priority lanes and where to put pedestrians first.

An ideal city must be harmonious in every aspect. All modes of transport, all industries, all buildings, all organic and inorganic materials, all aspects must come together to create a civilized and prosperous city. A vision of a harmonious society can be easily achieved through organized spatial planning, clear regulations to benefit the environment and the population, and infrastructure design that promotes harmony and liveliness. Dedication to harmony and integrity in a city makes it ideal, and that is my ideal city.