

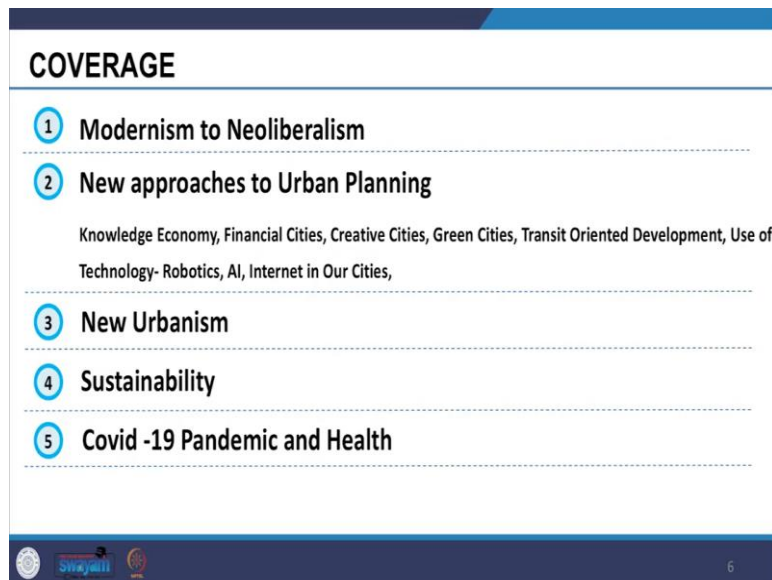
**Introduction to Urban Planning**  
**Prof. Harshit Sosan Lakra**  
**Department of Architecture and Planning**  
**Indian Institute of Technology, Roorkee**

**Lecture - 22**  
**Contextualising Cities (1980-2021)**

Welcome to the course introduction to urban planning. In this session today in our effort to contextualize our cities and to review their employment. We will walk through the planning narratives and interventions from the world and India from later part of 20th century till today the early 21st century. Where we have such big giant cities, we are facing problems of environments now the problem of health and Covid19 pandemic.

And very recent being cultural conflict and conflict of extreme ideologies. We are following Professor Luger's lectures and aligning with the Indian context we ended our last session at the beginning of the new liberalism and today we shall cover the following.

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We will see how we moved from modernism to Neoliberalism. We will look at new ways we started to address the cities to grow and sustain will also look at the knowledge economy financial cities, creative cities, green cities, transitory developments, use of technology such as robotics, artificial intelligence, internet in our cities and we look at new urbanism. Further we

look at how we moved to sustainability agenda in the end we will see Covid 19 and the new shifts towards health.

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**LEARNING OUTCOMES**

- 1 Differentiate Modernism and Neoliberalism
- 2 Identify the New approaches to Urban Planning  
Knowledge Economy, Financial Cities, Creative Cities, Green Cities, Transit Oriented Development, Use of Technology-Robotics, AI, Internet in our Cities,
- 3 Define New Urbanism
- 4 Review the aspect of Sustainability in Urban Planning
- 5 Review the Covid -19 Pandemic and Health concern in Urban Planning

The learning outcomes which we anticipate after completion of this session that you will be able to review the modernism and you will be able to differentiate between modernism and new liberalism. Further you will be able to identify the new ways in which we started to address the cities to grow and to sustain such as Knowledge Economy, Financial Cities, Creative Cities, Green Cities and you can also identify the concept of transit oriented development.

And then you will be also see and review the implication of use of Technology, Robotics, AI, Internet in our cities. You will be able to conceptually define or address the new urbanism further you will be able to talk about the how we are looking at the sustainability issue and then at this particular juncture how we are looking at Covid 19 and the shifts towards the health oriented cities. Industrial cities started to decline like we saw in the previous session.

And we knew how to build city but had no idea on how to dismantle cities. There were opposing theories, but real transformation needed policy and structural fixes. So, we saw that how in the previous lecture, how the neighbourhood level interventions, voices were raising which brought certain extent changes to certain extent. But, could not; be sufficient enough to bring the larger change for that policy and structural fixes were needed.

We also saw that how cities were running out of money cities were going bankrupt in the time. So, we see here that in 1980 the period which we are talking about here we see the beginning of neoliberalism. Neoliberalism which is a policy model of a social studies and economics which means that there is transfer of control of economic factors from the public sector to the private sector. So, we give that command to the private sector.

This period is identified from 1980 to 1999 with the starting with the cold war we also see industrial cities declining and disinvestment taking place in the western cities. We see financial cities rising across the globe and giving new look to cities. While we see that industries grew in the global south, we were seeing that industries were growing in this and there was a power imbalance. At the same time, we got aware about the climate change and got conscious about our efforts with green and eco cities approach.

Simultaneously, we see that cities opened up for private investment which we are seeing as a period of Neoliberalism. Further urban planning which we had seen started with architects started with planners and it was drawing oriented, physical planning oriented. It was transferring from physical planning to more towards the economic planning. Further we see that many of the declined cities now later on started to regenerate and creative ways very different ways what we had listed before.

So, we see that cities started to attract investments and attention for development through different ways. We see in this time that Internet came into existence and it drastically changed how these cities were working. We see now the network society we see Robotics we see Artificial Intelligence and this new invention and development could again transform. We are saying it could transform again in the lines what transformation we saw in the industrial revolution or even bigger than that.


And all these transformations we are starting to see how our cities are getting into smart cities interventions and so on. Further we see new economy shaping up. So, we are seeing the kind of jobs which we did before when we saw industrialization, we saw agriculture to industrial base

economy now we are seeing a different kind of economy a new economy which is shaping up in our cities.

Further we also see the conversation also forming around old phenomenon. But we also look at the new topics coming in like gentrification. We also see new concept in cities such as Creative Cities, Green Cities and transit-oriented development in this period. In US urban renewal at this particular time was recalled because the way you saw in the previous class how they were not really effective and they were very much racialized.

So, they were rolled back. With the regeneration we also see that investments were now done in pockets rather than doing it for the entire larger areas. Let us first try to understand Neoliberalism. We try to understand the Neoliberalism which is a policy model of a social studies and economics that transfer control of economic factors to private sector from the public sector.

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Neoliberalism is a policy model of social studies and economics that transfers control of economic factors to the private sector from the public sector.

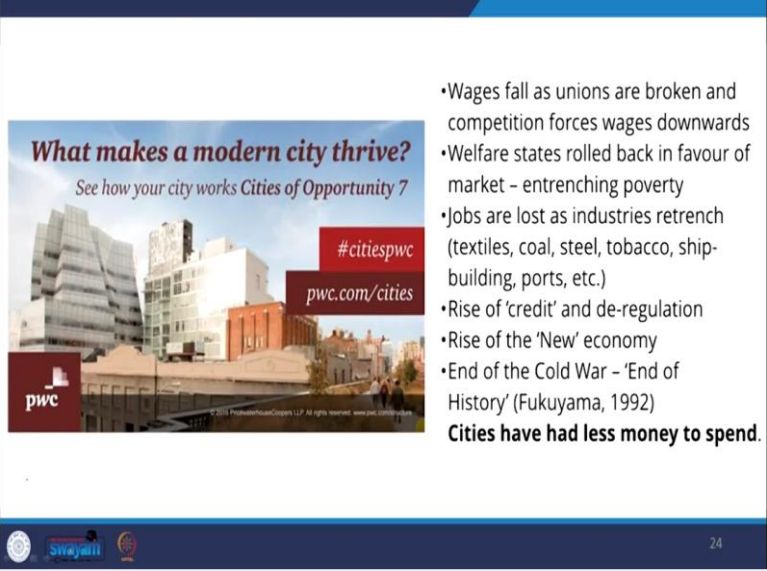
The Neoliberal Urban Age (1980-Present)

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Professor Lugar explains the characteristic of Neoliberalism. It says that the emphasis is more on the supply side and the idea is that the trickle down economy would happen. Further we see that the competition in the cities is also market-led. Further we see that government spends lesser and more of the investment comes from the private sector that increases the role of the private sector. We also see that there is a flexibility in the labour market.

Further we see more integrated trade less interference regulation with the business deals. Further we look at the mergers acquisitions and financial trading. We also see lower taxes especially corporate taxes idea that market will stimulate economic growth if left alone.

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**What makes a modern city thrive?**  
See how your city works *Cities of Opportunity 7*

#citiespwc  
pwc.com/cities

- Wages fall as unions are broken and competition forces wages downwards
- Welfare states rolled back in favour of market – entrenching poverty
- Jobs are lost as industries retrench (textiles, coal, steel, tobacco, ship-building, ports, etc.)
- Rise of 'credit' and de-regulation
- Rise of the 'New' economy
- End of the Cold War – 'End of History' (Fukuyama, 1992)

**Cities have had less money to spend.**

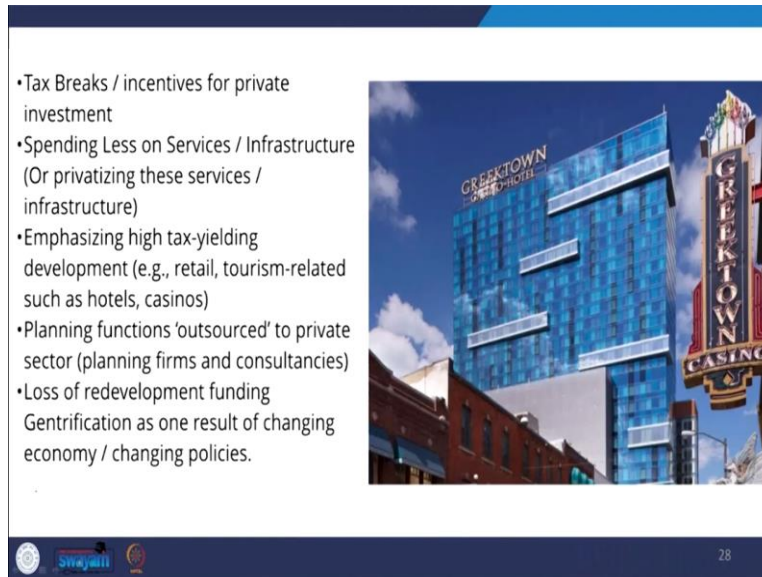
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Now we see that urban planning started with architects and then moved to planners and now see multinational companies planning cities or running the cities as business. At this point it is worth reviewing our economic and public infrastructure, how efficiently our cities are working and how much money our cities have. It is seen that city authorities more and more have less money. When cities have less money to work, they rely on the new source of income tax rebates incentive to private investors.

What does it really means when cities have less money? So, what the implications are so then when cities have less money, they start giving tax break incentives to the private investment. They start spending less on services infrastructure and rely more on the privatizing of these services. We see that they look at the emphasizing high tax yielding development such as real estate tourism related like hotels and other things.

So, which are high tax yielding developments. So, they focus more on that encouraging them. That is why we see that more and more cities are going towards tourism. Then we look at planning functions outsourced to private sectors then we see loss of redevelopment funding.

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- Tax Breaks / incentives for private investment
- Spending Less on Services / Infrastructure (Or privatizing these services / infrastructure)
- Emphasizing high tax-yielding development (e.g., retail, tourism-related such as hotels, casinos)
- Planning functions 'outsourced' to private sector (planning firms and consultancies)
- Loss of redevelopment funding

Gentrification as one result of changing economy / changing policies.

We also see gentrification as one result of changing economy and changing policies. In India we see a major step in the period, the major step for 73rd and 74th constitutional amendment act in 1989 this general government introduced two constitutional amendment act which you have also seen previously this brought in decentralization. And then the entities such as municipal bodies were identified and they were empowered for the third level of governance.

So, which was a major shift which showed the; shift from the rural to the urban understanding of ours. Further in the line with Neoliberalism in India we see Foreign Direct Investments FDI was introduced in 1991 under the Foreign Exchange Management Act. Further we see that URDPFI guideline also provides section of consolidated FDI policy which is directed or guides how urban and regional planning could take care of this FDI and can could integrate it.

Later in this period we also see that URDPFI guidelines. Then it was urban development plan formulation and implementation URDPFI guideline which first came up seeing all this urbanization trend. So, which gave guidance to the; planners and architects and the city managers

how to go about designing things planning for the cities. So, the first guidelines was introduced in 1996. Later we see the revised version came in 2015.

Which was renamed as urban and regional development plan formulation and implementation guidelines, which addressed to the need of regional development as well as inclusive planning sustainable habitat land use and transport integration at the planning stage. It also gave inputs on the service level benchmark disaster management concept and governance reform was also given in this. Further in this time we see in Indian scenario urban infrastructure projects were more and more undertaken through public and private partnership.

Because we are looking at the Neoliberalism period, we see how even public private partnership was also increased and encouraged. So, the public private partnership which is also said as PPP is a commercial legal relationship defined by government of India in 2011 as an arrangement between a government statutory entity, government-owned entity on one side and a private sector entity on the other side.

For the provision of public assets and or public services through the investments being made and or managed by the private sector entity. So, this was undertaken more of public private partnership was encouraged in this period. So, today there are hundreds of PPP projects in various stages of implementation throughout the country in different parts in different cities. So, infrastructure in India is poor when compared to similarly developed nations.

The government of India identified PPP as a way of developing countries' infrastructure. In 1990s during India's first liberalization wave there were various attempts to promote PPP. However, in some sectors such as water and sanitation it failed. India was perceived as too risky and there was significant opposition to private sector involvement. It is only in the first half of the 2000 that the first PPP was signed and implemented.

Looking at some of the; case studies in an Indian context. We see that one of the examples where we got good learning experience is Gurgaon. Gurgaon, which is one of Delhi's four major satellite cities and part of the national capital region. Its urban area can be broadly classified in

two district sections, the Haryana Urban Development Authority area and the Old Town Municipal Area Limit. Urban Development in Gurgaon is a joint operation of Government and the private sector.

Rapid and better organized urban growth do happen due to the greater availability of the financial resources. Since we did it through public private partnership, we had good access to resources and then the development took place faster there was no hindrances in the development. In this we saw that more than 45 private players were involved in Gurgaon property market with the major players being DLF, Ansel and Uni-tech private capital had very little incentive to provide the public infrastructure that sustained cities.

So, the project came very fast all the things were done very fast there were no hindrances. However, the public infrastructure was not up to the mark as the government was expecting. Another example which we see based on the previous learning is the Delhi Metro. So, Delhi Metro Rail Company was set up on march 5, 1995 and here the public private partnership was 50-50 partnership between government of India and government of Delhi, GNCTD to build and operate the system.

The cost of the entire network is around at that time. It was calculated to be 330 billion as of April 2001. And we see that it has been successfully implemented and it still the process is still going on. Reviewing how did we really work through this period in Indian landscape we see that we evolved in our process of decentralization and also opening up for the larger market and private players.

We also had learning experiences on how to tackle urban issues with public private partnership. Now we will see how in the western landscape the declining cities were coming up with new strategies for urban growth. We start seeing new transformation in decline industrial space in western cities such as transformation of industrial loft space to retail space. So, we see kind of a transition the empty spaces were occupied by the new type of professionals.



And activities termed as Revanchism or Reconquest which means recover the lost territory. So, the new kinds of professionals were taking over the empty spaces. So, we saw that the post-industrial spaces the blank spaces were now transforming to night time economy. We see that cities were regaining their creative ways. One of the considered good case study of North Carolina is the research triangle.

Which had agriculture based industries such as tobacco industries and textile industries which declined. However, they had universities. But you would see that universities, the general problem is that when the graduates come the city survives, but then all the graduates go out when they graduate and get their degree so there was a brain drain. So, considering that they created a research triangle since they had three universities at their place.

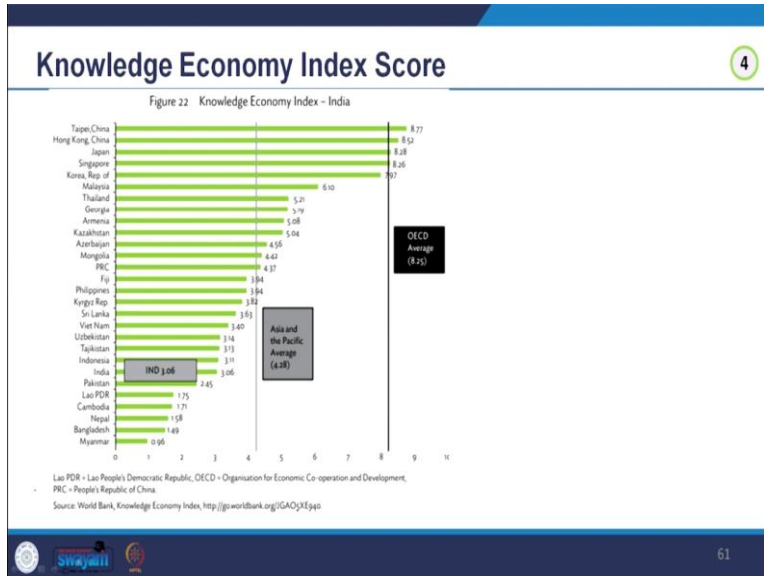
So, they created a research triangle with low tax district with skilled workforce. So, now you are seeing all the graduated students so with the skilled workforce and then they created incentive for business and companies. So, they created a research triangle with low tax district with six skilled workforce and incentive for business and companies. Now considered this case particularly is now considered as a success with high skilled workforce and number of companies flourishing in the region.

We see a trend in such tech job cities in US and across the globe however the structural poverty continues despite that we are seeing that these cities are very successful. There is increase in income there is increase in job but there is still structural poverty which continues in such places. So, it raises again questions about Neoliberalism that whether such kinds of interventions are really successful or not.

Because such kind of interventions are leading to further economic divide and the opportunities which are created by this like you are seeing high skill jobs. So, they are the economic benefit is only being created and favoured for the limited people. Comparing it with Asian and Indian context we see the study a comparison of various countries on knowledge based economy reveals that emerging economies in Asia and the pacific perform far lower on the overall knowledge

based economy as compared to countries of the organization of economic cooperation and development.

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In this section below an assessment of the position of emerging economies of Asia and Pacific is provided. The review of knowledge economic index core in India shows that there are still considerable barriers to doing business and high traffic.

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**Indian Examples of knowledge Cities**

Top 10 fastest-growing cities in the world, 2019-35

Rank	Growth (%/y, 2019-35)	City	GDP 2018 (\$ billion, constant 2018 prices)	GDP 2035 (\$ billion, constant 2018 prices)
1	9.17	Surat	28.5	126.8
2	8.58	Agra	3.9	15.6
3	8.50	Bengaluru	70.8	283.3
4	8.47	Hyderabad	50.6	201.4
5	8.41	Nagpur	12.3	48.6
6	8.36	Tiruppur	4.3	17.0
7	8.33	Rajkot	6.8	26.7
8	8.29	Tiruchirappalli	4.9	19.0
9	8.17	Chennai	36.0	136.8
10	8.16	Vijayawada	5.6	21.3

Source: Oxford Economics

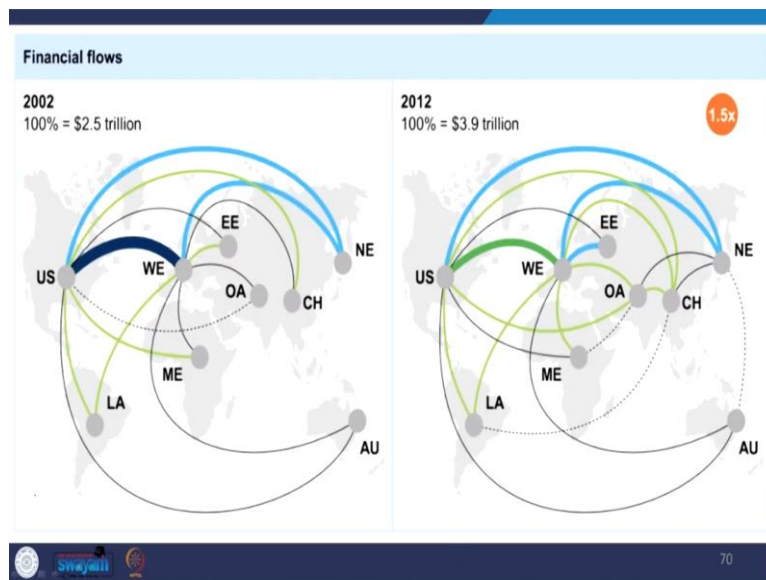
<https://www.financialexpress.com/economy/worlds-top-10-fastest-growing-cities-are-all-from-india-check-which-cities-made-it-to-oxford-list/1585498/>

We are looking at the examples of the fastest growing cities here in India. Some very well known of science and Technology Park in Indian Context Star, Techno Park in Trivandrum, International Tech Park in Bangalore, we also see Tidal Park in Chennai, Info Park in Kochi,

Hyderabad Information Technology Engineering Consultancy city, High Tech City in Hyderabad. Further we also see Biotechnology Parks such as ICICI Knowledge Park.

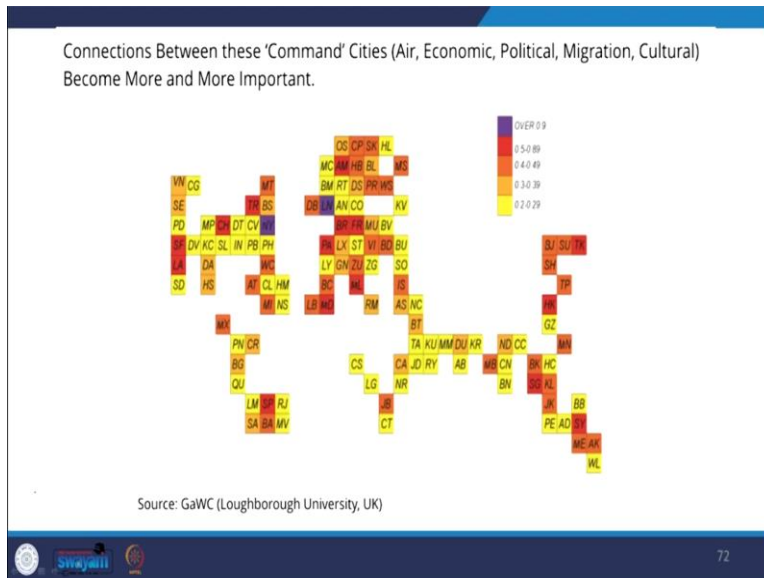
Shapoorji Pelangi Park, International Biotech Park, Golden Jubilee Biotech Park and then Biotech Park Lucknow. We also see that cities which have financial role are taking the leading role like we said now we are seeing a different kind of cities coming up. So, we are seeing the financial cities coming up and then they taking the leading role. And they are commanding the other cities and these kind of cities have spread across the globe. So, we see a city like New York we see London we see Tokyo.

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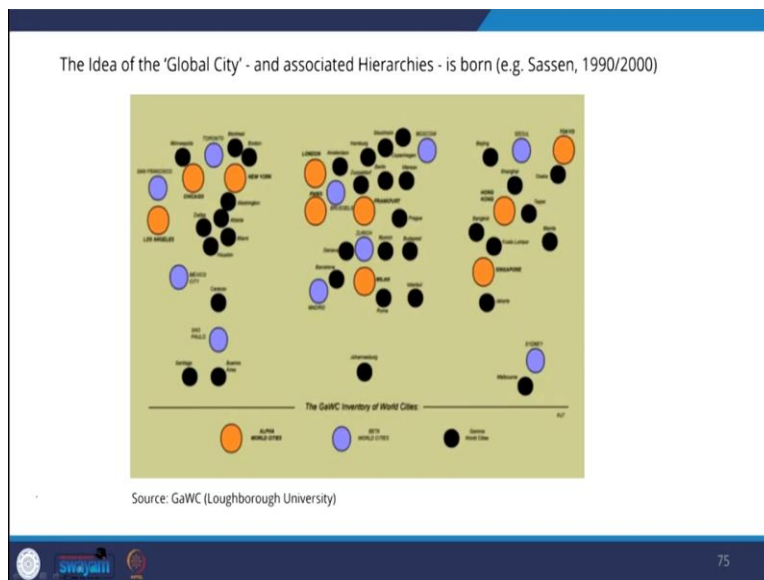
So, in this image we can see how in 2000 how the cities were had their financial flows from one city to the another by 2012 we see that how those flows have increased in time. We started seeing and comparing cities with how connected cities are with the global economy.

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So, in this image we see how the cities are commanding cities. We see that the idea of global city became popular in the time. We see Los Angeles, Chicago, New York, London, Paris, Frankfurt, Milan, Singapore, Hong Kong and Tokyo being top most global cities. Also, planners realize that the cities were central to the process of globalization. However, these global cities also show considerable disparities.

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We also see Mumbai city playing a considerable stronger role as a command city followed by New Delhi, Chennai, Bangalore and Kolkata.

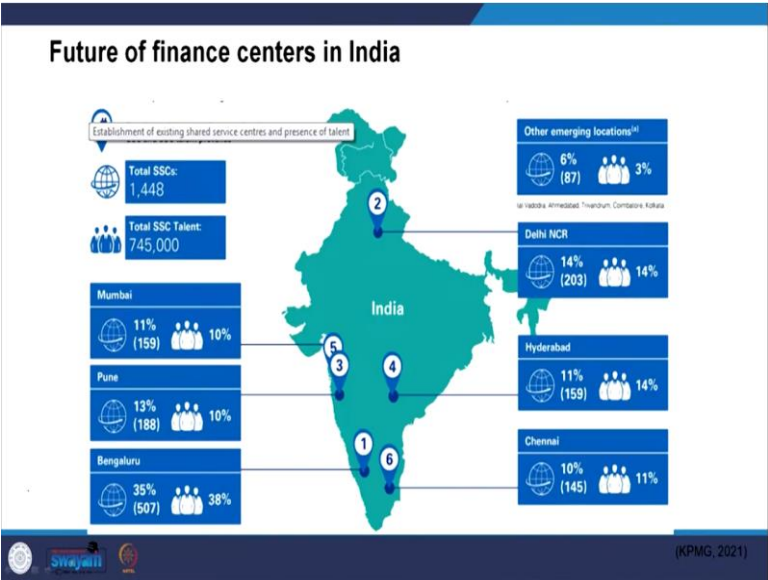
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Let us now review financial centres in India as per the KPMG recent report. We see the top 15 cities with the highest GDP. We see Mumbai, Delhi, Kolkata, Bangalore, Hyderabad, Chennai and so on which are top of the list. As per the KPMG report based on the recent conducted research of six main locations, we see that they identified shared service centres in India such as Mumbai, Pune, Bangalore, NCR Delhi, Chennai, Hyderabad.

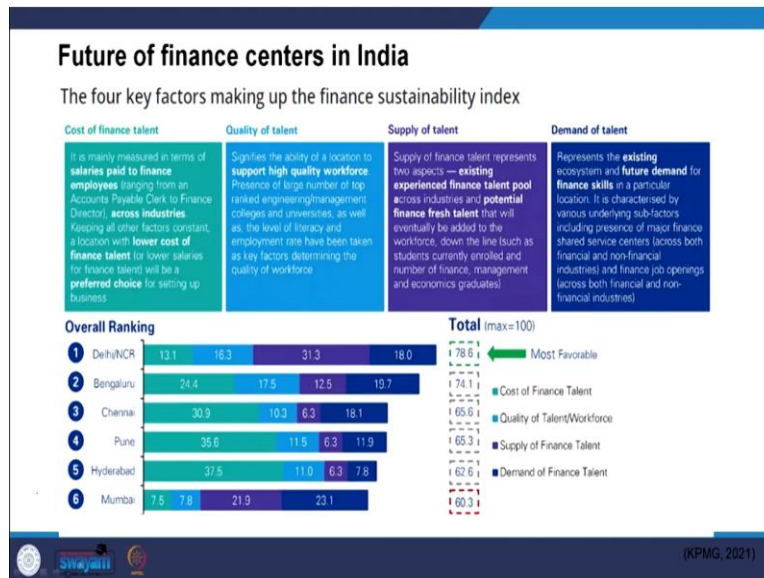
And their profiles and they looked at the sustainability and the potential for future shared service centre based on the range of factors.

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So, their study reveals the kind of cities which can have such kind of shared centres. Further we looked into finance talent sustainability index. Finance sustainability index represent the ability of a particular location to sustain a finance business in terms of generating relevant demand for finance jobs and providing adequate relevant skilled workforce all of it at a reasonable cost to the employers.

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So, we see which are our key cities here. Now let us see how other than these command and global cities how do smaller cities compete. So, we are seeing these are the big cities which are competing in terms of being financed cities or the global cities but how the smaller cities sustain. So, we see here smaller cities organize themselves in form of urban agglomeration to compete for investment for tourists and residents and for business at a global level. For example, Greater Manchester also termed as intra-urban competition by David Harvey.

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With less protectionism and regulation – cities around the world were left up to themselves to compete with one another for investment, for tourists, for residents; for business.

David Harvey called this new landscape 'intra-urban competition', and others have written of the various ways cities and metros around the world have sought to compete (and win) the precarious 'new' economy.



Agglomeration: One way of competing (Greater Manchester)

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So, with organizing themselves as urban agglomeration, they increase their size they increase the capacity and with this they can be they are greater Manchester is being able to compete at a global level. Cities also compete through economic clusters combined with agglomeration. So, we also see the coming of cluster theory into picture by Potter in 1990. We see that it looks at the development of specialized economic of industrial clusters in a particular place.

That form a niche in the global economy. Such the example which we looked at was the research triangle so on the similar line how do we create the clusters. Looking at India, we see that cluster based approach has been initiated. The government of India has announced the national manufacturing policy in year 2011. With the objective to enhance the share of manufacturing in GDP up to 25% within a decade creating 100 million jobs.

The national manufacturing policy outlines creation of clusters. The clusters play a critical roles in technological propagation by facilitating technological learning and manufacturing through the presence of an entire ecosystem in a same geographical location. So, we see the 12th five-year plan of planning commission also suggested a cluster approach for promotion of manufacturing industries. So, we will study about this more in our planning legislation segment.

We look at what other policies came out related with national manufacturing policy. National investment and manufacturing zones, special economic zones and we will also look at the cluster

development of schemes for MSME Micro Small and Medium Enterprises. Moving forward another way in which cities compete with each other for investment include branding. So, branding through mega events such as the event which you recently saw in Tokyo Olympics.

Then you also saw you have been seeing World Cup tourism culture, all these things by holding mega events. The cities are looking towards branding themselves. We would particularly come across the name Richard Florida who propagated or who conceptualized the creative city concept and he identified the creative class for promoting these cities. In this concept we see that art and culture and tourism have been central to city planning as ways to grow and improve cities since 1980s.

We will look more about this in our segment on culture and cities just to capture few things. In India heritage culture has been integral to our rural as well as open life. And we see how we grew evolved in the process of formally recognizing the urban culture through UNESCO and also through the intervention of creative city network. We also see that UNESCO inscribed Dholavira an ancient Harappa City.

Situated in present day Gujarat on the; world heritage list making it the second Indian site to be accorded the tag this year. So, we see Dholavira in Gujarat we see Ramappa Temple in Telangana. We further see UNESCO creative city network was created in 2004 to foster international cooperation within and across cities worldwide that utilize culture and creativity as a strategic liver for sustainable urban development.

So, within this we see that Indian National Commission for cooperation with UNESCO has selected Jammu and Kashmir summer capital Srinagar among the two cities from India for UNESCO creative cities network in 2021. Last year UNESCO designated 66 new creative cities of which southern Indian city Hyderabad was selected in the field of Gastronomy while Mumbai capital city of Maharashtra was designated in creative fields of Film.

Moving forward we also see interventions like Delhi heart which many other cities also took up for cultural revival and also to expedite tourism. Now we look at transit oriented development as



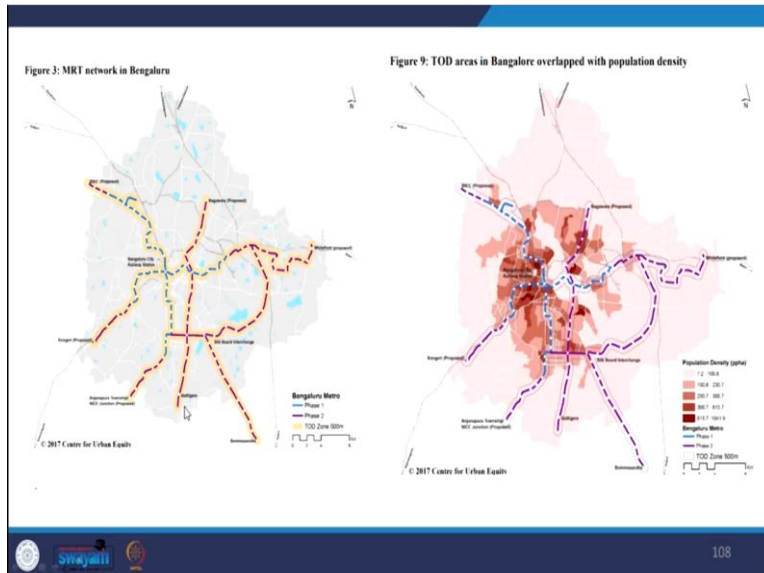
seen as another innovative approach to manage cities economically as well as sustainably. We see that the core idea of transit oriented development came up with observing the urban sprawl. The urban sprawl which is considered not good for public health or the environment or for the economy it is expensive, it is polluting, it is unhealthy.

So, based on that we started thinking or organizing ourselves around transit oriented development. This concept came in 1970 and with this we see how cities started to organize themselves around this concept. In India when we look at this concept, we see many cities have adopted transit oriented development. The growing urban sprawl in India is leading to increased use of private vehicles congested road.

You must be observing while traveling that how congested your roads are and how much long you have to travel. So, because of these efforts have been taken to build smarter and more sustainable cities the Government of India has been focusing on transit oriented development to support urban transformation process. So, if you look at the concept of TOD, TOD integrates land use and transport planning.

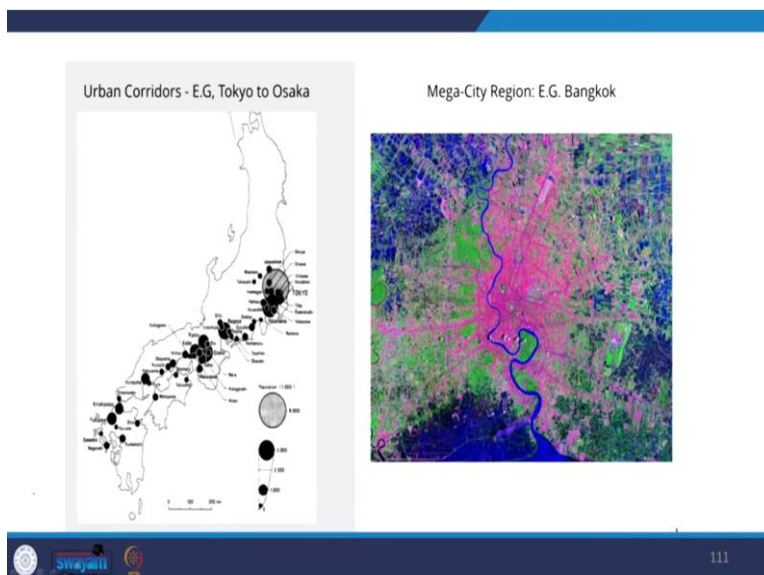
And aims to develop planned sustainable; urban growth centres having walkable and liveable communities with high density mixed land use. Citizens have access to open green and public spaces. And at the same time transit facilities are efficiently utilized through this concept.

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In the image we see how Bangalore has encouraged TOD in the city. Further we see that now we have again like you had seen earlier that we were we started making car oriented cities. Now we have moves back when the sustainability issues have come up the environmental issues have come up. We have started moving back to invest in the urban infrastructure and we have started making creating urban corridors. So, you see the urban corridor example here.

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From Tokyo to Osaka, you also see mega city region of Bangkok. If you look at Indian context and look at the industrial corridor, we have come up with a mega plan where we are connecting all the industrial corridor you must have also seen this in our regional planning segment. We see that different sectors of economy are interdependent on each other. Industrial corridors

recognizing this interdependence offer effective integration between industry and infrastructure leading to overall economic and social development.

Industrial corridor constitutes world class infrastructure. So, we see all the infrastructure which has been planned out in the industrial corridor worked out in India. We see high speed transportation networks, we see ports with state of art cargo handling equipment, modern airports. We see special economic regions or industrial areas, we see logistic park knowledge parks, we also see complementary infrastructure such as township real estate.

And then we also see urban infrastructure along with the enabling policy framework. So, the examples of our industrial corridor include Delhi Mumbai industrial corridor, Chennai Bangalore industrial corridor so right now we have 11 proposed in the country. The development of these 11 industrial corridor projects will be implemented through the national industrial corridor development and implementation trust.

These corridors are spread across India with strategic focus on inclusive development to provide a boost to industrialization and planned urbanization. We also see that smart cities are being developed along these corridors. Moving on we see now the new urbanism is also coming into play in this period. The term new urbanism captures the movement that emphasized a return to dense more traditional living and working environment with street connectivity.

Mix use and town centres with historical architectural styles. So, we see that how we were moving towards the transit oriented development and then we are moving towards the new urbanism where we are getting more and more connected plus or moving towards organizing ourselves in much more dense way. We also see the investment in the public transportation. Looking at the Indian context public infrastructure has been identified as a key element.

We see we have metro rail in the country rapid transit in India consists of Metro Monorails and Light Rail system the first rapid transit system in India was called Qatar Metro we started operation in 1984. We see that metro rail system in India is popularized and developed. Particularly we see the Delhi metro which was India's first modern metro which began its

operation in 2002. So, Rapid Metro Rail Gurgaon which started operation in November 2013 is India's first privately owned and operated metro.

So, we also see the how private players are here and running the public infrastructure. We see that Delhi metro recently started running without a driver on the 37 kilometre stretch magenta line. With this leap of faith Delhi metro joined these selected few countries globally to have started operation for driverless metro.

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**Trams To driverless Metro in India** 4

The modern world has transformed itself faster than ever in each and every aspect of our lives. Whether it be technology or anything else, science has proved itself worthy. Although science has also caused greater devastation during the first half of the twentieth century as two world wars, it has been the major force behind the present scenario of a peaceful world.

Delhi Metro recently started running without a driver on the 37-km stretch 'Magenta' line. With this leap of faith, Delhi Metro joined the select few countries globally to have started operations for a driverless metro. PM Modi has inaugurated the driverless metro in Delhi on December 28, 2020.

(First driverless metro launched by Delhi Metro Rail Corporation)

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Our prime minister has inaugurated the driverless metro in Delhi on December 28, 2020. We also see investment in bullet trains in the country now.

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**JNNURM**
4

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Two Sub-Mission

Basic Services for Urban Poor (BSUP)

Urban infrastructure and Governance (UIG)

- Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was a massive city-modernisation scheme launched by the Government of India under the **Ministry of Urban Development** in 2005
- Aimed at integrated development of slums through projects for providing shelter, basic services and other related civic amenities with a view to providing utilities to the urban poor.
- **Mission Statement:** The aim is to encourage reforms and fast track planned development of identified cities. Focus is to be on efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of ULBs/Parastatal agencies towards citizens.

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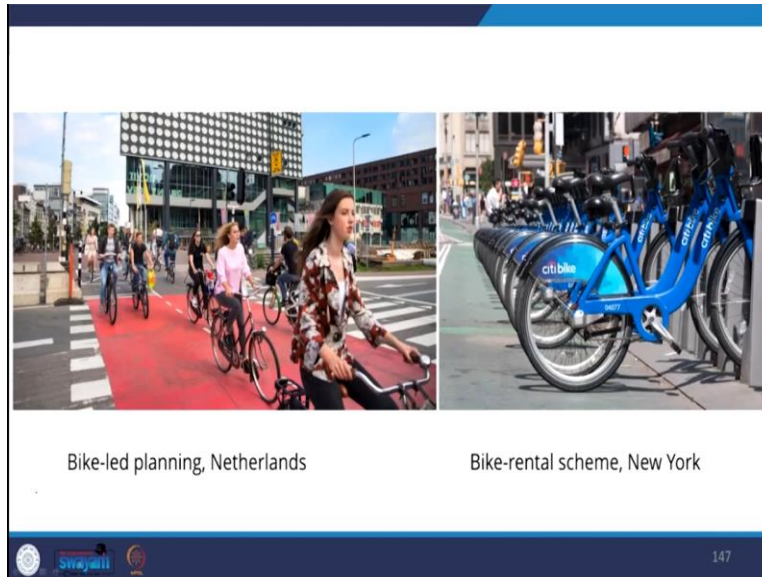
For the VC investment in all the infrastructure through Amrit Mission and also through these Smart City Missions. We see in this period that due to sustainability and the creative way to attract investments. We have also moved into initiatives like green and eco cities around the world. We see the example of city in China we also see the example of city in Abu Dhabi, which are built around this concept how much successful they are that needs much more investigation.

But then these concepts became popular eco city, a city which is based on low or zero carbon principle like we have seen in China and UAE. However, not all were feasible and realistic in their ideas. When we look at the Indian side, we see further like green cities coming up, Bangalore being one of the very prominent and known city which propagated the garden city concept and worked on this.

However, there are different reviews related with this Bangalore was also listed as top green city an environmentally responsible city owing to the spike in the demand for solar as well as garden products as per the research. Moving on in this period there were so many ideas coming up. We see that another concept which came up was the liveability paradigm with liveability index. We see that Vancouver is considered as one of the most liveable city at the global level.

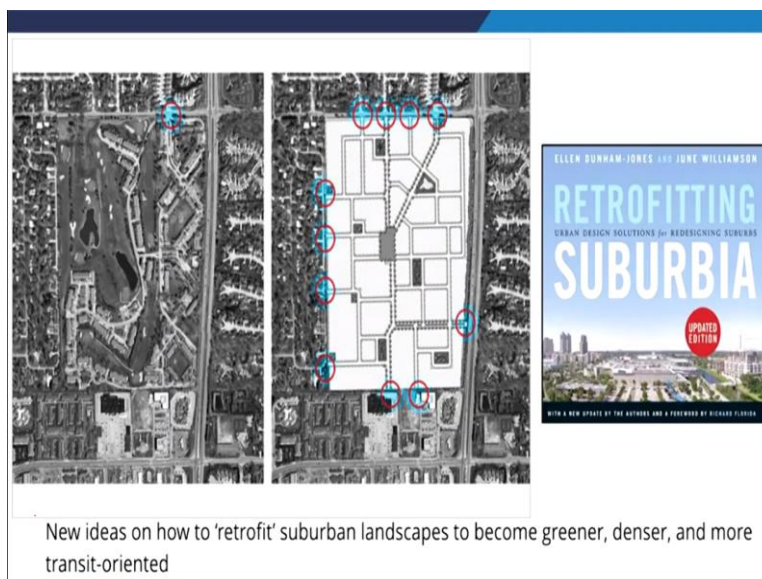
We also have comparison at the Indian level where we see that as per the ministry's research and study, we see that ease of living is best in Bangalore. Further we see that in this intervention we also promoted bike led planning.

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For example, we see in Netherlands where cities were designed around how people could bike and move around which was also environmental approach towards planning cities. We also see the challenge of how to develop the existing areas around the same concept which further led to the concept of retrofit.

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Here we see the older areas where the development was in a different way. And now we are moving more towards the public infrastructure public transportation how do we reconnect to these areas. So, for that the new concept of retrofit came and you have if you may recollect, we also saw this in the smart intervention where the one component was on the retrofitting aspect. So, now looking at the current time of when we are at the age of internet, we are at the age of data we are at the time of Artificial Intelligence and Robotics.

We see cities moving towards adopting and consuming these data. So, we have moved towards the smart urbanism so the concept of smart urbanism comes here. We see how we have started looking at the future and we are seeing that our cities need to be smart they need to address the climate change and how we need to work upon this. So, we see that most of our technological solutions for smart cities involved smart energy, smart transportation, smart water.

We see we are talking about smarter building smart communications smart network. So, all these you have seen that how in India also we moved forward with the smart cities and how did we mobilized cities with the pilot projects local area planning based pilot projects and also certain intervention at the pan city level. We see here 5G smart city in Quayside Toronto.

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So, which is planned around all the new concepts of smart features. We see how people would move, how do they would park, how they would use the passive housing, how they will have.

Further we see issue about women's safety in Indian landscape also, we are taking lot of steps how to address about women's safety. And then we are also trying to encourage how women loitering is helpful to the urban environment.

We are also conscious about the urban heat island which will further see in the environmental segment. So, at this particular juncture we are looking at what are the sustainable approach for our cities, what are the less sustainable things and which are more sustainable. So, more sustainable include the compact form of residential development mixed use land use. We are also looking at the employment based primarily on education and skills.

Rather than the manufacture which are much more environmentally polluting industries. We are seeing how we can move more on foot and bicycle and then major public transport and then we are also looking at the renewable energy. We are facing the pandemic and all these theories which we had developed about the density about the public transportation about the public spaces and the kind of land use we had been doing have again.

We have come to question here. We have started questioning, we have started rethinking about health infrastructure. How we can have a healthier city? How we can have better health infrastructure? How we can have better public health and transportation? How are we going to reorganize ourselves? When we need to work from home? When we need to get our children educated from home?

And how we are going to use the public spaces? And how our retail economy we are also sitting at home and shopping from home? And how these informal jobs? And what is going to happen with those kind of jobs? So, all those things have to be rethought, reconsidered at this time and at the same time we have to be thoughtful about the environment and about our health.

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**SUMMARY**

- 1 Differentiated Modernism and Neoliberalism
- 2 Identified the New approaches to Urban Planning  
 Knowledge Economy, Financial Cities, Creative Cities, Green Cities, Transit Oriented Development, Use of Technology-Robotics, AI, Internet in our Cities,
- 3 Defined New Urbanism
- 4 Reviewed the aspect of Sustainability in Urban Planning
- 5 Reviewed the Covid -19 and Health concern in Urban Planning

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So, the summarizing this is what we covered today. We saw the neoliberalism we looked at how we have the various new ways how we started looking at the cities and we started trying all these concepts in our cities and then we moved towards sustainability. And then finally we are at the point where we are looking at the health and health infrastructure and re thinking how we need to organize our own cities. So, that we are safe and we at the same time our approach are sustainable.

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Our coverage was limited with the scope to make you aware of the topic. There are enormous readings and movies available to explore few are suggested here. This is not an extensive list. You may feel free to suggest more from your experience. Please feel free to ask questions, let us

know about your concerns. You have to share your opinion, experiences and suggestions looking forward to interacting and co-learning with you while exploring cities and urban planning. That is all for today. Thank you.