Analysis of the current situation and development direction of Zhengzhou's planning and construction

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Abstract. This article analyzes and studies the current status and development direction of Zhengzhou City by using urban management theory, comparative methods and on-the-spot investigation methods. Close to the conclusion. As a new first-tier city, Zhengzhou's development level and planning and construction are not yet mature, and there are still many problems that need to be solved urgently. The results of the study show that the overall provision of public goods in Zhengzhou is uneven and inadequate. Public goods are an obvious material manifestation of whether cities are developed or not. Infrastructure is a major component of public goods. Housing construction is the top priority of the people's livelihood. In response to the housing planning and environmental protection issues in Zhengzhou City, this article puts forward several suggestions: to expand the investment of funds to build affordable housing; to resolve the garbage classification and land layout Environmental issues in Zhengzhou. Environmental protection has always been a key issue in China. Both cities and residents should raise their awareness of environmental protection in order for cities to develop healthily and sustainably. This article has a certain reference role for the urban planning and construction of Zhengzhou City.

1. Chapter 1 Introduction
Proper urban planning is inseparable from good urban management. Urban management is a broad term that covers a large number of functions. To understand urban management, we must first understand the components of the urban structure. A city or urban settlement is more than just a road building or an urban park. The core function of the city is to provide residents with a livable environment, such as food, housing, medical care, entertainment and other items needed for life [1]. Urban management is the confluence of all the above streams and provides citizens with a combination of the elements listed above. The 21st century is an urbanized century, and China in the 21st century is an urbanized China. In the past 30 years, China has experienced the largest urbanization process in the history of urbanization in the world, the most complex background, the most difficult tasks, the most benefited population, and the most intense conflicts and conflicts. However, the city is a complex giant system created by mankind. It not only carries and leads the success and progress, but also hides the gloom and lurks the crisis. The process of urbanization in China is like this. Zhengzhou's current urbanization and urban development are also facing severe challenges. The low-income population also occupies a large part. Due to the large population, education and housing are particularly tense, and public goods are relatively backward. The
current urban management rights are basically in the hands of the public sector, and China's urbanization process and development are led by the government.

1.1. Research background and meaning

1.1.1. Research background. Urban management is an applied science that specializes in the management of urban public affairs. The rapid development of urbanization in China provides a broad practical demand for urban management research. In recent years, urban management has become a key field of public management teaching and research in China, and has been highly valued by government decision-making departments. Among them, urban planning and construction are an important branch of urban management science. Excellent urban planning can improve citizens' living comfort and satisfaction, improve the overall competitiveness of the city, and occupy an important position in the increasingly fierce urban competition. Urban planning is not only a comprehensive science involving multiple disciplines, but also a government action to guide city construction, or a social movement that encourages citizen participation.

Architecture is a city's most basic material elements and its most obvious appearance. For example, we can easily distinguish the difference between Beijing and Shanghai through some buildings. In urban architecture, residential housing is the most basic and basic material information for residents. Urban housing is a basic requirement that is essential for the survival and development of residents. The purpose of urban construction is to allow more urban residents to enjoy this kind of security and ensure that people of every class have a room to live in. And the basic conditions for social stability. Real estate is one of the important industries of the urban economy. The construction of urban housing can drive the development of other industries in the city: it can digest the surplus labor in the labor market and the demand for various materials for building decoration. The so-called move around the body, the development of urban housing and other buildings continue to inject fresh blood into the city.

With the improvement of people's living standards, urban residents' demands for air environment quality are also increasing. The main purpose of the city is also to build a green and beautiful modern city. This goal can be achieved through the beautification of the urban environment, the reduction of urban air quality, the reduction of emissions, and the treatment of polluting enterprises. The early batches of industrialized cities in the West have already given a painful lesson: we cannot take the old road of "pollution first, then governance". We must love the environment like our own eyes, and lose the environment on which we live and develop. There is no such thing as city construction and development.

1.1.2. Research significance. Urban planning is one of the important means of urban management. It regulates urban spatial resources, guides urban development and construction, maintains the balance of diverse interests, promotes the maximization of public interests, guarantees public safety and social equity, and improves urban development and citizens' welfare. The purpose of urban planning is to make up for market defects. The market mechanism can promote economic development and urbanization, but it cannot solve problems such as environmental protection and public health. The market mechanism can bring economic prosperity and urban expansion, but it also causes urban decentralization, urban center decline, and land use waste. The city government is responsible for solving these problems. One of the basic tools for the government to solve problems is city planning.

Studying the science of city management can help to enhance the city's comprehensive competitiveness and shape the characteristic city image. There is a competitive relationship between cities, and talents and resources are all objects of competition. Only by continuous development of various cities can they be more attractive in the colorful modern social cities. Many cities are eager to build some modern commercial plazas, resulting in the same city and no characteristics. Excellent city management and planning can help to differentiate your city and create a distinctive industrial agglomeration effect.
1.2. Research status at home and abroad

1.2.1. Current situation abroad. The start of urban planning abroad is relatively early. In 1850, American architects designed Central Park to create large green areas in the center of the city. The city park broke the old concept that the city is always covered with dense houses, and the garden belongs to the old concept of royal nobility, which greatly improved the ecological environment. In 1882, the Spanish designer put forward the theory of the band-shaped city, and the concept of separating the urban area with the green belt and perfecting the urban spatial layout emerged in urban planning.

Urban planning in the United States has always been known for its sound system and advancement. One is the long-term planning concept. The guiding ideology of New York City Planning is how to make the city develop in an orderly and orderly manner. Therefore, long-term planning in metropolitan areas such as New York often focuses on the socio-economic development trends and problems in the next 30, 50 or even 100 years, from the aspects of population growth, natural resource supply, environmental changes, and new economic growth. Systematic and scientific analysis and forecasting, which provides a scientific basis for the formulation of urban master plans.

The second is the planning concept of sustainable development. "Based on ecology, based on development" is one of the important concepts in the 21st century when the United States formulated a blueprint for urban planning. Since 2012, urban planners in the United States have paid more and more attention to environmental protection of natural ecology, protection of historical and cultural resources and sustainable development. They are soberly aware that environmental resources are becoming valuable resources for sustainable development in the post-modern era. Strengthen environmental protection and save resources, explore the combination of urban planning and ecological development, and find effective ways to control the disorderly expansion of cities and create beautiful living spaces. With the help of the planning of the metropolitan area to achieve coordinated development between cities, the connections between cities are becoming closer and closer. In order to overcome the shortcomings of repeated planning, waste of resources and excessive competition caused by the independent planning of cities from their own perspectives, metropolitan cities such as New York are increasingly focusing on planning coordination between cities and between regions and regions. Metropolitan planning to establish a planning coordination mechanism between cities, and then achieve inter-city coordination and integration development. As a result, a non-governmental non-profit organization, the New York Regional Planning Association, a voluntary association of local governments and supported by the federal and state governments, came into being. Many involved major issues such as regional planning and complementary economic development (such as transportation planning, Environmental planning, etc.) are used to achieve coordination and unification.

1.2.2. Domestic status. 1842-1948 was the stage of germination of urbanization deformity in China. After the Opium War, with the invasion of imperialism and the development of national capitalism, the earliest capitalist industrial and commercial cities appeared along the coast, along the river and along the railway in our country. During the period from 1949 to 1957, China implemented the first five-year plan. The adjustment of the industrial layout made China enter the normal stage of urbanization. From 1958 to 1978, due to the Great Leap Forward and the "Cultural Revolution", China's urbanization entered a stage of severe stagnation. It was only at the end of 1978 that the Third Plenary Session of the 11th Central Committee of the Party pointed out the guideline of "focusing on economic construction" before China entered a new period of reform, opening up and modernization.

Since the reform and opening up, China's modern city construction has begun in an all-round way, and the government has begun to attach importance to urban planning. In 1984, the State Council promulgated the "Urban Planning Regulations", which stipulated that the planning of key cities such as Beijing must be submitted to the State Council for approval. Subsequently, in 1989, the Standing Committee of the National People's Congress passed the "Urban Planning Law," which was the first basic urban planning law since the founding of New China. Based on the practice of the above laws and regulations, in 2007, the Standing Committee of the National People's Congress formulated the new "Urban and
Rural Planning Law”, which established the planning concept of urban and rural overall planning, people-oriented and ecological protection [3]. Compared with before, its innovation lies in: he changed the original urban-rural dual divide-and-conquer management system, and turned to practice the urban-rural integrated development system. This can ease the contradiction between urban and rural development, promote the coordinated development of urban and rural areas, break the urban-rural division, and allow more people to share the fruits of economic and social development. The new law also highlights the public policy attributes and public service functions of urban planning. He emphasized that putting public interests at the core, and clearly proposed that urban construction and development should prioritize basic public facilities and public service facilities. Another important point is that the new law improves the supervision and restriction mechanism and public participation mechanism for administrative rights. In this way, it can promote the construction of a clean government and reduce corruption; the second is that the public participates in urban planning, which can meet the public’s needs, Demand, improve citizen satisfaction. One of the principles of urban planning is to adhere to the people-oriented principle, and everything starts from the needs of people.

1.2.3. Differences between domestic and foreign planning. The level of public participation is high. American urban planning places great emphasis on public participation. In addition to urban planning administrative agencies, a series of non-governmental agencies involved in planning legislation and enforcement have been established. For example, in addition to the New York Regional Planning Association, the New York Metropolitan Area also has organizations such as the New York City Development Commission, the New York Housing and Regional Planning Commission, the New York City Planning Commission, and the National Resource Planning Commission. Most of the members of the committee are civic volunteers with professional knowledge. They are officially appointed by the city council through application. Their membership, selection conditions, tenure, rights and responsibilities are all statutory. This largely guarantees planning legislation, amendments, enforcement is open and fair. In the process of urban planning, detailed public participation plans are formulated in accordance with the law, including civic consultations, public hearings, interviews, questionnaire surveys, media discussions, community lectures, and group discussions and summaries of community planning [4]. The data collected by the Municipal Planning Bureau, the research results and the proposed planning proposals must be submitted to the regular research meetings participated by the public for discussion and determination. Before being submitted to the municipal planning committee and the municipal council for decision-making, a public hearing must be held. Most of China's urban planning is formulated and executed by the city government, similar to the elite decision-making model. First, the Urban Planning and Development Bureau formulates various options for the plan. The mayor presides over a meeting to determine the options for the plan. The final decision is made by the Municipal People's Congress representatives. Although the main leaders of our city government are all elected, they as elites do not represent the wishes of most people. I have heard that there is a big vacancy in public participation in urban planning. The omnipotence of the functions of our government has led to the urban planning by the government. The citizens do not know exactly where to build and where to improve. This kind of bottom-up planning in the United States, completed with public participation, is worthy of our study. China's traditional urban planning focuses on industrial development and spatial layout, and seeks to maximize economic benefits. There are also some government officials who are always engaged in "face-saving projects" for performance. Modern urban planning should focus on sustainable development, focusing on the coordination and unification of economic benefits, environmental beautification, and fair efficiency. The development of social welfare maximization and spatial balance should be pursued. This is also the difference between our national and foreign welfare state planning.

1.2.4. Future development trends. The development of population suburbanization must be a trend in the future. The suburb refers to the surrounding area of the city's high-density population and buildings, and usually refers to the edge of the city or the border with the surrounding cities and counties. With the
The expansion of urban functions, suburbs have advantages of location effect due to their proximity to cities, and housing prices are much cheaper than urban areas, and industries and populations can grow rapidly. The urban center has a large population, heavy traffic, and expensive land prices. Competitive pressures have prompted the migration of population and industries. This is an important reason for the rapid development of suburban population and industries. Suburbanization is not the reverse movement of urbanization, but the performance of urban development entering a higher stage of development and the optimal allocation of urban population and industries in a wider space. The suburbs have the natural advantages of beautiful scenery, fresh air, and good environment, which have attracted the surplus class to emigrate. Following this, the suburbs began to build villas, resorts, leisure clubs and other facilities. With the suburbanization of residents and life, the trend of suburbanization also appears in industry and commerce.

The city's fast track is increasingly developed. Urban fast-track mainly refers to the material and information exchange carriers with airport terminals, highways, high-speed railways, postal telecommunications and the Internet as the backbone. The advanced and fast-track network is a symbol and guarantee of urban development [5]. Since the reform and opening up, the urban rapid passage has developed rapidly. Among them, air transportation has a special status in the fast-track network due to its comfort and directness. At present, China not only develops rapidly on passenger planes, but express companies like SF Express also have their own private cargo planes. It can be seen that the air corridor has an irreplaceable role in expanding the influence of the city and promoting foreign exchanges and cooperation. The establishment of the airport hub is a necessary transportation guarantee for future urban development. The construction of highways improves the city's comprehensive transportation capacity. It not only promotes urban development, but also promotes the development along the railway. Remote areas or poor areas have the opportunity to get rid of poverty and get rich. Where does the high-speed railway extend, but where does the nerve ending of the urban network extend. Internet technology is now more and more developed, and mobile payment, which is now popular in China, has become a very convenient part of people's daily lives. In a word, the urban fast track strengthens the connection between the city and the outside world, and promotes the network and integration of the urban system.

The importance of eco-city construction is an inevitable trend of future urban development. Due to the industrial revolution, human production and life continue to gather in cities, while various waste and harmful substances discharged into the nature gradually exceed the purification ability of the nature, and environmental problems are seriously polluted. Environmental pollution will not only destroy the ecological balance of nature and cities, but also cause serious harm to human economy and health: the severe smog in Beijing, the capital of our country, is the result of environmental pollution. After receiving the lessons of environmental pollution, many cities began to focus on ecological balance and environmental protection, and proposed the development goals of building "ecological cities" and "green cities". Zhengzhou has always been known as the Green City, but due to the rapid development of the city, the environmental protection project has not been planned, resulting in the deterioration of air quality in Zhengzhou. In Zhengzhou's future urban development, it began to change its energy-consuming development ideas, focused on the development and utilization of various clean energy sources, and consciously developed toward clean, ecological, and comfortable directions. With the development of modern scientific and technological achievements, these high and new technologies can be used to govern and improve the ecological environment.

1.3. Research content and methods

1.3.1. Research content. This article mainly starts with the urban planning of Zhengzhou City, including the development direction of the entire city, the coordinated governance of urban and suburban areas, how to improve the satisfaction and well-being of citizens, the problems in Zhengzhou planning and how to improve to better direction development. In view of the problems in practice, some views and suggestions are put forward, and the reasonable layout of Zhengzhou 's urban planning is promoted by comparing with the cases of excellent urban planning. At present, China's research on the healthy deve
lopment of cities is still in an underdeveloped stage, and many cities still have old school mindsets. This is an important issue that we urgently need to improve.

1.3.2. Research methods. In this paper, a comprehensive study of the most loyal planning status using comparative methods, a combination of theory and inspection analysis is carried out, as follows:

First, the comparative method. By comparing the planning status and development direction of the eastern and western regions of Zhengzhou City, it is found that the development of the western region of Zhengzhou lags behind the eastern region, and the infrastructure and capital investment of the western region are far behind the eastern region. This is the main reason for the unbalanced development of the eastern and western regions of Zhengzhou City.

Second, the method of combining theory with investigation and analysis. Through reading a large number of relevant literature at home and abroad, we have a certain understanding of the existing theoretical results and planning schemes, so as to clarify the research direction of this article and the problems to be solved. Through empirical specific analysis, the theory is combined with reality.

2. Chapter 2 Status of Zhengzhou City Planning
Urban planning refers to the comprehensive deployment and specific arrangements made in order to achieve the economic and social development goals of the city in a certain period, determine the nature, scale and development direction of the city, rationally use the urban land, coordinate the urban spatial layout and various constructions. Its main purpose is to improve people's quality of life and the development level of the city, radiate good external effects to the surroundings, and promote the coordinated development of the region. The current status and development direction of urban planning in the urban and suburban areas of Zhengzhou City. Suburbanization is an inevitable stage of urban development. This article lists the planning situation of Zhengzhou's east and west districts, so that Zhengzhou can check for vacancies and develop in a healthy direction.

2.1. Current status of planning and construction of Zhengzhou West District
For now, the planning in the West District of Zhengzhou City is relatively good. After living in Zhengzhou for a while, it is not difficult to find that the difference between the planned development level of Zhengzhou is east and west. The western region of Zhengzhou is mainly the Central Plains District and the Erqi District, mainly some old communities and old commercial squares. With a sense of age, most of the elderly live in the West District of Zhengzhou. Due to the relatively narrow roads, the construction of the Zhengzhou subway will have some impact on the traffic in the west, and there will be more serious congestion during peak commuting times. Second, the community is relatively old and the population density is high, so the Zhengzhou city government is more conservative about the planning and construction of the west [6].

Compared with cities, the green space construction in the Western District often lacks the investment of funds. Due to the invisible competitive relationship between the Western District and the Eastern District in economic development, the green space funds in the Western District usually have a small amount of investment and a single source of funds. It is precisely because of lack of funds that the implementation of green space construction in the Western District has been hindered. The rational layout of green land is difficult to implement accurately, and the comprehensive benefits of green land cannot be effectively exerted [7]. In addition, the construction of green space in the Western District is basically an inherent construction model, and it is impossible to make a thorough analysis of the specific characteristics of the Western District. In short, it cannot be adapted to local conditions, resulting in the phenomenon of "a thousand towns and one side" in the Western District landscape. Was severely damaged. This construction model not only makes the characteristics of each city less prominent, but also easily results in a single urban planning pattern.
2.2. Status of Zhengzhou East District Planning and Construction

Zhengzhou East District is currently the backbone of Zhengzhou's development. Zhengdong New District is a key planning project for the construction of Zhengzhou New District. Its commercial and transportation public facilities are relatively advanced, and its population continues to move like eastern Zhengzhou. New and advanced high-speed rail stations and the Xinzheng Airport, which covers an area of 256,000 square meters, are both built in eastern Zhengzhou. The establishment of many large commercial squares, office buildings, and new types of communities provide many employment opportunities. These novelties and capital have attracted many young people to develop in this area. The massive accumulation of human resources is the fundamental reason for the rise of Zhengdong New District.

In the overall development of the Eastern District, the understanding of the construction and protection of green space is still at a stage of lack of attention, and the view of "emphasis on economy and environment is light" still exists. Although the social competitiveness and economic income of the Eastern District have developed rapidly, the development of the green area in the Eastern District lags far behind the level of economic development, which is also a common problem in China's urban development. Due to lack of understanding, people only pay attention to economic development and immediate intermediate benefits, while ignoring the longer-term benefits of environmental quality, occupation of cultivated land without reclamation, destruction of forest vegetation, and arbitrary discharge of sewage and waste gas [8]. In addition, the population continues to gather like an economic development area, which threatens the unique natural sceneries and cultural landscapes of the Eastern District. This phenomenon continues to spread like a virus in the surrounding Western District.

3. Chapter 3 Analysis of Problems Existing in Zhengzhou City Planning and Construction

Zhengzhou is also known as Green City. In the era when heavy industry was underdeveloped, Zhengzhou’s air quality and green area were at the forefront of the country, but with the development of industrialization, Zhengzhou’s air quality is now bad, and the haze is serious. One of the most important problems in Zhengzhou. Zhengzhou is a large city in the Central Plains with a large population, and public infrastructure, especially public transportation, is particularly important. Currently, Zhengzhou City has adopted private car restrictions, and the number of buses is satisfactory. The subway has opened two lines. It is expected that three lines will be opened in 2020. The development prospect is very good.

3.1. Problems in the construction of Zhengzhou West District

3.1.1. The problem of old house renovation. The reconstruction of old urban areas and the development of new urban areas are important components of the implementation of urban planning. At present, Zhengzhou has some misunderstandings in the reconstruction of the old city: a bit of quick success and short-term gains, and wants to make all the old cities flat and rebuild. This will interrupt the historical context of the city, but the city needs cultural accumulation. In the reconstruction of the old city, it is necessary to deal with the relationship between transformation and protection. Not only to protect historical and cultural heritage and to maintain traditional customs, but also to determine the scale of demolition and construction reasonably, there should be planned reconstruction of areas with concentrated dangerous buildings and backward infrastructure. If the construction is disorderly, not only will there be problems in the general direction of urban planning, but also the basic housing needs of the residents will not be guaranteed, which will easily lead to serious consequences for labor and financial losses [9].

3.1.2. Urban transport issues. The number of cars is increasing. With the rapid development of Zhengzhou's economy and the continuous improvement of people's living standards, people's purchasing power for cars has also increased. In the past ten years, Zhengzhou's mobile ownership exceeded 1.6 million in early 2008 and 2.6 million in late 2015. By the end of the decade, it had reached 3.45 million vehicles, an increase of 210% compared with ten years ago. The increase in cars will inevitably lead to congestion in the streets, and buses will even pass for nearly ten minutes at a junction during peak commuting hours; the design of traffic lights at many intersections is unreasonable, and the timing of traffic lig
hts does not match, causing one party to wait too long. The traffic lights at some intersections are even bad, which affects the travel of cars and citizens. Because Zhengzhou is now under construction of underground rail transit, many road sections are under construction, resulting in narrow streets and fewer passable sections. This is also the current major problem in Zhengzhou’s transportation. However, with the passage of time, the subway will definitely become a backbone to relieve traffic pressure.

Unreasonable urban road network construction is currently the main problem of Zhengzhou. Zhengzhou is a famous historical and cultural city. It started early and did not make long-term considerations for urban transportation planning. The original transportation system can no longer meet the current development of Zhengzhou. Existing urban arterial roads in Zhengzhou have too large distances, lack of branch roads, and chaotic functions. They belong to a low-speed transportation system. It is difficult to meet the needs of modern urban motor vehicle transportation, and it has invisibly increased the carrying capacity of existing urban roads. In addition, the unreasonable intersection design hindered the smooth passage of vehicles and caused traffic jams. The density of the road network is too low, the levels are unbalanced, and the pressure on the main roads is too great. First of all, the total amount of roads is insufficient, the density of the road network is too low, and the contradiction between the traffic demand and the supply of road facilities brought about by the rapid development of urbanization and motorization is outstanding. Secondly, in the past road construction, there are The awareness of “light branch roads”, the historical debts of secondary and branch roads have not been effectively resolved, the road network structure is imperfect, the expressway is not a system, and the secondary branch roads are not a network; again, road construction does not match the land use, and urban roads in some regions Facilities still lag behind the needs of urban development. The construction of traffic corridors between new cities, new districts and groups is slow, the passages are single, and the scale is insufficient. The role of traffic in leading urban development has not been manifested, invisibly increasing urban traffic pressure and causing traffic congestion.

The bus stop design is unreasonable. Most arterial roads lack bus lanes and parking bays. The stopping and starting of buses affect the passage of vehicles, and the irregular behavior of other vehicles will affect the stopping, starting and driving of buses, reducing the commuting efficiency of buses. Interaction with other motor vehicles causes road congestion. Rail transit is not perfect. The Zhengzhou subway started late and developed relatively slowly. It is still in operation and has not yet built a complete transportation system [13]. At present, only subway lines 1 and 2 have been opened, and the remaining routes are still under construction. A single subway line can only carry passengers on this route, the transportation efficiency is low, and the connection with other public transportation is not yet perfect. Can not meet the public’s riding needs.

3.2. Problems in the construction of East District of Zhengzhou City

3.2.1. Problems of public infrastructure construction. Urban public infrastructure provides urban residents with basic material conditions for survival and development. Without basic public facilities, human beings cannot carry out daily basic activities. The establishment of infrastructure also provides a material basis for the evolution and development of cities. Since the reform and opening up, China's urbanization process has accelerated, and the level of basic public facilities has been continuously improved, making important contributions to economic growth, social development, and environmental beautification. However, after all, public infrastructure is a public product, and it has both non-competitive consumption and non-exclusive benefits [11]. Therefore, public infrastructure will radiate externally, causing some external effects. If not handled properly, some external effects will damage the maximization of social benefits and become a negative external effect. These negative external effects will cause some social problems.

Infrastructure has a certain external negative effect on the environment. With the development of the city, various novel inventions have been created by people. With the increase of daily products, residents’ domestic waste is also increasing. The waste disposal methods in Zhengzhou are relatively limited. One is waste incineration. According to the requirements of laws and regulations, garbage incinerati
on stations are usually built far away from residential areas. Generally, few residents pay attention to this problem, but some garbage incineration stations are built near residential areas, which is a more serious problem. At present, the technology of garbage incineration is not yet mature, and some harmful gases will be discharged into the atmosphere, causing irreversible damage to the atmospheric environment. In case of improper operation and unexpected situation, the consequences are unbearable.

3.2.2. Problems of ecological environment. Air pollution is a serious environmental problem facing Zhengzhou. Air pollution refers to various exhaust gases discharged into the atmosphere without treatment in daily life and production processes, resulting in deterioration of air quality, which not only damages human health but also destroys the stability of the ecosystem and hinders urban development. As a new first-tier city in development in Zhengzhou, subway and other public transportation facilities are under construction. Due to the large population, exhaust emissions from private cars is an important cause of air quality decline. Some harmful substances in air pollution have carcinogenic properties, which is a serious obstacle to the improvement of people's quality of life. The decline in air quality is not only harmful to human health, but also affects the survival of plants: Zhengzhou has always been known as Green City. If green plants cannot survive and grow in this city, then the name of Green City will no longer exist. Air pollution will form acid rain, which will result in acidification and depletion of the soil, resulting in a reduction in crop yields, which cannot meet the "green food" standard.

Water pollution is currently an important environmental issue facing China, and Zhengzhou is no exception. Water pollution refers to the entry of toxic and harmful substances into the urban surface and groundwater, which deteriorates the natural water body. As we all know, freshwater resources are a resource that is in short supply on the earth. China is also a water-scarce country, so it has the South-to-North Water Diversion Project. Zhengzhou is located in the Central Plains region, where water resources are not abundant. As a city with a large population, water pollution is very harmful to radiation. Once there is a problem with water resources, a large area of the population will be affected. Since 2006, the discharge of urban domestic sewage in Zhengzhou has surpassed that of industrial sewage and has become the main source of pollution in the urban water environment. At present, there is still an unreasonable project in the urban planning of Zhengzhou: the government approved the construction of a garbage incineration station near the Jialu River and Donglin Lake. China's waste incineration technology is not yet mature, not only will cause harm to air quality, improper treatment will also cause secondary pollution of water resources. What's more worth mentioning is that there are not only three large residential areas but also several small villages with about 300,000 urban residents near Donglin Lake. The construction of garbage incineration stations near residential areas is no longer in compliance with laws and regulations, and it is also likely to cause serious health hazards to residents. This is a major environmental problem in the urban planning of Zhengzhou [12].

4. Chapter 4 Solutions to Zhengzhou City Planning Problems

Green water and green mountains are Jinshan and Yinshan. Green water and green mountains are better than Jinshan and Yinshan. It can be seen that people's requirements for the ecological environment are increasing day by day. Ecological balance is an important factor to be considered in contemporary urban planning. As a large populated city, Zhengzhou's housing is particularly important. To ensure that residents have a house to live is a necessary guarantee to improve their happiness. This chapter proposes some solutions to the development direction of residential buildings. Many residential buildings in old urban areas have problems with unreasonable planning, poor safety facilities, and aging community construction management. From these aspects, we can seize key points to solve problems.

4.1. Solutions to the problems in the West District of Zhengzhou City

4.1.1. Solutions for old house renovation. As the most populous province in China, the housing problem of residents has always been the primary issue. The promotion of compact housing models should be strengthened. Compact housing can also be called affordable housing. In this type of housing, the ho
use construction interview is relatively small, and the housing price is low, which can solve the living problems of some people to a certain extent. However, due to the meager profit of these types of housing, most real estate companies are reluctant to invest in construction, resulting in a single source of such housing construction funds and a small number. The government should take certain measures to encourage more real estate companies to participate in the construction of compact real estate, so as to solve the housing problem of some people.

Strengthen the modernization of rural areas. Aiming at the shortcomings of traditional farm house construction and the goal of new rural housing construction, this paper proposes a purpose-oriented rural house self-construction model, establishes a rural house self-construction guide frame, and discusses the rural house self-construction guide strategy and application mode. The guidance of self-built farm houses must be based on the modernization of rural areas and complement the defects of traditional self-built models, adhere to the principles of adaptability, intensiveness, ecological sustainability and regional construction, and grasp the transformation of production and lifestyles, green sustainability and folk customs. The cultural heritage requires the development direction of farmhouses, comprehensively utilizes various means, and takes necessary measures and strategies from the three levels of policy, planning and architecture. Facing the peak period of rural housing construction, construct a guiding mechanism for self-construction of rural housing, and form a set of implementable strategies for rural modernization transformation and solving the current problems of rural housing construction [14].

This article investigates and finds that there is still a deep space for residential housing expansion in the old city in the west of the city. The reconstruction and construction of the old city is an important part of the implementation of urban planning: it must not only coordinate the relationship between reconstruction and protection to protect cultural heritage and maintain folk customs, but also determine a reasonable scale of demolition and construction to meet the housing needs of residents. Most of the western districts are old residential districts built in the last century, and the layout of new high-rise residential districts is unreasonable. The height of the old campus is mostly no more than 7 floors, and the underground construction area is not effectively used. These cannot maximize the income of urban land. Moreover, there are relatively large hidden dangers in the security facilities and firefighting facilities of these communities. Once a security accident occurs, it will pose a great threat to the lives and property safety of residents [18]. As the management of these communities is relatively lax, there is also a certain phenomenon of private construction, and the design and decoration style of the houses are too backward. To some extent, it may really "influence the city appearance". The most important point is that in terms of prices and housing prices, the Western District has an advantage over the Eastern District, so I think the Western District is a better development direction for residential housing in the future. Introducing housing investment here can not only ease the demand for housing for the population and alleviate the sharp contradiction of rising housing prices; it can also promote economic growth and boost the vitality of capital in the Western District, so that the east and west of Zhengzhou can balance and coordinate development.

4.1.2. Solutions to urban traffic. Measures for improving traffic in Zhengzhou: implement the "small block, dense road network" urban road planning strategy. Break through tradition, redefine road functions, reduce road spacing, increase road network density, increase the design of branch road systems, share the traffic pressure of main roads, improve the connectivity between roads of all levels, and form a convenient, healthy, and smooth transportation system [15].

Increase the cost of parking spaces in the city center, and use the price mechanism to guide traffic demand. At present, Zhengzhou has implemented the policy of restricting single and double numbers, which can reduce residents' desire to buy cars and ease traffic congestion; for vehicles that are parked on the roadside, fines are increased, and those who are serious can take measures to detain vehicles. Heavy punishment is required to stop parking at will, remove road obstacles, and promote smooth roads.

Improve the bus system: increase the number and route of buses, shorten the waiting time, and increase the coverage of buses; optimize the design of bus stops and improve the waiting environment: such as adding seats and providing electronic screens to facilitate people to understand the number of trains
and arrivals Time; establish a dedicated bus lane to improve the traffic of the bus; improve the connection of various bus routes to facilitate the transfer of citizens; improve the riding environment and improve the comfort of riding. Nowadays, the bus system in Zhengzhou is relatively convenient, but it is necessary to point out that many sections of the bus must pass through the subway or road maintenance, which makes the road narrow and congested.

Vigorously develop rail transit. Metro transportation should be vigorously developed. The speed of the subway is high, the number of passengers is high, the efficiency of operation is high, and it has great attraction to the public. For the subway fare, the price should be reduced as much as possible while ensuring the interests of the subway company. The opened subway lines 1, 2, and 5 are still relatively expensive for some ordinary citizens. Reducing the fare can attract more citizens to take the subway, reduce the travel method of cars, and ease traffic pressure.

Encourage bicycle travel. Establish special bicycle lanes to run through the city, provide convenient, fast and safe special lanes for bicycle travel, encourage citizens to choose bicycle travel, and vigorously develop the "green travel" policy; Stations, subway stations, commercial centers, public places, etc. are equipped with shared bicycles to facilitate citizens to transfer and travel [16]. However, the city government should reasonably regulate some bike-sharing companies, do not invest a lot or neglect management, otherwise it will cause the phenomenon of "cycling the city" but not conducive to transportation convenience.

4.2. Solutions to the problems in the eastern district of Zhengzhou City

4.2.1. Solutions to public infrastructure. At present, Zhengzhou's infrastructure construction is constantly improving, such as the construction of public transportation such as subways and airports, and the construction of bridges and asphalt roads to improve the convenience of citizens' living standards. These public infrastructure constructions have corresponding positive externalities. Due to the advanced nature of the airport and high-speed rail, Zhengzhou City has become a transportation hub in the Central Plains region, playing a role in inheriting the past and inspiring the future, so as to promote the development of the urban economy. The construction of postal and telecommunications facilities in Zhengzhou not only allows citizens to have convenient mobile payments but also accelerates the speed of obtaining the information everyone needs.

As a pure public product, basic public facilities are generally invested and constructed by the Zhengzhou government or authorized by the government department, and have a certain monopoly. The infrastructure is usually some projects with large investment, large capital accumulation, and long cost recovery period such as Neima Road and Flyover in Zhengzhou City, so it is usually funded by the government. This has caused problems such as a single channel for infrastructure investment, opaque use of funds, and unsustainable operation of facilities. It is precisely because of these characteristics of public facilities that the private sector is reluctant to invest in infrastructure, resulting in a single source of funding for infrastructure and a single investment entity. These are not conducive to the improvement of infrastructure construction level and the popularity of supply [17]. In response to this, the municipal government can adopt construction-operation-transfer or company cooperation models to attract private sector investment and introduce competition mechanisms to stimulate the activity of private capital, which can promote the coordinated development of infrastructure. And because of the participation of private capital, it can better collect the needs of the citizens, which is more in line with local production and living habits.

Urban public infrastructure construction is an important public decision-making field, so scientific and reasonable decision-making is a very important issue. The decision-making process and results of the Zhengzhou municipal government are not yet transparent, which will create opportunities for some interest groups. Interest groups will lobby and bribe government officials for rent-seeking behaviors, resulting in the decision-making of some facilities not satisfying the interests of most social residents. This not only led to a decline in the overall welfare level of the city, but also put a lot of pressure on clean government officials. Zhengzhou City should establish a supervisory agency, and make a fair, just, an
open notice system for public infrastructure decisions, so that citizens can more clearly and accurately understand the infrastructure establishment process.

4.2.2. Solutions to the ecological environment. A city's ecosystem consists of three parts: ecosystem engineering, ecosystem construction, and ecosystem planning. Ecological planning is the core and foundation of urban green space system ecological construction and the key to the sustainable development of urban green space. Urban green space ecological engineering is the deepening and specific implementation of ecological planning. Ecological management runs through ecological planning, green land ecological engineering and urban green space system maintenance management. The entire process is an important guarantee and measure for the healthy and sustainable development of the urban green space system.

Speaking of Zhengzhou, people first thought of "Green City". The reason why it is called Green City is because in the 1980s, Zhengzhou began to prosper greening, and the name of Green City became famous throughout the next few years. The current forest coverage rate in Zhengzhou has reached 33.36%, and the green area has reached 300 million square meters. An urban greening network covering the entire city has basically been formed. As Zhengzhou is a developing city, it is constantly expanding its territory and improving roads, which has caused a series of ecological problems. In order to strengthen the continuous construction of new sprinkler vehicles and road cleaning vehicles, the government reduces the formation of dust and smog in a timely manner, and provides a guarantee for the lives and travel of citizens [18].

Water pollution in cities is usually caused by wastewater residues discharged by some polluting enterprises. Strengthen the environmental protection audit of enterprises, levy corresponding environmental protection taxes on some projects with serious pollution or damage, or take certain punishment measures for enterprises with great harm, so as to restrict some enterprises from Environmental hazards. Implement a monitoring mechanism to ensure that the discharged waste water is treated with minimal harm, and to achieve emission reduction and volume discharge, water pollution can be improved. With the development of the city, polluting enterprises must slowly move out of the urban areas and residents' living areas. This measure can not only ease the environmental protection pressure of the urban area, but also benefit the overall planning and layout of the city.

5. In conclusion
This article takes Zhengzhou's planning status as the research object, through a large number of literature analysis and logical analysis methods, summarizes some problems in Zhengzhou's current planning and proposes some solutions, and finally predicts the future development direction. The main conclusions are:

(1) Residential housing and environmental protection are among the more important. Zhengzhou has a large population, so it should be the first to ease the contradiction between population and housing. In the past three years of urban environmental quality assessment, Zhengzhou City has been selected as one of the top ten with the most serious air pollution every time. Therefore, controlling environmental pollution and protecting the environment are not only what the city government should do, but also the responsibility and obligation of each of our urban residents.

(2) Good supervision of the city appearance is inseparable from the effective implementation of the law enforcement departments. It is necessary to improve the resource approval of all levels of departments and strengthen the construction of laws and regulations and law enforcement. Civilized law enforcement is an indispensable part of city management. It affects the relationship between the government and the masses.

(3) For these problems, the paper proposes some solutions. Neither the long-term strategy of city planning nor the short-term plan can be predicted and answered by personal power. The city government should open up channels for residents to participate and absorb the opinions of the people, so as to make a satisfactory urban planning plan more realistic.
(4) Urban planning is not once and for all, it has certain limitations, because the government's decision-makers are ordinary people rather than prophets, so the construction and reform of urban planning must always maintain fresh vitality and continuous progress. With the progress of the times, the pace of social life is accelerating, which also prompts the government to become younger and younger so that the decision-making has a better perspective. Through the implementation of urban planning to strengthen people and people's relationship.

This article gives some opinions on the planning of Zhengzhou City, but there are still many problems in actual life that need to be discussed in depth.

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