Retraction

Retracted: Construction of Risk Control Decision-Making Model Platform for Transportation Hub Projects under the Background of Message Technique

Mobile Information Systems

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope

(2) Discrepancies in the description of the research reported

(3) Discrepancies between the availability of data and the research described

(4) Inappropriate citations

(5) Incoherent, meaningless and/or irrelevant content included in the article

(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] P. Zhong, H. Yin, and Y. Li, "Construction of Risk Control Decision-Making Model Platform for Transportation Hub Projects under the Background of Message Technique," *Mobile Information Systems*, vol. 2022, Article ID 1199289, 11 pages, 2022.

Research Article

Construction of Risk Control Decision-Making Model Platform for Transportation Hub Projects under the Background of Message Technique

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With the acceleration of urbanization, the construction and operation of comprehensive transportation hub have promoted the development of regional economy. However, due to its huge scale, high building density, and crowded public space, the safety status of the comprehensive transportation hub is worrying. As the node of various transportation modes, the efficient operation of the transportation system is closely related to it, but many potential risks threaten the operation safety of integrated transportation hub all the time. Therefore, risk management is an important work to ensure the safe operation of integrated transportation hub. With the deepening of technology application, the application scope of information technology has also been expanded to complete the analysis and simulation of technical scheme and construction organization process, find problems in time, and take preventive measures, so as to optimize the design scheme, reduce unnecessary losses, and speed up the construction progress. In this study, information technology is used to construct the risk control decision model of transportation hub project. According to the research, the change of the target value of the algorithm in this study is 29% better than that of the traditional algorithm, and it can get better results and get the optimal solution quickly when applied to the intelligent traffic dispatching management system.

1. Introduction

In recent years, the completion and operation of comprehensive transportation hubs in major cities have added new impetus to China's economic arteries and promoted regional economic improvement. As an important node of the transportation network, the comprehensive transportation hub not only undertakes the transportation function but also undertakes the corresponding urban service function. Comprehensive transportation hub is not only a connecting node of urban and intercity transportation modes but also a collection of transportation, leisure, sightseeing, and other functions. The integrated advantages of comprehensive transportation hub are increasingly significant [1]. The radiation function and capacity of the core city have been greatly improved, and the connection and coupling between

metropolitan areas have been continuously enhanced. At the same time, the integrated transportation hub bears the increasing pressure of collecting and distributing passengers and faces increasing security risks. Comprehensive transportation hub is an important infrastructure to maintain urban improvement and one of the main contents of urban planning and construction administration [2]. With the rapid improvement of China's railway industry, especially the high-speed railway and intercity rail transit lines, railway passenger stations have rapidly developed into the current urban comprehensive transportation hub with their own characteristics, which is highly valued by urban planners [3]. Comprehensive transportation infrastructure has huge investment and long service life. In high-intensity areas, as the lifeline project of earthquake relief, the importance of transportation infrastructure can be imagined. If the

infrastructure suffering from severe earthquake disaster cannot be dredged in time, it will affect the efficiency of rescue and relief and even lead to secondary disasters. Comprehensive transportation hub is an important infrastructure of urban improvement and the main content of urban improvement planning and construction administration [4]. The construction and improvement of comprehensive transportation hub in megacities have gradually become a new growth pole related to urban construction and social and economic improvement. The construction, transportation, and improvement of urban comprehensive transportation hub have gradually become a new growth pole related to urban construction and social and economic improvement. With the rapid improvement of the transportation industry, the state has intensified the construction of comprehensive transportation hubs and local governments hope to rely on hub advantages to develop regional economy and actively promote the construction process of comprehensive transportation hubs [5]. When people pay too much attention to the economic benefits brought by comprehensive transportation hubs, there are also growing security risks. As a "soft target" in the domain of public security, comprehensive transportation hub security is an important part of national security and a short board that needs to be filled urgently in China's public security system [6]. On the one hand, the improvement orientation of urban comprehensive transportation hub and the requirement of sustainable improvement of comprehensive transportation hub directly determine the changes of modern hub characteristics. On the other hand, the characteristics of the integrated transportation hub formed under the new situation also urge us to break through the original institutional constraints and reexamine the construction, transportation, and improvement mode of the integrated transportation hub from the perspective of public safety priority improvement strategy. The strategic improvement status of comprehensive transportation hub in China's megacities has been gradually improved [7]. As an important node of traffic network construction, megacity comprehensive transportation hub plays a vital role in ensuring the strategic improvement of the urban transportation system, coordinating the smooth connection and utilization of aviation, railway, highway, and high-speed rail and subway, and ensuring the safe operation of hub. Compared with the single-function transportation hub, the multifunction comprehensive transportation hub system is more complex, and there are more transmission paths for risks. Risk changes bring greater losses to the system, and even new risks emerge due to the complex system characteristics [8]. Although there are related foundations for the research of safety risks, it is necessary to go deeper and introduce more research methods in the research and control of safety risk transmission paths combined with comprehensive transportation hubs. Comprehensive transportation hub facilities are huge in scale, high in building density, large and concentrated in passenger flow, and crowded in public space of hub, so the daily operation faces great security risks. With the further acceleration of urbanization in China, the comprehensive transportation hub, as an important node of transportation

network construction, plays a vital role in ensuring the strategic improvement of the urban transportation system, coordinating the smooth connection and utilization of railways, highways, high-speed trains, and subways, and ensuring the safe operation of hubs [9]. In areas with frequent mountain disasters, all kinds of mountain disasters will cause damage to mountain traffic, restrict road capacity, and affect operational safety. In coastal typhoon and inland strong wind areas, wind disasters have a significant impact on the structural safety of transportation infrastructure and driving safety. In our country, for a long time, we have not paid enough attention to the urban comprehensive transportation hub, and, in practice, there is a tendency of "emphasizing the line construction and neglecting the hub planning," which makes the comprehensive transportation hub construction lag behind the diversified demand of transportation improvement for hub functions under the new situation. As an important improvement domain of urban municipal infrastructure, the rapid improvement of urban comprehensive transportation hub has brought more safety questions. In a sense, the safe improvement of hub construction and transportation is related to the success or failure of urban public safety system construction. Therefore, the construction, operation, and administration of the comprehensive transportation hub should meet the requirements of multiple functions, economy, and key engineering technologies, break through the original split administration mode, and make it gain sustainable improvement advantages under the framework of "great safety concept."

The innovations of this study are as follows:

(1) This study introduces the use of the message technique in the construction industry, so that readers can have a basic understanding of the research methods we want to carry out. Information society is a society in which the message industry is highly developed and occupies an advantage in the industrial structure. Informatization is a dynamic improvement process from an industrial society to a message society. It is necessary to set up a whole platform of the message technique administration system in enterprises, so that enterprises will not have questions in the future competition when software such as the administration system is biased towards hardware.

(2) This study introduces the current situation of message administration in construction enterprises, so that we can combine the research methods with the practice. In practice, most enterprises have their own informatization improvement plans, which are well understood, valued by leaders, willing to invest resources, dare to change the traditional mode, and have strong execution. They have achieved positive results from practice or tasted the sweetness of informatization. At present, they are stepping up the implementation of enterprise collaborative administration or administration message system integration or the improvement of enterprise resource planning system.

(3) In this study, a model is established to minimize the delay of traffic flow at the intersection, so that it can pass through the intersection smoothly. We must ensure that the signal control decision at the intersection is in realtime and accurate. The research of this model is very important, because it is the premise of establishing a scientific intelligent traffic control system to ensure that the data used for signal control decisions are forward-looking.

This article is divided into five parts.

The first part is a general introduction of this study. The second part is related academic progress and summarizes the research of this study. The third part introduces the related domains involved in this study. The fourth part is the main body of this study, which is the application of the message technique in the domain of transportation and the proposed model for testing. The fifth part is the conclusion.

2. Related Work

Karballaeezadeh et al. suggested that the formation process of the transportation hub planning scheme should be taken as the logic, and the construction opportunities, strategies, and functional positioning of the hub should be systematically analyzed [10]. Lenz and Heinrichs suggested studying the emergency strategy of megacity comprehensive transportation hub, emphasizing that comprehensive transportation hub should strengthen risk prevention and emergency response in three stages, planning and design, construction, and administration and operation, and discuss from three levels: horizontal coordination, vertical logic, and emergency command [11]. Xu and Thakur suggested that the impact of large-scale hub construction on regional spatial structure should be taken as the starting point, and, considering the differences of spatial effects produced by different types of traffic facilities, the impact of their spatial structure should be discussed from four aspects: airport system, railway hub, expressway network, and inland shipping ports [12]. Zhu et al. suggested considering the whole life cycle of megacity comprehensive transportation hub, and, by comparing and analyzing the emergency administration systems at home and abroad, they proposed building a full-stage emergency administration system from planning and design to construction to operation and administration and took Hongqiao comprehensive transportation hub as an example to illustrate [13]. Lin et al. suggested expounding the motivation and research basis of emergency administration of megacity comprehensive transportation hub and analyzing its emergency administration system from the perspectives of subject, object, and environmental factors [14]. Sun suggested that the pedestrian traffic characteristics of the transfer hub should be studied, and an automatic identification congestion and emergency evacuation model should be established. Taking Xi'an North Street Station as an example, Sun et al. suggested that the service level of North Street Station should be improved, and the congestion was high. Based on brittleness theory, the best route for emergency evacuation was selected

[15]. Hung et al. suggested using the system engineering theory of "man-machine-environment-administration" to analyze various factors affecting airport flight safety, establish an analytic hierarchy process (AHP) structure model, determine the subordinate relationship between the upper and lower factors, use triangular fuzzy number complementary judgment matrix to sort, get the weight relationship between related elements, and use their different importance to sort the risk administration objects [16]. Jan et al. suggested that the mechanism of operational safety accidents and the characteristics of operational safety administration of integrated transportation hub should be studied based on vulnerability, and the integrated administration mechanism of operational safety of integrated transportation hub was constructed [17]. Xu et al. suggested that the operation and administration of integrated transportation hub can be divided into four levels: normal administration, interference administration, crisis administration, and emergency administration and systematically analyzed the administration characteristics of each level and designed the function of intelligent operation and administration system by taking the event of large passenger flow as an example, which provided a reference for later theoretical research and design and improvement of the intensive and efficient administration intelligent system [18]. Aujla et al. suggested that, in the research of trust mechanism among members of network organization, four types of factors should be extracted: organizational background of individual and node enterprises, network strategic guarantee, and trust among members. Structural equation model was used to demonstrate the direct and indirect effects of each factor, and the corresponding influence paths among the factors were obtained [19]. Slamet et al. suggested that, through the research and analysis of classic integrated transportation hub cases at home and abroad, combined with relevant theories, the proposed operation and administration mode of integrated transportation hub was studied from three aspects: operation mode, administration interface division, and operation company formation [20]. Lin et al. suggested using correlation analysis to study the correlation among four factors: carbon emission intensity, energy consumption structure, energy-capital ratio, and capital input intensity, and build a path analysis model to get the influence coefficient among all factors [21]. Jafari et al. suggested that, in the research of influencing factors and path of flight delay service recovery efficiency, four kinds of indicators, namely, responsiveness, tangibility, empathy, and reliability, should be analyzed, and the factors affecting recovery efficiency should be screened out by variance analysis, and these factors should be divided into two categories, customer quality factors and delay characteristic factors, and the six categories of indicators should be modeled by structural equation, and the path influence coefficient should be analyzed [22].

Intelligent transportation is the only way to improve the modern transportation system, and it is one of the research hotspots in the field of transportation at home and abroad. The unique mixed traffic flows in China's urban traffic interact at intersections, resulting in chaotic traffic order, increased delays, reduced traffic speed, and frequent traffic

accidents. The best way to solve traffic problems is to use intelligent traffic scientifically and reasonably. This work studies how to solve this problem and has achieved remarkable results.

3. Related Overview

3.1. Application of the Message Technique in Construction Industry. With the continuous improvement of construction enterprises, it is urgent to update the administration system. In the era of message technique explosion, it is an urgent matter for enterprises to actively integrate administration systems with emerging technologies in the face of future competition. The concept of enterprise information originated from Japan, which was put forward by Japanese scholars in 1967 with reference to industrialization. It is believed that information society is a society in which the information industry is highly developed and occupies an advantage in the industrial structure. Informatization is a dynamic development process from industrial society to information society. Since "Smart City" was put forward in 2010, China has quickly joined in the construction of "Smart City," and the concept of "Smart Site" has been derived from it in the domain of architecture. Academics and related organizations have also defined "smart worksite" one after another, but they have not yet formed a unified definition. In 1993, China's National Informatization Promotion Office first put forward the concept of informatization. However, western scholars have not put forward the idea of enterprise informatization. Their research on informatization is carried out according to specific domains such as the types of the message technique and the influence of a certain message technique or message system on organizational administration. It is necessary to set up a whole platform of the message technique administration system in enterprises, so that enterprises will not have questions in the future competition when software such as the administration system is biased towards hardware. "Smart construction site" is a concept derived from the smart city in the construction industry. It focuses on the construction site, integrates and applies advanced technologies such as Internet of Things, BIM, big data, VR, and mobile intelligent devices around production factors such as people, materials, machines, methods, and environment in the whole construction process, establishes a highly informative application system and intelligent management system, and closely integrates information technology with the construction production process to realize digitalization, information, and intelligence of the construction site. Scholars in China have also generally mentioned the concept of message enterprise; that is, message enterprise refers to an enterprise that uses the message technique in every link of production and administration, fully develops internal and external message resources and human resources, effectively improves work efficiency, administration, and decision-making level, and has core competitiveness. The hub message system is shown in Figure 1.

With the popularity of computers, more and more construction units began to hand over the original manual work to computers. The message technique of intelligent construction site is applied to the whole process administration of construction site, which can be divided into three stages: prior planning, construction control, and later decision-making, and each stage has its core technique. The construction of the enterprise message technique platform has the most basic hardware foundation; enterprises also have certain requirements for message administration software for enterprise personnel, which make enterprises have the basic software requirements for professionals. All the software and hardware questions in the basic requirements of the message technique platform design of construction enterprises have been met. In the process of construction planning, the BIM technique has actually been involved for a long time. With the deepening of technique application, its application scope has also been expanded to complete the analysis and simulation of technical scheme and construction organization process, find questions in time, and take preventive measures, so as to optimize the design scheme, reduce unnecessary losses, and speed up the construction progress. The construction of the message technique administration platform must be refined.

As we all know, the life of a construction enterprise is the engineering quality. This makes the characteristic of delicacy necessary in enterprise administration. With the help of the message technique administration platform, enterprises must make strict requirements on the timeliness and accuracy of the platform. In fact, the process of enterprise informatization is a process in which enterprises turn from industrialization to informatization: this process includes the embodiment of productivity, which is reflected in the gradual transfer of the message technique from its application in secondary business to its application in major business. After the informatization of the enterprise, the extensive administration system in the original construction enterprise must be changed, and the business must be handled accurately and timely. The administration process must be strictly implemented and gradually developed into a precise administration system.

3.2. Present Situation of Enterprise Message Administration. To discuss the present situation of improvement and application of the message technique in construction enterprises, we must first understand the category and improvement trend of the message technique in construction enterprises. Taking the enterprise improvement strategy as the goal, taking the international advanced intensive administration as the improvement mode of enterprise administration, and taking the message technique as an important and indispensable technical means to change the traditional administration mode, improve the decision-making level of enterprise administration and enhance the improvement strength of enterprises. Among them, operator administration is to restrict and supervise the daily activities of operators and managers on the construction site. The improvement and application of the message technique in construction enterprises have developed from the initial scientific calculation (mainly structural calculation) to data
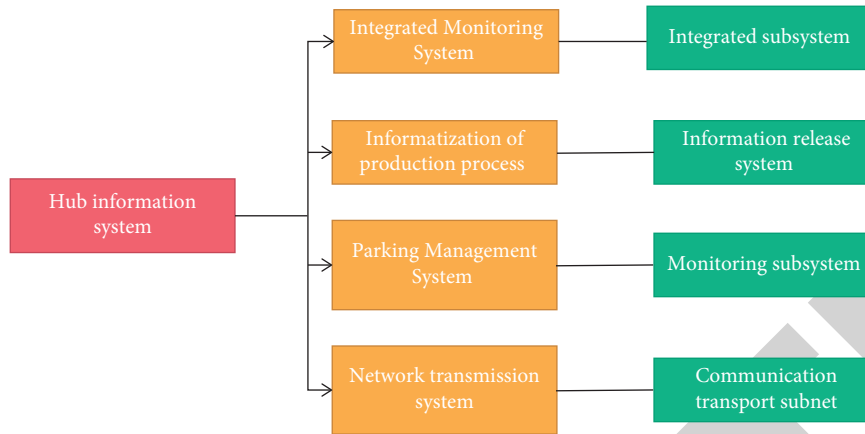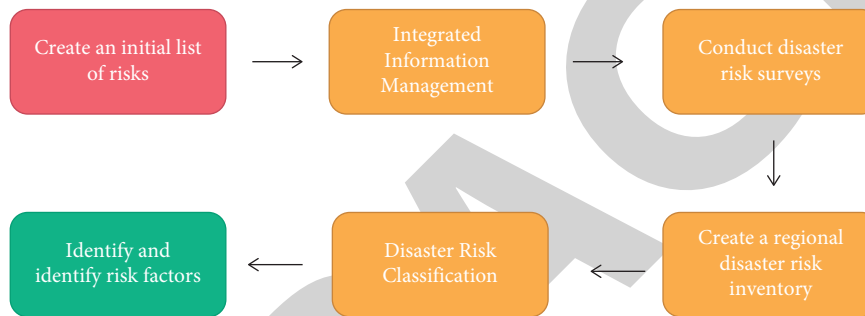
Figure 1: Hub message system.

Figure 2: Risk analysis process.

processing (mainly financial accounting and engineering budget calculation) to the integration of the administration message system and enterprise resource planning and gradually formed two kinds of technologies: administration message technique of construction enterprises and production process message technique.

Most enterprises have their own informatization improvement plans, which are well understood, valued by leaders, are willing to invest in resources, dare to change the traditional mode, and have strong execution. They have achieved positive results from practice or tasted the sweetness of informatization. At present, they are stepping up the implementation of enterprise collaborative administration or administration message system integration or the improvement of the enterprise resource planning system. According to 4M theory, human factor is a major factor causing safety accidents. In addition, the mobility of workers in the construction area and the disorder of working paths lead to some workers operating mechanical equipment without permission or entering the operation area without permission. The traditional personnel management method makes it difficult to supervise every worker in real time, which easily leads to safety accidents. The risk analysis process is shown in Figure 2.

There are still some enterprises that do not realize the importance of the combination of informatization and enterprise improvement strategy, but they hope to keep pace with advanced science and technique and take informatization technique as a means to solve the modernization of main business or core business in enterprises, with special emphasis on visible effects and benefits. They are not determined to change the existing administration methods of enterprises but only hope to realize their own administration methods with informatization. In order to avoid safety accidents caused by factors such as misoperation, mistaken entry, and inadequate safety awareness in such enterprises, the uniqueness of fingerprint/face recognition and the accuracy of positioning function are applied to barrier measures such as entrance guard, combined with safety education and training of VR and other advanced technologies, to reduce the number of people in the construction area and standardize the administration procedures of construction operations, so as to strengthen the standardized administration of personnel in the construction area.

Some enterprises generally have informatization plans, and their understanding and attention stay in theory, acknowledging the role and importance of informatization. However, they are very cautious in investing in informatization resources. Enterprises have basically realized the computer application of their main business and are now developing towards the integration of management information systems. The classification of the message technique in construction enterprises has not been very clear. In recent years, the research and application of the message technique in construction enterprises have been focused on

administration application. With the increasing difficulty of modern engineering design and construction, it is urgent to extend the message technique from the original scientific calculation and message administration to the design and construction process. While carrying out enterprise administration message construction, some large construction enterprises have also made active and effective explorations in applying the message technique to the construction process. There are still enterprises that only use computers as tools for enterprise staff, emphasizing the characteristics and changes of their own enterprise and project administration. They think that informatization is difficult to replace traditional administration, and there is no plan for lack of informatization plan. Apart from the indispensable budget or bidding software and financial accounting processing software, there is basically no effort in other administration message systems, especially in project administration informatization. The information technology of enterprise management in construction industry is a technology that can change the traditional business processing and management mode of construction enterprises and improve work efficiency and management level. Through the combination of information technology and management technology, the informatization technology of enterprise management can standardize and optimize the business processing and management process until the process reengineering and achieve the goal of replacing manual work with computers, quickly, preparing and orderly processing the processing and management process of construction enterprises and engineering businesses by means of information technology, assisting and supporting enterprise decision-making, pushing forward the process of business processing automation and management modernization of enterprises, and making continuous improvement. Such enterprises should adopt the message technique to keep pace with the times. Monitoring and early warning mainly refer to safety accidents caused by the factors of controlled objects. By installing wireless sensors at key positions of equipment and structures, the safety indicators of equipment and structures can be monitored all the time, thus realizing remote monitoring of safety indicators.

4. Decision-Making Model Platform for Risk Control of Transportation Hub Project under the Background of the Message Technique

4.1. Informatization of Message Traffic. With the continuous planning and construction of integrated transportation hub in China, more and more experts and scholars pay attention to the research of intelligent or message administration system of integrated transportation hub. A transportation hub is a place where passenger flow is distributed and transferred by urban external transportation modes or more than two public transportation modes or one public transportation mode with multiple lines, and it has the basic functions of transfer and multimodal transport services (the transportation hub mentioned in this article mainly refers to the passenger transportation hub). Definition of comprehensive urban transportation hub is as follows: ① In a narrow sense, it refers to a large-scale transportation hub with both external and internal transportation functions, including a variety of transportation modes, as well as a gathering and dispersing center of people and vehicles. ② Broadly speaking, it refers to the peripheral space range centered on ① and including extension, such as peripheral roads.

Intelligent transportation message administration mode of urban comprehensive transportation hub is the specific application of administration mode in the domain of intelligent transportation message administration of urban comprehensive transportation hub. It is a set of framework systems designed according to the requirements of intelligent transportation message administration of hub, covering administration concept, administration authority, administration structure, administration content, administration tools, and so forth, and can be repeatedly applied to the intelligent transportation message administration system of comprehensive transportation hub, so as to realize efficient and safe operation and administration of hub during operation. With the rapid and sustained development of economy and the acceleration of urbanization, the single traffic mode and simple traffic function gradually change to intensive and comprehensive, forming a large or superlarge urban comprehensive traffic hub. The intelligent transportation hub system is a comprehensive information management and the control system that integrates the functions of operation management, comprehensive monitoring, disaster prevention command, traffic relief, and public security management. Combined with the administration system, administration structure, investment, and financing mode, the administration authority of urban comprehensive transportation hub includes traffic mode administration area, hub administration area other than traffic mode, and road administration area around hub.

Evaluation factor set is a comprehensive collection and summary of evaluation indicators, which can usually be divided into multiple levels:

$$
\begin{aligned}
F &= (F_1, F_2, L, F_n) \\
F_1 &= (F_{1j}, F_{12}, L, F_{lm}).
\end{aligned}
\tag{1}
$$

In the above formula, F is the evaluation factor set, F_1 is the evaluation factor, F_{1j} is the lower level subdivision evaluation factor, and so on.

A variety of possible evaluation results will be formed into a comment set, namely,

$$
E = (E_1, E_2, L, E_k).
\tag{2}
$$

For the convenience of follow-up research, the $[0, 1]$ interval is equally divided into $(k - 1)$ sections, and each section corresponds to a comment value, namely,

$$
E = (0, \Delta, L, 1), \Delta = \frac{1}{(k - 1)}.
\tag{3}
$$

To construct the intelligent information management system of comprehensive transportation hub, we should first

analyze its information needs. The demand comes from the service objects of the system, and the service objects of the hub intelligent information management system can be divided into government industry supervision departments, managers, travelers, vehicles, and their transportation enterprises. The intelligent transportation message administration mode of urban transportation hub is objective, comprehensive, systematic, and open. The cognition degree of hub message administration mode reflects the analysis and summary of hub operation administration rules. As a high spatial convergence of various transportation modes, integrated transportation hub needs to build many specialized message administration systems to realize comprehensive message collection, transmission, storage, and processing and provide comprehensive and efficient message services for industry administration departments, transportation enterprises, public travelers, and other users. Traffic administration areas, including terminal building, railway station building, and track station, are specially designed by professional design institutes. Hub administration areas other than traffic modes include main buildings other than traffic modes, station square, social vehicle parking lot, taxi parking lot, office buildings, municipal supporting service facilities, and shops and office buildings, which are the message design scope of urban comprehensive transportation hubs. The traffic administration department needs to fully grasp the operation status and passenger transport improvement status of the hub and analyze the rules of travel in time, space, and personnel composition according to the analysis of daily and important holiday passenger flow, traffic volume, and major emergencies, so as to provide decision support for coordinated emergency response, planning, design, and policy formulation. If the development track of cognition is correct, that is, "practice-cognition-re-practice-re-cognition," the information management mode of hub intelligent transportation constructed in this way will have vitality and can be continuously evolved and improved. In order to effectively evaluate the operation efficiency of information management of integrated transportation hub, it is necessary to refine the evaluation indexes from macro, meso, and microperspectives.

4.2. Model Construction.

4.2. Model Construction. Comprehensive transportation hub is a complex system, so it is necessary to analyze its risk factors in order to study its internal security risks. The improvement trend of integrated transportation hub at home and abroad shows that integrated improvement is gradually becoming the mainstream form of hub improvement in the future. Through the improvement of integrated construction, the integrity, functionality, and security of integrated transportation hub organization will be brought into full play. The historical data are tested, and the answers are shown in Figures 3–5.

Taking picture observation as the input variable of the system, the traffic flow of the intersection studied in this study is better than the traditional method. The emergence of government failure and market failure has caused people to reflect on traditional public administration, and the
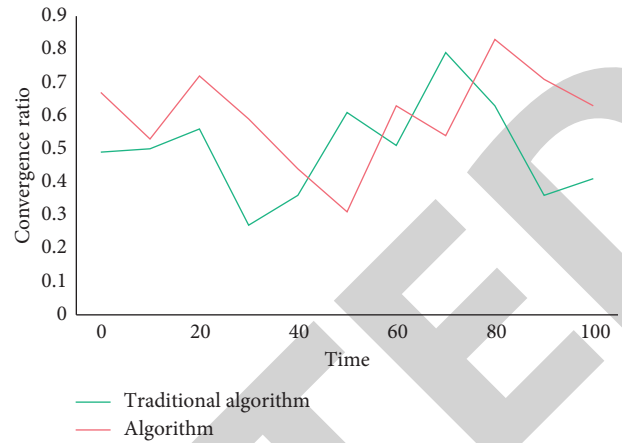
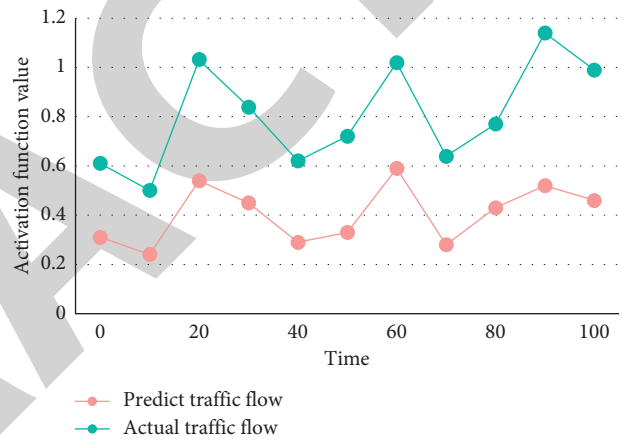

FIGURE 3: Convergence comparison diagram.

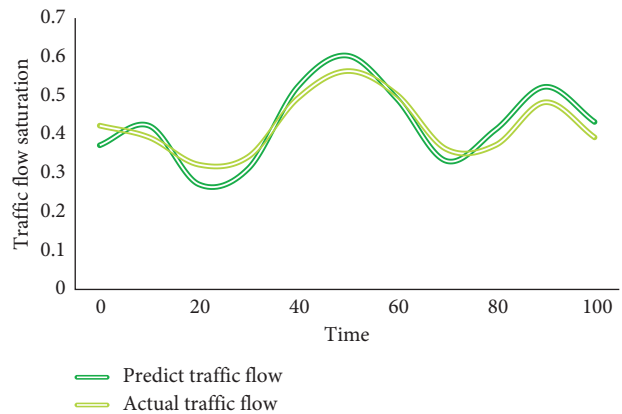FIGURE 4: Activation function diagram of this study.

FIGURE 5: Saturation of traffic flow.

emergence of public choice theory and the practice of new public administration have laid a theoretical foundation for multisubject participation in public administration. At the same time, the improvement of civil society, scientific and technological progress, and other factors have provided necessary conditions for the implementation of governance. As a result, we began to identify risks. Risk identification is a

TABLE 1: Comparison of target average.

	0	10	20	30	40	50	60	70	80	90	100
Traditional algorithm	6734	7031	6799	6354	7091	6466	5614	5876	6397	6506	6348
Our algorithm	7368	7164	6940	6671	6945	6833	7136	7294	7058	6732	7255

TABLE 2: Comparison of optimal individual target values.

	0	10	20	30	40	50	60	70	80	90	100
Traditional algorithm	3791	3984	3288	3395	3549	3861	4081	3955	3764	3641	3887
Our algorithm	4049	4185	4397	5034	4899	4561	4294	4618	4167	4689	4824

very important work in the process of risk management. It is a process of detecting, judging, classifying, and analyzing potential risks. This process includes judging the disaster area, identifying the types of disasters, analyzing the disaster-causing factors, and predicting the possibility of disasters and the degree of losses caused. Comprehensive transportation hubs are generally large in scale and complex in organizational structure. The word "integration" comes from the Latin word "integratio," which originally means "update" and "repair," and later refers to the integration of different parts into a whole. "Integration" contains not only the concept of system integration but also the connotation of system optimization. "Integration" means that there are two or more elements or systems that can be distinguished from each other, related to each other, and interact with each other. They are distributed in a certain hierarchical structure, and, under the given environmental constraints, they form an organic aggregate to achieve the overall purpose. Next, we compare the simulation results of the target plant, as given in Tables 1 and 2 and Figures 6 and 7.

As can be seen from the figure, the change of the target value of this algorithm with the evolution algebra is 29% better than that of the traditional algorithm, and it can get better results and get the optimal solution quickly when applied to the intelligent traffic dispatching administration system. The administration and organization coordination are relatively difficult, and the uncertainty of the environment also has a great influence on it. Its operational safety also presents the characteristics of multiple disasters, and the disaster-causing factors of each disaster are different. Therefore, if we want to comprehensively, systematically, deeply, and accurately identify the risks of the comprehensive transportation hub, we must choose an appropriate risk identification method.

Here, the neural network is used to predict the short-term traffic flow. The classic neural network model is shown in Figure 8.

Let the first layer be the input layer and the second layer be the recording function layer, and both adopt Gaussian functions:

$$\mu_{ij}(x_i) = \exp\left[-\frac{(x_i - c_{ij})^2}{\sigma_{ij}^2}\right], \tag{4}$$

where μ_{ij} is the jth generic function of x_i and c_{ij} and σ_{ij} are the center and width of the jth Gaussian function of x_i,
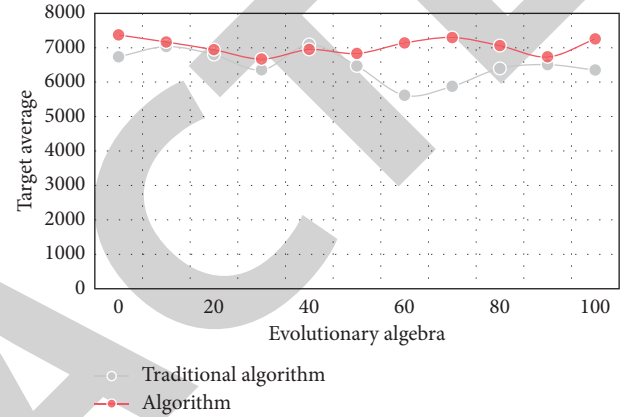

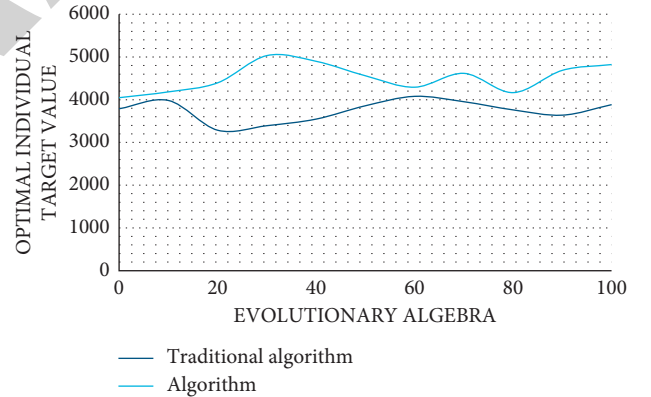FIGURE 6: Comparison of target averages.

FIGURE 7: Comparison of optimal individual target values.

respectively. If the norm operator for calculating each trigger weight is multiplication, then the output of the jth rule $R_j (j = 1, 2, \ldots, u)$ of the third layer is

$$\varphi_j(x_1, x_2, \ldots, x_r) = \exp\left[-\sum_{i=1}^{r}\frac{(x_i - c_{ij})^2}{\sigma_{ij}^2}\right]. \tag{5}$$

Each node of the fourth layer has input signal weights and output variables:

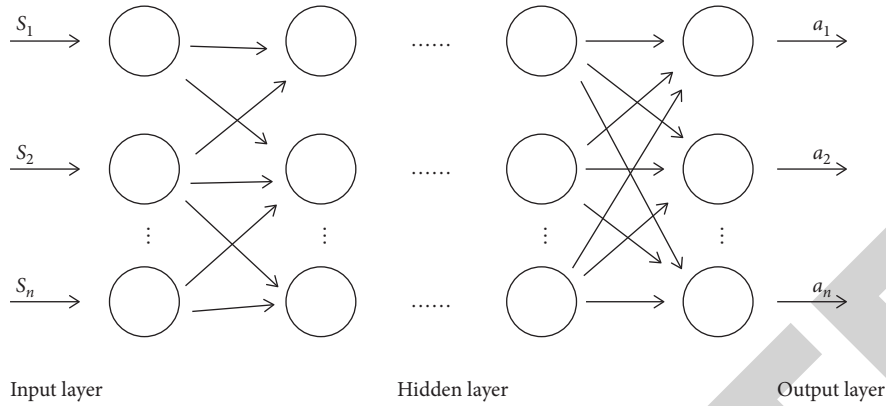$$y(x_1, x_2, \ldots, x_r) = -\sum_{j=1}^{u} \omega_j \cdot \varphi_j, \tag{6}$$

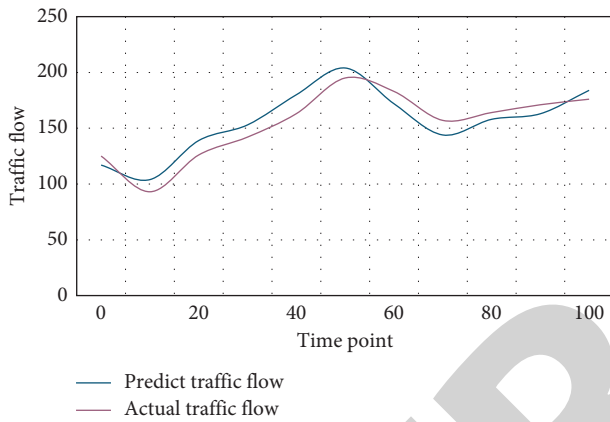Figure 8: Classical neural network model.

Figure 9: Prediction results of this algorithm.

where y is the value of an output variable and ω_j is the connection weight of the THEN part (result parameter) or the jth rule.

For the TSK model,

$$\omega_j = \alpha_{0j} + a_{1j}x_1 + \cdots + \alpha_{rj}x_r. \tag{7}$$

This neural network theory introduces the activation function, also known as the excitation function, which is denoted by f:

$$o = f(\text{net}), \tag{8}$$

where o is the output of the neuron. Commonly used activation functions include linear function, nonlinear function, and step function.

The general form of a linear function is

$$f(\text{net}) = k \times \text{net} + c. \tag{9}$$

In the above formula, k is the magnification factor and c is the displacement factor.

The nonlinear function is expressed as follows:

$$f(x) = \begin{cases} \gamma & \text{if net} \geq \theta, \\ k \times \text{net} & \text{if } |\text{net}| < \theta, \\ -\gamma & \text{if net} \leq -\theta. \end{cases} \tag{10}$$

The step function is as follows:

$$f(x) = \begin{cases} \beta & \text{if net} > \theta, \\ -\gamma & \text{if net} \leq \theta. \end{cases} \tag{11}$$

θ, γ, θ are all nonnegative.

The mode of "integration of construction and transportation" means that the whole process of providing products and services of urban integrated transportation hub is dominated by a main body, which, as the agent of the government, is responsible for the whole process from planning, design, and construction to operation of integrated transportation hub. Therefore, the integration mode is reflected in the integration of various functions in the form of traffic organization, and the integration research of the organization mode on the basis of function realization is more meaningful. The prediction results of this algorithm are shown in Figure 9.

It can be seen from the figure that the prediction effect of this algorithm is good, and the predicted traffic flow is consistent with the actual traffic flow trend. The composition of the integrated transportation hub itself is complex. On the one hand, because of the different functions of each system, it will bring severe challenges to the integrated operation and administration. The scale of different transportation modes is different, and the cooperation mode and efficiency among different systems are more complicated. The construction and operation of comprehensive transportation hub have changed the urban spatial structure, guided the core industrial structure, influenced the urban form and layout, and improved the regional economic competitiveness. With the rapid improvement of China's economy, comprehensive transportation has become the mainstream of transportation improvement. As the node of various transportation modes, comprehensive transportation hub plays an irreplaceable role, and the efficient operation of the transportation system is closely related to it. Therefore, it is of great significance to promote the development of comprehensive transportation hub, and the guarantee of operational safety is the most basic and important index in transportation hub. Ensuring the public safety of megacity comprehensive transportation

hub is a major challenge faced by public administration. Whether it is the response to complex social environment, the need of government function transformation, or the high responsibility for public safety, in the construction of emergency strategy of megacity comprehensive transportation hub, the participants should not be limited to the government but should be a network of benign interaction among government, market, and society.

As the gathering point of various transportation modes, the comprehensive transportation hub has the characteristics of the complex structure system, relatively closed environment, and dense crowds, which directly affects the safe operation of the whole transportation network and the construction of the urban public safety system. At present, China's comprehensive transportation hub has certain security risks. When connecting, it is necessary to consider the different risk administration methods, so that when dealing with emergencies, all systems can cooperate. On the other hand, the combination of various subsystems makes the integrated hub a more complex system, which is not only influenced by the outside world but also influenced by each other.

5. Conclusions

With the rapid improvement of China's economy, comprehensive transportation has become the mainstream of transportation improvement, and the upsurge of comprehensive transportation hub construction arises at the historic moment. As the gathering point of various transportation modes, the comprehensive transportation hub has the characteristics of the complex structure system, relatively closed environment, dense crowds, and fragile system security. Compared with a single hub, it is more vulnerable to the threat of unsafe factors. Once an accident happens, it will cause heavy casualties and huge property losses and may even lead to traffic paralysis and even affect social stability. In this study, this question is studied. After testing, the target value of this algorithm is 29% better than that of the traditional algorithm, and it can get better results and get the optimal solution quickly when applied to the intelligent traffic dispatching administration system. Comprehensive transportation hub is a complex social system, which includes people, equipment, organizations, and other participants. As a traffic node, it involves a wide range and many objects. If there is a security question, the loss will be huge, so the administration of its security risk is very important, and the means of risk administration also need innovation.

Data Availability

The data used to support this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

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