

# Characteristics of Industrial Land Use Transition in Development Zone in China: A Case Study of Tuanfeng County

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**Key words:** Land use transition; Transition characteristic; Transition modes; Industrial land of Development zone

## SUMMARY

The main purpose of this work is to summarize the characteristics and modes of industrial land use transition in “Tuanfeng economic development zone”, thus clarifying social-economic development process of the sample region, estimating pros and cons of the industrial land use transition in different period, promoting useful and meaningful regional developing thoughts and strategies for the present stage. Based on the GIS, dynamic and spatial statistical analysis application, this paper discusses the space-time characteristics of overall structure and spatial structure of the sample region, divides the industrial land use transition modes for the further. Under the demand of industrial restructuring and the idea of sustainable development, the sample industrial land’s overall structure characteristics lays in the following two parts: For the 14 industrial sector, ferrous metal smelting and rolling processing industry’s original scale is significantly larger and shows increased trend, textile and clothing industry, agriculture product and food handling industry have obvious smaller original scale and shows decreasing trend. Such industrial sector structure shows that steel structure industry advantage development trend has been formed and is expected to be built as China's largest steel structure industry base. For the 4 kinds of land which transformed into industrial land of the sample region, much more farmland has been occupied while the transfer-rate has been significantly reduced which indicates that the existed food and ecological risk has been noticed and fall dangerously low. With the aspiration for the profit of agglomeration and transformation, the spatial structure characteristics lays in the following two parts: For the one part, the sample area shows an obviously trend of spatial clustering, the main gathering areas and gathering industry sectors show a trend of increasing ,as of 2013, forming 7 main gathering areas and 3 kinds of main industrial clusters. For the other part, the sample region main has increasingly closer relationship with the traffic, as of 2013, gathered in the 200 meters from the main road, the 2000 meters from the main lack, but the contact with the transportation still need to be strengthened. Overall structure characteristics presents that the transition modes of the overall

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structure of the sample industrial land can be divided into 4 kinds – Severe Change, Secular Change, Slowly Change, Stabilization. Spatial structure characteristics demonstrates that the transition modes of the spatial structure of the sample industrial land also can be divided into 4 kinds – Basic Agglomeration, Developing Agglomeration, Potential Agglomeration, Isolation. These Various kinds of transition modes have distinctive transition scale and degree in different time and space