Exploring Informality in Chinese Urbanization: A Case Study of Tiantongyuan

Department of Planning, Policy, and Design
University of California, Irvine
Lauren Grabowski
Client: Renmin University • Advisor: Dr. Kenneth Chew
# Table of Contents

## TABLE OF FIGURES

| TABLE OF FIGURES | 3 |

## ACKNOWLEDGEMENTS

| ACKNOWLEDGEMENTS | 4 |

## EXECUTIVE SUMMARY

| EXECUTIVE SUMMARY | 5 |

## CHAPTER I

| Problem Statement | 6 |
| Objectives | 7 |
| Significance | 8 |

## CHAPTER II BACKGROUND

| Terminology | 10 |
| Theoretical Framework | 12 |
| Informality and Informal Elements in China | 12 |
| Informality and Urbanization in China | 13 |
| Background | 14 |
| Tiantongyuan | 14 |
| Peri-urban area | 16 |
| Urban Design of Tiantongyuan | 17 |
| Urban Villages | 17 |
| Transportation | 19 |
| Floating Population | 21 |

## CHAPTER III METHODOLOGY

| Procedures | 22 |
| Qualitative Interviews | 22 |
| Direct Observation | 23 |
| Limitations | 23 |

## CHAPTER IV FINDINGS

| Author’s Note | 24 |
| Informal Elements | 25 |
| Informality in Housing | 31 |
| Informal Land Use and the Informal Economy | 34 |
| Informality in Land Use management | 39 |
| Informality in Transportation | 47 |

## CHAPTER V ANALYSIS

| 52 |

## CHAPTER VI LOOKING AHEAD

| 58 |

| 58 |
Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Urban Villages in Tiantongyuan</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Streets of Dagong Village</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>Pre and post-reform era buildings in Dagong Village</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Trash accumulated in Yandan Village</td>
<td>28</td>
</tr>
<tr>
<td>5</td>
<td>Pre-reform era housing in Yandan Village</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>Interior of newly constructed apartment in Dagong Village</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td>Clean water pump in Dagong Village</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>Location of illegal subdivisions in Tiantongyuan</td>
<td>32</td>
</tr>
<tr>
<td>9</td>
<td>Informal kitchen in Dagong Village</td>
<td>35</td>
</tr>
<tr>
<td>10</td>
<td>Informal street vendor in private space</td>
<td>38</td>
</tr>
<tr>
<td>11</td>
<td>Unregulated change in land use designation</td>
<td>38</td>
</tr>
<tr>
<td>12</td>
<td>Tian Tong Wei Hu</td>
<td>40</td>
</tr>
<tr>
<td>13</td>
<td>Inside Tian Tong Wei Hu</td>
<td>41</td>
</tr>
<tr>
<td>14</td>
<td>Taiping Village</td>
<td>43</td>
</tr>
<tr>
<td>15</td>
<td>Stores in Taiping Village</td>
<td>45</td>
</tr>
<tr>
<td>16</td>
<td>Street vendor in Taiping Village</td>
<td>45</td>
</tr>
<tr>
<td>17</td>
<td>Taiping Village and Tiantongyuan</td>
<td>46</td>
</tr>
<tr>
<td>18</td>
<td>More stores in Taiping Village</td>
<td>46</td>
</tr>
<tr>
<td>19</td>
<td>Black cabs lined up outside Tiantongyuan station</td>
<td>51</td>
</tr>
<tr>
<td>20</td>
<td>Illegal pedicabs lined up outside Tiantongyuan station</td>
<td>51</td>
</tr>
<tr>
<td>21</td>
<td>Informal Elements</td>
<td>54</td>
</tr>
</tbody>
</table>
Acknowledgements

I would like to offer my sincere thanks to the following people. First, I wish to thank Dr. Ken Chew. After serendipitously learning of my passion for Chinese planning, Dr. Chew took action to help me turn my dream into a life-changing experience. I would also like to extend my heartfelt gratitude to Katherine Liang and Frank Chew. Their generosity and commitment to improving the lives of the Chinese rural poor made this research possible.

I would also like to thank the many faculty members at the University of California, Irvine. Many made time in their busy schedules to provide guidance for this report. Also, in the course of obtaining my degree, many professors kindly permitted me to use class assignments as opportunities to learn more about Chinese planning. Creating a Taiwanese transit map, comparing the City Beautiful to the Beijing Olympics, analyzing the dingzi hu, and researching the hukou policy provided me with a strong foundation in Chinese urban planning before I arrived in Beijing.

I’m also greatly indebted to the faculty at Renmin University, especially Dr. Qinbo and Dr. Liya Yang, who provided me with guidance and guanxi. Also, it was a privilege to have the opportunity to work with my three wonderful assistants: Lihui, Nannan, and Biao. Their tireless effort, insight, and observations not only greatly contributed to this research but also made it even more enjoyable. They are truly my 黃金搭檔!

Finally, I would like to offer a humble thank you to Tiantongyuan’s migrant workers who kindly allowed me into their lives and homes. Their existence may be encompassed by informality, but their courage and hard work are forever changing China and the world.
Executive Summary

China’s rapid, large-scale urbanization is accompanied by informality, particularly in the peri-urban region. This project aims to explore informality’s role in urbanization by using the case study of Tiantongyuan, Beijing. Relying on maps, observations, and qualitative interviews with local residents and migrant workers, informality in Tiantongyuan’s was identified, and informality’s role in housing, land use and transportation was documented and analyzed. It was found that some informal elements resulted from policies from China’s pre-reform period of the planned economy. Under China’s new economy, informal elements in Tiantongyuan interact with market forces.

This paper also identifies and explores changes in policy that address informality as well as changes in market forces that interact with informality. These changes are explored with reference to implications for economic opportunities for migrant workers.
Chapter I

Problem Statement

Due to spatial economic inequalities and a relaxation of migration restrictions, China is currently undergoing the largest peacetime migration in human history. An estimated 300 million Chinese will either temporarily or permanently migrate from rural areas to cities. The result of this massive rural-urban migration is urbanization that is rapid and large-scale. The annual rate of urbanization in China has increased from 19% in 1980 to 44% in 2006 (National Bureau of Statistics). By 2025, of the estimated 350 million people that will be added to China's cities, 240 million, nearly 70% will be migrant workers (Ibid).

History indicates that urbanization, characterized by industrialization and migration, creates a high demand for new industrial space and for an expanded labor force that requires housing and services. Governments may be unable to allocate land and public services to meet these demands quickly. Consequently, informality accompanies urbanization as these demands are met outside formal government regulations. China’s exceptionally high and historically unprecedented rate of migration and economic growth suggests that informality’s role in urbanization is particularly significant.

Current research and understanding of informality’s role in the urbanization process is limited. While there has been extensive literature on the informal labor pool (floating population) and informal housing (urban villages,) this project aims to identify and explore additional elements of informality in the urbanization process, and in particular those that affect the livelihoods of migrant workers.
Objectives

Using the case study of Tiantongyuan, this project has the following objectives:

- Identify and describe informality in Tiantongyuan.
- Analyze the factors that historically and currently shape informality’s role in Tiantongyuan.
- Explore informality’s role in Tiantongyuan’s housing, land use and transportation.
- Identify areas for future research that affect immigrants’ economic opportunities.
Significance

Research on informality in China has focused on informal labor (floating population) and informal housing (urban villages). This will expand upon the academic literature by analyzing the role of informality in urbanization. This research also holds significance for its potential to increase understanding of migrant workers since informality characterizes nearly all aspects of their in cities including employment, housing, healthcare, and education (Gransow, 2010).

Furthermore, expanding current understanding of informality in migrants’ lives has implications for addressing one of China’s most significant problems- the rural-urban divide. The stark rural-urban divide is rooted in the socialist era policy of focusing development in cities and restricting migration. In the past 30 years, China has lifted an estimated 150 million of its people out of poverty due to its economic reforms, a remarkable and unprecedented achievement. However, the economic reforms have actually caused the rural-urban gap to widen. China's double digit GDP growth has generated wealth that is primarily concentrated in its cities and coastal areas with per capita rural income at only 39% of per capita urban income as of 2005 (Yusuf, 2008).

The rural problem has been addressed through government policies aimed at the village level. However, there has been a recent shift in focus to urban areas. Although it might seem counterintuitive to focus on cities to address the issue of rural poverty, China's high rates of rural-urban migration have led the researchers of the 2009 World Bank report to recommend that poverty alleviation efforts should be shifted from poor areas to poor people. This report further identifies evidence supporting migration as an effective tool for alleviating rural poverty for more migrant workers. For instance, according to the National Bureau of Statistics Rural Household Surveys, rural households with at least one migrant worker are 30% less likely to be poor than households without migrant workers. Furthermore, China’s 11th Five Year Plan suggests the government’s awareness that labor mobility will be a key component to any policy addressing the rural-urban divide (Yusuf, 2008).
Although migration has emerged as a valuable poverty-alleviation tool, its full potential for addressing the rural poverty and the rural-urban divide has not yet been realized. An exploration of informality and urbanization will contribute to a greater understanding of migrant workers' lives in Tiantongyuan. Improved knowledge can ultimately lead to improved policy to help maximize their economic opportunities in cities.

Finally, as waves of migrant workers continue to pour into China's cities, a failure to understand the issues could result not only in a missed opportunity to alleviate rural poverty, but the creation of new problems such as a new class of urban poor.
Chapter II Background

Terminology

Urban Village (城中村; chengzhongcun, “village in city,” also “village among city”): term used to describe a formerly rural village that has been encroached upon by a city and encompassed by urbanized land, yet is still governed by a Village Council with property rights. Urban villages often occur in the urban periphery and often serve as work and living areas for migrant workers.

Hukou: (户口; hukou, “household registration”): China's system of population registration. Under the hukou system, every Chinese citizen is registered with the government with 1) either agricultural or non-agricultural, and 2) birth location. These designations are associated with various state-subsidized benefits, so hukou can dramatically impact health, employment, and education. The rules for switching hukou vary by location. Beijing's rules are considered to be the strictest requiring a high-level management job or PhD for urban Beijing hukou.

Migrant worker/ floating population: (流動人口; liudongrenkou, “floating population”): term for domestic Chinese migrant workers that move outside their hukou registration from rural to urban areas or between provinces.

Informal Elements: Economic activities, both legal and illegal, which operate outside of government regulation.

Ring road: Therefore, Beijing was built with a system of ring roads emanating from the central government's power at Tiananmen. There are currently five ring roads in Beijing with additional ones added as the city expands from urbanization.

Tiantongyuan: residential neighborhood of approximately 400,000 residents (excluding migrant workers.) It is located in the Changping District in northeast Beijing. It is considered to be the largest subdivision in Asia.
**Tiantongyuan resident**: in this paper, this term will refer to non-migrant workers living in the formal housing of Tiantongyuan

**Changping District**: One of Beijing’s five suburban districts. Beijing’s urban fringe is in the southern part of Changping. Changping is home to two of the largest residential communities in Beijing, Huilonguan and Tiantongyuan. It is surrounded by protected farmland.

**Guanxi**: (关系 guanxi; relation): an important Chinese concept that emphasizes the value of having a relationship where both parties use their own status and power to help each other.
Theoretical Framework

Informality and Informal Elements in China

Until 1973, the informal economy was unrecognized in academic literature. In his research on informal labor in Ghana, Keith Hart first used the term informal sector to describe to income-generating work that existed outside formal government regulation. Since then, research has revealed that informality can comprise a significant portion of a developing country’s economy and labor market. For China, an estimated 60% of the urban labor force works in the informal economy, and a majority of the informal economy workers are migrants (Huang, 2009).

Unfortunately informality has been plagued with “minimal conceptual clarity and coherence in the analytical literature” (Kanbur, 2, 2009). In order to avoid this conceptual pitfall, this project’s definition of informality will be explicitly delineated and explained. Informality can be broadly defined as the realm of economic activities, both legal and illegal, existing outside government regulation. Although there has been some debate pertaining to whether or not illegal/black market economic activities should be included, this paper will include black market activities in its definition of informality in an effort to be inclusive in the exploratory process. Additional research has argued that the definition should include not only informal sector work but also informal sector workers (Kanbur, 2009). This definition is appropriate for China since the majority of the urban informal economy consists of migrant workers. These migrant workers face government-imposed restrictions on their access to employment, housing, education, and healthcare which means that in informality pervades nearly all aspects of their lives. As a result, this paper will include migrant workers in the definition of informality.

Finally, in defining informality, this paper will rely on research that focuses specifically on informality in urbanization in China. In the article, “Informal Elements in Urban Growth Regulation,” Qi et al. notes that the management of rural lands and urban villages “introduced strong elements of informality into urban land management and planning” (Qi, 25, 2007). Like the floating population, rural land (also known as urban villages and discussed in greater detail later) plays an integral in informal
work and workers. Therefore, informality in land management and planning will also be included in this paper’s definition of informality. Defining informality in broader terms is suitable for this project since it is general in scope and exploratory in nature.

**Informality and Urbanization in China**

History indicates that when cities undergo rapid industrialization and economic growth, the process of urbanization is accompanied by informality (Qi, 2007). Urban economic development can create a demand for new industrial space and for an expanded labor force that requires housing and services from other industrializing cities. Government may be unable to allocate land and public services to meet these demands quickly; consequently, informality ensues. While informality exists in urbanizing areas throughout history, according to Qi et al, several characteristics may uniquely define the urbanization process in China. First, the economic reforms have ushered in an era of double digit economic growth primarily concentrated in China’s cities. Coinciding with this growth has been a relaxation of hukou restriction on migration which has triggered massive migration. This rapid and large-scale growth and migration distinguishes Chinese urbanization. An additional feature unique to China is the abrupt elimination of government social welfare housing in 1998 which exacerbated the demand for housing that was already strong due to increased migration. Finally, Chinese urbanization is distinguished by the alteration in the government tax system in 1994 which reallocated a larger portion of tax revenue to the central government. This new system created incentives for local governments to increase development of land in order to generate local tax revenue. It has resulted in the rapid development of peri-urban areas and increased urbanization. Not every urbanizing area in China is accompanied by all of these characteristics. For Tiantongyuan, the first and second reasons are very important factors, while the last one does not apply.
Tiantongyuan is a residential neighborhood located in Beijing's Changping District in the urban fringe, 13km north of the city center. It is divided in Tiantongyuan North, Tiantongyuan Central, Tiantongyuan East, and Tiantongyuan West. With a population of approximately 350,000 residents, some regard it as the largest residential community in all of Asia. This number, however, is only an estimate, and it does not include the sizeable number of migrant workers living in Tiantongyuan's urban villages. The exact number of these migrant workers is unknown, but estimates vary from 50,000 to 80,000.

The Beijing government planned and developed the residential community of Tiantongyuan due to a strong need to provide housing for tens of thousands of residents. This housing need emerged for two reasons. First, as Beijing redeveloped its urban core, thousands of residents were displaced from their homes and needed a new place to live. Second, in the 1990s, danwei, the Communist cradle-to-grave system of providing education, employment and housing, was phased out under China's economic reforms. In 1998, the provision of welfare housing for state workers was officially terminated. Without government-provided housing, thousands of Beijingers could not afford a home, and a high demand for affordable housing resulted.

To meet this demand, the government offered rules for developers to create affordable housing like reducing taxes while capping developer profits at 3%. In 1998, Tiantongyuan was one of several affordable housing developments to emerge on the outskirts of Beijing as a solution to this high demand for housing. Beijing residents whose homes were slated for demolition were given the opportunity to purchase “jing ji shi yong fang (economic and
practical housing). In 1998, no regulations existed regarding who could purchase low income housing and many wealthy individuals purchased these apartments for weekend residents and for financial investment. Low income housing rules were eventually tightened so that only families with annual incomes of 60,000 yuan ($7,000) qualified, although well-connected individuals continue to find loopholes and are able to purchase newly constructed apartments in Tiantongyuan.

In addition to relocated Beijing residents and low income residents, a third group was given the opportunity to buy apartments in Tiantongyuan. Many of the original residents of Tiantongyuan, mostly rural farmers with rural Beijing hukou, lost their homes when their villages were demolished to build high rises. Part of their compensation package typically consists of a newly constructed apartment in Tiantongyuan as well as financial compensation.

Formal housing in Tiantongyuan serves approximately 400,000 residents. It consists of government “economically affordable housing” *jing ji shi yongfang* 经济适用房 and market rate housing. The majority of *jing ji shi yongfang* is occupied by Beijingers (those in possession of urban Beijing *hukou*) that were relocated due to urban redevelopment and infrastructure projects in the urban core and from development in Chaoyang for the 2008 Olympics. This group was offered the opportunity to purchase economically affordable housing by the government since their homes were slated for demolition. (It should be noted that not all apartments slated for demolition were actually demolished, and so some Tiantongyuan residents have multiple apartments.) Another significant group of people occupying formal housing in Tiantongyuan is displaced villagers (those in possession of rural Beijing *hukou*) who lost their farmland and village land when Tiantongyuan was constructed in its place. These people were
also offered the opportunity to purchase economically affordable housing by the government. In many cases, they were given the apartment as part of an agreement that allowed a developer to take over and develop their formerly rural land.

Before the rules of *jing ji shi yong fang* were formalized - a process which took several years after the program began in 1998 - there were not firm income limits or *hukou* rules. Some people purchased the property without meeting low income requirements. Furthermore, a Dongbei developer constructed the apartments. As a result, many people from Dongbei province who had *guanxi* with the developer were able to purchase formal housing, and today there is a significant population of Dongbei people living in the earliest-constructed apartments in Tiantongyuan.

*Jing ji shi yong fang* is still being built and sold in Tiantongyuan, but currently the more stringent rules apply. These rules include restriction to buyers in possession of Beijing *hukou* with a low income. There is also residential property being developed and sold at market rate anyone regardless of *hukou*.

Peri-urban area

There are four major types of urban neighborhoods in China 1) traditional pre-Communist old city 2) work-unit compounds from industrialization period 1949-1978 3) mixed-use suburbs or satellite towns from late 1970s 4) rural-urban for peri-urban villages formed after the late 1970s (Wu, 2002). Tiantongyuan falls into the fourth category. The peri-urban areas of Chinese cities, also known as the urban fringe, are where migrant workers typically live and work. Rapid urbanization results in accelerated growth in this region as migrants move in and the central city pushes outward. Despite rapid growth, peri-urban neighborhoods typically lack
the level of services that exist in the urban core, a characteristic that may act as a draw for migrants looking for economic opportunities (Ibid).

Urban Design of Tiantongyuan

Tiantongyuan is a high density, mostly residential community. Many of the earliest constructed apartment complexes are only a few floors high, while many of the newer high-rises are over 30 stories. Residences are gated and guarded by private security. Commercial areas are clustered in only a few areas, mostly in central Tiantongyuan.

Chinese cities are notorious for its superblocks, an artifact of the danwei system when large building masses were necessary to provide education, housing and employment in one location. Despite danwei's demise, the superblock persists in Chinese planning and is evident in Tiantongyuan. Residential areas are inscribed in 800 meter (2000 feet) blocks with very few intermediate streets.

Another characteristic of Chinese urban planning is very wide roads and other rights of way at the district level, with few intermediate streets within residential developments. This street layout is evident throughout Tiantongyuan with a few exceptions. Most of the intermediate streets and driveways within Tiantongyuan's residential areas are owned by the developers and blocked off to nonresidents by guarded gates.

Urban Villages

In China, the term urban village applies to officially rural land occupied by villages that have been encompassed by urban expansion or by the urban fringe. Despite the fact that these villages are urbanized, the original villagers maintain collective ownership of the land. Urban villages are an artifact of the dual land system that existed from the pre-reform socialist era.
This system set up urban and rural lands with those in possession of rural *hukou* having ownership rights to their land through the village collective.

The phenomenon of urban villages occurs throughout China. In 2008, over 867 urban villages were located in the Beijing Metropolitan Area, mostly in the suburban districts. Within Beijing's urban fringe there are approximately 112 villages. These villages cover an area of 18,000 hectare with a building area of 72,210,000 square meters.

A significant consequence of the Village Councils' maintaining collective ownership of the land for urban planning is that the villages are not subject to the regulatory guidelines from the city government. As a result, urban villages have been transformed into residential, commercial, or industrial areas. Sometimes small-scale industrial workshops or manufacturing emerge, such as in Beijing's Haidian district. Most common in China and in Tiantongyuan, however, is that urban villages turn into densely populated residential areas for the floating population. The original village residents construct new, multi-story apartments on their property to make money. Although these buildings are illegal, city governments sometimes compensate villagers for the value of these buildings in the case of demolition. The potential of receiving compensation further encourages this type of development.

New urban village construction also generates rental money because they fulfill a strong need for affordable housing demanded by the massive influx of migrant workers. Both of these cases represent an economic boon for urban villagers. For instance, according to one villager in Zhongtan, the largest urban village in Tiantongyuan, the majority of income earned by the original villagers is rental income (China Digital Times.) According to this villager, inside Zhongtan on any space possible, a building has been built with rooms rented to tenants (Ibid). An unsurprising consequence to this situation is that population of villages are consists of a
majority migrant workers, and the original villagers are absentee landlords that live in the surrounding city. This situation is the case in Tiantongyuan. In Tiantongyuan's urban village of Zhongtan, the migrant worker population is 40 times greater than the population of original villagers. A survey of 15 villages in the Tiantongyuan and Huilongguan area revealed that migrant workers comprised 80% of total residents (Ibid).

Some have attributed this provision of affordable housing for migrant workers through urban villages as one explanation for minimal slum conditions in China. While some Chinese urban villages have certain slum-like conditions, the majority meet World Bank standards. In all of Tiantongyuan's urban villages, there is adequate sanitation, access to clean water, and permanent housing structures. A 2008 survey of Beijing's urban villages showed that 86% lacked heating, 90% lacked kitchens and bathrooms, and 99.1% have electricity (Guo, 2006). Larger, residential urban villages in Tiantongyuan have amenities such as grocery stores or even karaoke lounges.

Transportation

Accompanying the large-scale urbanization in Beijing is the rapid expansion of the public transportation system including subway, light-rail, bus, and Bus Rapid Transit, which link Beijing's suburban communities to the urban core. Since 1990 the government has developed Beijing's public transportation system in order to cope with the massive traffic problems caused by the city's population growth, the accompanying air pollutions, and as part of preparation for the 2008 Beijing Olympics. Until 2000, Beijing operated only two subway lines. From 2000-2010, seven additional subway lines had been added, and there are plans for constructing ten more by 2015 which would make it the largest subway system in the world.
Subway Line 5

In 2000, Subway Line 5, Beijing's first north-south route was planned. It originally did not include the Tiantongyuan station, only the stations currently known as Tiantongyuan North and Tiantongyuan South. Local residents initiated a signature movement and obtained signatures of more than 10,000 residents. The government responded by opening an investigation and eventually decided to add the Tiantongyuan station. This station is now line 5's busiest. Ridership per station or line is unavailable, but the system as a whole provides over 6 million rides daily. It currently operates beyond capacity, and conductors still have to limit the number of passengers that board the train at peak hours.

Tiantongyuan station has a north and south entrance. It operates from 5:30 am to 11 pm. It has a paid bicycle parking lot. There is no automobile parking lot. Pedestrian overpasses connect each subway station to the opposite side of the street. Tiantongyuan station connects with approximately 20 bus lines within 10 minutes walking.

Buses

Since 1999, the number of bus routes in Beijing increased from 377 to over 620, while the number of buses has tripled. Since 2006, many more bus lines were added to Tiantongyuan. In 2007, bus fare was reduced to 40 fen per ride. Currently, all the urban villages in Tiantongyuan are within walking distance to a bus stop. Like the subway, the buses in Tiantongyuan are severely overcrowded. Often, passengers must wait for several buses to pass before they can board.

Bus Rapid Transit System

Tiantongyuan has four BRT lines connecting the community to Beijing's city center. The cost is 1 yuan per ride. There is a BRT station adjacent to the east side of Tiantongyuan station.
Bikes

Tiantongyuan has wide, dedicated bike lines. There is paid bike parking on the west side of Tiantongyuan station and informal, free bicycle parking across the street.

Taxis

Due to Tiantongyuan’s distant location beyond the fifth ring road, official taxis are rare outside of peak commute hours. Unlicensed taxis, known as black cabs, as well as motorized trishaws provide taxi service to residents of Tiantongyuan. This service is illegal. Black cabs are typically owned by the driver and are identified by a red light hung from the rearview mirror.

Black cabs and trishaws typically park across the street east of Tiantongyuan station in order to take passengers to the highly residential areas north and east of the station.

Floating Population

Every year, millions of Chinese migrate from their rural hometowns to China's cities. The term “floating population” applies to migrant workers because they lack *hukou* and are unattached and seemingly “floating” in China. Because many of these migrant workers do not register for temporary residence when they migrate, estimates of this floating population are uncertain. Recently, the Chinese government has begun relying on cell phone data to obtain population estimates. Approximately 200 million migrant workers are currently living in China's cities. Of these, approximately 8 million are currently living in Beijing which means that approximately one out of every three people living in Beijing is a migrant worker (China Daily, 2010). Furthermore, many of these migrants constitute a significant portion of China’s the estimated 120 million workers in the informal economy (Truang, 2009).

Reasons for migration vary, although rural poverty, urban employment opportunities, and education are primary reasons for immigration (Kitazume, 2007). It should be noted that not
all migrant workers are poor or from rural areas in other provinces. Many migrant workers living in Tiantongyuan work in white collar jobs in the urban center.

Chapter III Methodology

Procedures

The interview portion of this project was conducted over a period of two months: November and December 2010. Tiantongyuan was selected because of its location in the peri-urban area which is where most migrant workers reside. Qualitative interviews were employed due to the exploratory scope of this project. I also spent significant time walking around making observations.

Qualitative Interviews

This study relied upon snowball sampling and the direct recruitment of unknown participants in a public setting. Twenty formal qualitative interviews about participants’ daily lives and life history were conducted. The in-depth interviews required fluency in Mandarin as well as a high proficiency in English to translate the interview. Three students from Renmin University's Department of Public Administration, Li Hui, Xu Nan Nan, and Biao, assisted in interviewee recruitment, conducting interviews, translation, and transcription. Li Hui is a fifth year urban planning Masters student. Xu Nan Nan and Biao are undergraduate students majoring in urban planning. All are fluent in Mandarin, highly proficient in English and received trained in qualitative interview protocol. In addition to the formal interviews, data collection in the form of note-taking was also collected from seven informal discussions with individuals who provided valuable information. All required Renmin University protocol for conducting qualitative interviews was met. Interviews were conducted using an open-ended interview guide.
Direct Observation

Direct observation of Tiantongyuan and its urban villages was employed to examine how residents in Tiantongyuan lived, work, and traveled around. Also, some participants granted the researcher permission to shadow a typical daily commute between home and work, and to view their housing.

Limitations

Since interview participants were non-random and did not comprise a statistically significant sample, the results of these interviews cannot be generalized to the entire population.

This survey was conducted during winter months. This time of year in Beijing is characterized by cold temperatures (average 35 degrees Celsius) and an early sunset (approximately 5:00 pm or even earlier due to pollution.) Consequently, there may be differences in types of work and how people commute to work. For example, people may take the bus instead of biking to avoid the cold weather, or more street vendors sell seasonal products such as tanghulu (candied hawthorns). This issue was taken into account when conducting the survey and interviewees were probed about seasonal difference in their behavior when appropriate. However, it still presents a limitation to the data. Also, the freezing weather caused the tape recorder batteries to die prematurely during some interviews. In these cases, careful written notes were taken.
Chapter IV Findings

Author’s Note

When I first arrived in Tiantongyuan, it was my intention to collect interviews as individual case studies that highlighted current planning, housing and transportation issues in Tiantongyuan. During the interview process, my research assistant and I came across surprising anecdotes, fascinating information, and unexpected trends that defied our expectations of how people lived, worked and got around Tiantongyuan. We found ourselves asking follow-up questions to interviewees about all kinds of information about Tiantongyuan, its history, and its people. These conversations also led to some very interesting discussions among me and my assistants who, despite their own extensive knowledge of Chinese planning, were often just as surprised as I was by the interview responses.

After several weeks of collecting data followed by a holiday break, I was able to return to the research findings with a fresh perspective. Reading through the interview transcriptions and observation notes led to more questions and an additional review of the literature on informality, Chinese urbanization, and Chinese land use. Ultimately, I felt that while the individual case stories were valuable, the sum of these stories was even greater than the parts. By analyzing the data holistically, I was able to re-construct and portray a current account of informality in Tiantongyuan. Relating this story to the academic literature situated the story of Tiantongyuan within a larger historical context that continues to evolve today.
Informal Elements

The following elements of informality were identified in Tiantongyuan

- Five urban villages. (See Figure 1).
- Floating population estimated at 50,000
- Significant local informal economy consisting of informal private enterprises, self-employed and providing local services such as babysitting, etc.
- Informal housing for migrant workers
- Informal/ black market transfer of property rights resulting in change in land use from residential to commercial and purchase and rental of residential property

Figure 1: Urban Villages in Tiantongyuan
Urban Villages

Dagong

Dagong is an urban village of approximately 10,000 people, nearly all of whom are migrant workers. The original villagers now rent out their apartments to migrant workers and now live in formal housing on urban land. Dagong’s narrow streets are lined with street vendors, stores and supermarkets. Within the village is a large, privately-owned company that specializes in home furnishing. Trash is scattered throughout the street, but the Village Council hires migrant workers to sanitize the streets. There are no private bathrooms, but public toilets and clean water are accessible to residents. Housing consists of older, pre-reform era single-story brick homes and newly constructed multi-story buildings erected by the original villagers in order to rent to migrant workers for a profit. These newly-erected buildings also increase the amount of government compensation given to the original village owner in the event that the government takes over the property for development.
Figure 2: Streets of Dagong Village

Figure 3: Pre and post-reform era buildings in Dagong Village
Figure 4: Trash accumulated in Yandan Village

Figure 5: Pre-reform era housing in Yandan Village
Figure 6: Interior of newly constructed apartment in Dagong Village

Figure 7: Clean water pump in Dagong Village
Yandan

Like Dagong, Yandan consists of narrow streets, mixed-use construction, and new buildings for rent. It is populated almost entirely by migrant workers. Yandan has a significant portion of young college graduates with low-paying jobs. These students are sometimes referred to as “ant people,” 蚂蚁族. This term was first coined by Lian Si, a post-doctoral fellow in sociology at Peking University in his book, “Ant People”.

The primary industry in Yandan is automobile repair and services. This automobile repair industry was originally located in Chao Yang district, but was relocated due to 2008 Olympic construction. The sanitation in Yandan is visibly worse than Dagong. (See Figure 4). A recent migrant, an “ant,” stated that he initially refused to live there because of the undesirable conditions, but he was forced to stay because he couldn’t afford to live elsewhere. Another migrant stated that the conditions in Yandan were worse than in her hometown and that she was contemplating returning home.
Informality in Housing

Affordable housing in urban villages

Most migrant workers in Tiantongyuan rent informal housing in the urban villages. This rental of informal housing by migrant workers is extremely common in the peri-urban area of most Chinese cities and well-documented in the literature (Liu, 2010). There are five main urban villages in Tiantongyuan. Two were studied for this project: Yandan Village and Dagong Village. The conditions of these urban villages were similar to those described in the literature. Yandan and Dagong are lively, walkable, social spaces with densely constructed, affordable housing and stores. They are also crowded with marginally adequate sanitation and occasionally slum-like in some areas.

Observations and interviews confirmed that Yandan and Dagong serve as similar role in Tiantongyuan. Interviews with Tiantongyuan’s floating population revealed an additional benefit of unregulated space for migrant workers worth. Street vending is one of the most popular types of work for a migrant worker in Tiantongyuan, and a wheeled cart is a necessary tool for this job. A cart allows immigrants to transport their product from their homes in the urban village to the populated streets of Tiantongyuan. Furthermore, street vendors face harassment from street police (a topic that will be discussed further below). Consequently, some immigrants feel it is necessary to have a cart in order to escape the street police. Formal housing lacks storage space for cart, while urban villages do not regulate against them. The fact that urban villages have spaces that can be appropriated for cart storage is valuable for many migrants’ livelihoods.

Illegal/ black market rental of formal housing
While most of the literature on affordable housing for migrants focuses on the urban villages, there is an additional source of affordable housing for migrant workers in Tiantongyuan. Formal housing is being illegally subdivided and rented out individually to multiple migrant workers to a single apartment. Areas North 1 and North 2 of Tiantongyuan in particular are noted for this type of activity. (See Figure 8).

Figure 8: Location of illegal subdivisions in Tiantongyuan

The fact that the illegal subdivision of apartments occurs in Changping district expands upon previous research on the subject of affordable housing for migrant workers. Notably, Cindy Fan et al. conducted surveys that included urban villages in Changping District. These surveys suggested migrant workers are willing to pay market rate or even slightly higher than market rate per square footage. However, they prefer to consume a smaller amount of rental space in order save more money (Fan, 2008). Therefore, the phenomenon of urban villages
providing affordable housing to immigrants is more than just affordable housing; rather the size of the space available in urban villages is much smaller. Fan et al. recommends that urban planning take into account that migrant workers are willing to pay market rate for smaller spaces by building this type of housing. This recommendation, however, has not been met. In fact, Beijing restrictions on illegal subdividing apartments for rent were tightened in January 2011. Based on interviews, it is clear that a black market is occurring resulting in the de facto fulfillment of Fan et al.’s recommendation. Formal property owners in Tiantongyuan respond to this demand for affordable housing by illegally subdividing housing into smaller spaces which are consumed by migrant workers.

**Illegal purchase of formal housing**

Officially, the laws of social welfare housing dictate that affordable housing constructed in Tiantongyuan requires possession of urban Beijing *hukou*. As a result, most migrant workers are legally precluded from purchasing social welfare housing. Interviews, however, revealed that there are documented instances of non-Beijing residents purchasing social welfare housing. For example, one interviewed immigrant was able to utilize his *guanxi* by relying on a relative with urban Beijing *hukou* to purchase an apartment in Tiantongyuan for the economically affordable rate. This case suggests that the lack of urban Beijing *hukou* is an obstacle to obtaining housing for migrants, but that *guanxi* can be a valuable tool for illegally overcoming regulations.
Informal Land Use and the Informal Economy

Because Tiantongyuan was established as a residential community for relocated Beijing residents, it has a limited supply of formal commercial space. With few exceptions, the official government land use map primarily indicates residential areas. Nearly all Tiantongyuan residents and migrant workers interviewed noted that there were few places to shop in Tiantongyuan. Most traveled outside the community to purchase goods. It appears that a demand for consumption space exists in Tiantongyuan. There is evidence that this demand is being met in part by informal elements.

Street vendors using street/public space in Tiantongyuan

Street vending is highly prevalent throughout Tiantongyuan and its urban villages. A few hundred street vendors were observed during the course of this research project. The vendors sell a diverse array of prepared foods, fruits, and vegetables; articles of clothing such as socks, scarves, coats, and purses; and accessories such as cell phone holders and hair ribbons.

The majority of street vendors were observed using a bicycle trishaw to transport their goods. Some transported their products in a blanket that also served as a ground mat for displaying their products for sale. A minority of street vendors relied on automobiles or illegal motorized trishaws to transport their product. Street vendors’ method of transportation is important because the illegality of their venture necessitates ease of mobility in order to escape law enforcement. One vendor switched her product from fruit to prepared food, because the food could be transported in a smaller more mobile cart than the fruit cart.

Many Tiantongyuan residents regard the street vendors as a public nuisance for obstructing subway entrances, pedestrian overpasses and streets. Some residents considered the street vendors to sell unclean food or low quality products. However, Tiantongyuan residents
also felt street vendors contribute positively as well. They provide inexpensive food and goods in a place with few shopping options. Many food items cost only few yuan ($0.30- $2.00). Also, they bring convenience for Tiantongyuan residents that lack time to prepare meals, and convenience to migrant workers living in urban villages where few apartments have kitchens (See Figure 9).

Figure 9: Informal kitchen in Dagong Village

Street vendors in Tiantongyuan use sidewalks, streets, and pedestrian overpasses directly outside the subway stations’ entrances in the morning and evening during peak commuting hours in order to attract the most business. It is illegal to use public sidewalks and street space for vending in Tiantongyuan (as well as in most Chinese cities). Two types of street police (chengguan 城管) enforce anti-street vending rules in Tiantongyuan: public police and private security. Public street police chase vendors away from subway entrances, public streets and sidewalks. Private security personnel are hired by property owners which chase away street
vendors from sidewalk space in front of private development. If caught, the police may confiscate the carts, valued at approximately 200 yuan. Street vendors report frequent harassment from street police that prevent them from selling and earning income. According to interviews, the private security guards are even stricter than the public police. Due to this enforcement, some street vendors reported large variations in their monthly earnings. In the course of this study, the enforcement of the law against street vending was readily apparent. At certain peak hours, hundreds of street vendors lined the sidewalks, streets, and overpasses by the subways. At other peak hours, only a very small handful of vendors were selling. These few vendors said that everyone knew that the street police

As noted, private businesses pay money to hire security guards to enforce rules against street vending to mitigate the public nuisance for Tiantongyuan residents. However, some street vendors develop a guanxi relationship with private property owners in order to informally rent privately-owned space in public areas such as parking lots or sidewalks. (See Figure 10). One street vendor sold fruit in a parking lot directly across from the subway station. Although this space was privately-owned, she stated that she was able to sell there because she had guanxi with the property owner and paid a small fee. She was also able to display a large amount of fruit for sale because she did not need to be prepared to run from the police at any given moment. Similarly, another street vendor rented sidewalk space in the area directly in front of a restaurant by paying a fee to the restaurant owner. He stated that he was able to make
significantly more money staying in this one are than bicycling around selling his product. These informal rental agreements between street vendors and private property owners can benefit street vendors’ economic opportunities.

**Street vendors using street and public space in urban villages**

Street vendors also operate within public spaces of the urban villages. They sell products to the villages’ thousands of residents. The street conditions vary. The streets are often much narrower than the streets of Tiantongyuan. Sometimes the streets are unpaved and muddy with no room to set up a cart or space to sell. Street vending in the urban villages is legal; however, the Village Council collects a fee from the street vendors. In Yandan, a daily fee of 2 yuan ($0.30) is collected by Village Council officials. Street vendors considered this fee to be fair.

The streets of the urban villages serve as an informal but legal alternative to selling on the streets of Tiantongyuan. One street vendor in Yandan expressed an interested in selling in the public space by Tiantongyuan subway station, but her fear of the street police deterred her. Even though she believed that she would earn more income selling in the public space near the subway, she only sold in the urban village streets. Despite her belief, it is unclear whether or not street vendors earn more income selling in the urban village streets or in Tiantongyuan streets. Another interview revealed that two migrant worker brothers sold the same snack. One sold in the urban village of Zhongtan, while another sold in the public space outside Tiantongyuan. Both earned approximately the same amount per month. Some street vendors also expressed an interest in renting store space, but claimed that commercial space was not affordable. Store space in urban villages can cost approximately 2000 yuan ($303) per month. Small commercial spaces near Tiantongyuan subway station can cost over 3000 yuan ($455) per month.
Figure 10: Informal street vendor in private space

Figure 11: Unregulated change in land use designation
Informality in Land Use management

As discussed in the Theoretical Framework section of this paper, land use management and development in China’s new economy constitutes economic activity. Therefore, land use and development that exist outside of government regulation will be considered instances of informality for research project.

Unregulated land use change

Under China’s planned economy, all development projects were initiated by the government. Consequently, there was no need for development control, and zoning legislation was unnecessary. Under the new economy, there are financial incentives to develop land for profit (Gar-On Yeh). Without sufficient development control, unregulated profit-motivated land use changes and designations are occurring in China. Most of these unregulated land use changes are from residential to commercial (Ibid).

In Tiantongyuan, there are a few instances of unregulated commercial land use changes. For example, the ground floors of some residential buildings have been converted to small commercial spaces. (See Figure 11). The most common occupants of these converted spaces are real estate agencies for selling and renting residential property in Tiantongyuan and privately run kindergartens since there is an extremely severe shortage of kindergartens in Tiantongyuan. (Recently 10,000 students in Tiantongyuan and nearby Huilonguan competed for 100 spaces). However, the vast majority of development in Tiantongyuan is residential. All those interviewed stated that there is a lack of commercial space in Tiantongyuan. The places in Tiantongyuan (excluding urban villages) where Tiantongyuan residents stated that they shopped are a chain supermarket called Wu mart, a large vegetable market, and Tian Tong Wei Huo, a
clothing market. This paper will focus on the informality of Tian Tong Wei Huo. (See Figure 12).

The land use map for Tiantongyuan does not designate the land use for Tian Tong Wei Huo as commercial. At the time of Tiantongyuan’s development, Chinese urban planning under the City Planning Act dictated that cities create master plans. However, Huo constitutes an unregulated land use change from residential to commercial. It is a large, multi-storey clothing market that attracts shoppers from outside Tiantongyuan. The market operates by renting out stalls to individuals. The majority of these clothing sellers are migrants. (See Figure 13).
The construction of Tian Tong Wei Huo constitutes informal land management and planning. Its construction was able to occur due to a lack of government regulation stemming from the pre-economic reform era and was motivated by a profit-driven developer.

An analysis of its function reveals that it also helps meet the demand in Tiantongyuan for commercial space for both Tiantongyuan resident that need a place to buy and also for migrants that desire a place to work.

**Black market land ownership transaction resulting in unregulated land use change**

Within Tiantongyuan are four privately developed commercial markets that were formally rural villages. As discussed in the background section of this paper, although all land in China is officially owned by the government, China operates under a dual-land tenure system consisting of urban and rural land. This system originated under the pre-reform Communist
system. Urban land is state-owned. Land use rights of urban land can be transferred under a government administrated system of allocation. Rural land is owned by the village collective, also known as the CEO (collective economic organization.) The CEO owns the land, but cannot legally transfer the land’s property rights government oversight and fees since the government is technically the land owner. In practice, however, the dual-land use system and the commercial value of land under the new economy have contributed to the creation of a black land market.

One of these commercialized urban villages was Taiping Village. Exchanging land for cash and housing is “very common” and “in Beijing, the land occupier can obtain 60 percent of housing constructed under such black-market arrangement” (Gar-On Yeh, 67, 2005). Taiping’s village collective exchanged property rights to their village land with a developer in exchange for money and housing. The money was allocated to village resident, and the villages moved into the housing units, now collectively referred to as New Taiping.

Fig X indicates the location of the housing Taiping’s residents received in exchange for village land. The new housing area is called, New Taiping.
Due to the informality of the land exchange, new structures in the Taiping market have been constructed simply and cheaply so that removal is easy and not costly in the event that the government designates the property for demolition. Due to the village’s location in the middle a main road less than a quarter mile from the Tiantongyuan subway station, future government-mandated demolition is considered highly probable. Furthermore, even though the developer is the land occupier, the village collective still holds the land ownership certificate. Therefore is no economic incentive as there is in the urban villages to develop the property in order to gain greater government compensation in the event of demolition. This lack of compensation incentive also explains why the absence of any new residential buildings which are prevalent throughout Tiantongyuan’s urban villages where the compensation incentive does exist. Instead, the market’s shopkeepers live in the original villager housing which is old and dilapidated.
A result of this illegal transfer of property rights is an unregulated land use change of the urban village from residential to commercial. The land use change is a result of the land’s greater value as a commercial, and also helps meets the demand of Tiantongyuan residents for more commercial space. Unlike, the urban villages whose commercial space caters almost exclusively to urban village residents, the Taiping market contains a variety of commercial spaces that serve middle income Tiantongyuan residents. The market contains stores that sell decorative house furnishings, appliances like refrigerators and dishwashers, bedding, and even a mountain bikes. There are also hair salons, cell phone stores, inexpensive restaurants and a supermarket.

This type of unregulated land use change for Tian Tong Wei Huo and Taiping Village has been criticized for causing chaotic development, particularly in the urban fringe. While this criticism may be merited in some instances, an analysis of these two examples in Tiantongyaun suggest that unregulated land use changes result in the development of commercial space that is necessary. The primarily residential development of Tiantongyuan has resulted in a demand for commercial space that these land use changes help meet. Furthermore, the desire for sufficient and affordable commercial space was repeatedly articulated by migrant workers.
Figure 15: Stores in Taiping Village

Figure 16: Street vendor in Taiping Village
Figure 17: Taiping Village and Tiantongyuan

Figure 18: More stores in Taiping Village
Informality in Transportation

The informal economy’s reliance on public transportation to transport goods

Most migrant workers in Tiantongyuan work jobs that provide services to the local community. It is common among migrants in Tiantongyuan to first find a job and afterwards find an apartment located near the job. Many typically walk, bike, or take a local bus to work. In the case of married couples, it is typical for the couple to live close to the husband’s job, and for the women to search for nearby work. For example, a small, informal employment agency in Dagong stated that some women moved there to be with their husbands. They then looked for work as babysitters, and often preferred to work no further than two bus stops away.

Most migrant workers living and working in Tiantongyuan seldom use the subway. On those rare occasions where migrants took the subway, they went to the train stations in Beijing to go to their home village, to visit friends in other locations in Beijing, or to go shopping outside of Tiantongyuan. In contrast to other cities for which research suggests that public transit is cost prohibitive for migrant workers, no one interviewed cited the cost of public transportation as a problem. One possible reason that transit is not cost-prohibitive because in an effort to increase ridership, the cost of transportation has been reduced and the excess cost is absorbed the government. In fact, some Tiantongyuan residents actually suggested that the price of transportation should be increased in order to reduce overcapacity.

There was one notable exception to migrants’ rare subway usage- migrant workers that use the subway and long-distance buses as a means for transporting goods for their own business. For example, in Tian Tong Wei Huo, the large clothing market by Tiantongyuan subway station, many migrants that rent small spaces in the market to sell goods travel via subway to the city center to purchase their products at a wholesale clothing market by the
Beijing Zoo. This practice is very common for migrants working at the market for several reasons. First, because the entire market consists of individual entrepreneurs renting small spaces, a delivery truck is not efficient. Second, taking the subway is faster than a car so it saves time. Finally, taking the subway also saves money. Even market workers who had access to a vehicle chose to take the subway to the wholesale market in order to save time and money. In addition to market workers, street vendors that sell non-food products such hats, scarves, socks, coats, and cell phone accessories took used the subway to transport their goods.

In addition to the subway, some migrants use long distance buses in order to access the cheapest products possible. Instead of taking the subway to wholesale markets in Beijing, some migrant workers take a long distance bus for 2 to 3 days to another province to order their product directly from the factory thereby removing the middleman wholesale market. The ordered goods, however, are delivered to a part of Beijing that is inaccessible by subway and vendors must access a vehicle to transport the goods to their home. Transporting these goods from the site of delivery in Beijing to Tiantongyuan via hired taxi was considered to be very expensive by migrants, but usually there is not a less expensive alternative.

Also there is some evidence that the ability to transport goods via subway attracts businesses. One worker relocated his electronic repair business to Tiantongyuan from another peri-urban area without a subway station for the purpose of transporting repaired products via subway.

Using the subway to transport goods is not illegal in Beijing. The subway rules permit transporting packages smaller than 1.8 meter and forbid bicycles, televisions, refrigerator, and glass panes.
However, from these cases it is evident that informal commercial spaces and informal workers are relying on unintended uses of planned infrastructure in order to save time and money. When this infrastructure is unavailable, such as when products ordered for resale purposes are delivered to places without a subway station, the cost to migrants is very high.

**Black cabs and illegal pedicabs**

Another informal element observed in Tiantongyuan is the prevalence of black cab drivers and illegal electric. Both black cabs and electric rickshaws are highly prevalent throughout the streets of Tiantongyuan, especially outside the subways station but also in the urban villages. Migrants without Beijing *hukou* lack permission to drive a legal cab; therefore, they drive a “black cab” which consists of a car with a red light hung from the rearview mirror. Although the rules of *hukou* dictate the informality of the work, a strong market demand for transportation resulting from inadequate planning exists in Tiantongyuan. The laws against black cabs and motorized pedicabs are periodically enforced by the police. Police impound the vehicle and charge the driver a fine. Despite the ban, in the entire city of Beijing there are approximately 66,000 legal taxis and an estimated 70,000 black cab drivers (China Daily, 2010). The fact that Beijing can sustain double the number of cabs it legally licenses suggests a market demand possibly due to inadequacies in public infrastructure (Ibid).

As previously mentioned, the transportation infrastructure for Tiantongyuan, while a major improvement from its past, is still seriously overburdened. Long lines form outside the subway station for the morning commute, and armed guards watch over the massive crowds at peak morning and evening hours. Buses are delayed from traffic and bus stops are overcrowded with people who must wait for several buses to pass before a free one is available for boarding. There is also a remarkable absence of legal taxis in Tiantongyuan except at the peak afternoon
commute hour. Most legal taxi drivers do not operate in Tiantongyuan because they can make more money in the urban core. Only in the afternoon when Tiantongyuan residents return in taxis after work can a significant presence of taxis be observed.

Instead black taxis and motorized pedicabs fulfill transportation needs that emerge from problems in planning. A large convention center lies just outside Tiantongyuan, but lacks any connection to public transportation. During the day and on weekends, people from around Beijing take the line 5 subway to the Tiantongyuan subway station and then take a black cab to the convention center. At peak commuting hours, there are long waits for buses operating beyond capacity and so many people rely on black cabs and pedicabs to save time. Also, the primarily residential nature of Tiantongyuan means that residents do not live near many commercial spaces and rely on black cans and pedicabs when shopping. Black cabs and pedicabs serve both Tiantongyuan resident and Tiantongyuan’s migrant workers.
Figure 19: Black cabs lined up outside Tiantongyuan station

Figure 20: Illegal pedicabs lined up outside Tiantongyuan station
Chapter V Analysis

Although Tiantongyuan was established by top-down government planning, informality is inextricably woven into its urban fabric. An analysis of Tiantongyuan’s informal elements reveals that much informality stems from policies that are legacies of the pre-economic reform period.

One of these characteristics is hukou. Hukou is the term used for China’s system of household registration. It has roots in imperial China and was abolished by the Communists in 1949 only to be resurrected in 1950 as a means of controlling population movement with the goal of urban industrialization in mind. Hukou comes from their parent’s hukou. It has two aspects. It designates a location and a rural or urban status. Hukou is associated with various government subsidized benefits including education, medical, employment, housing and more. Generally, urban hukou is associated with better benefits than rural hukou and is considered more desirable. Hukou plays a strong role in introducing informality to Chinese urbanization.

All migrant workers by definition lack the hukou of their adapted residence. The consequence of this is that informality characterizes nearly all aspects of migrants’ lives in cities including their self-employed or non-contractual employment, inadequate housing, insufficient healthcare, and uncertain education (Gransow, 2010). The ramifications if this pervasive informality for urban growth will be discussed in further detail below.

Another characteristic that shapes informality in Chinese urbanization is the dual system of land ownership. While technically all land is owned by the government, China operates under a dual land tenure system, urban and rural. This dual system originated under early Communism. Urban land is owned by the state. Land use rights of urban land can be transferred under a government administrated system of allocation. Rural land is owned by the village
collective also known as the CEO (collective economic organization.) The CEO owns the land, but cannot legally transfer the land’s property rights. As Chinese cities undergo rapid urban expansion, urban land often encompasses village-owned rural resulting in a phenomenon known as urban villages. These urban villages, which will be discussed in further detail, have been described as “vacuum of regulation (Liu, 2010). The village collective is considered to exist outside the urban administration system; therefore, there is “fluidity in enforcement in urban planning and development control regulations” (Zhang, 248, 2005). The political and administrative management of them “introduces strong elements of informality into urban land management and planning” (Changqing, 2007).

A final characteristic of China’s urban growth process is unregulated land use changes. Unregulated land use changes occur in China for two reasons. First, there is a lack of zoning legislation due to the fact that under the Communist planned economy, there was no need to regulate development control. All development projects came from the government, thus use changes were government project-based. With the economic reforms, when de facto property rights to land is transferred, unregulated land use changes occur (Gar-On Yah, 2005). Typically these changes are from residential to industrial or commercial. A second cause of unregulated land use changes is the black land market. While the government technically owns all land, in practice, whoever occupies the land has de facto property rights that can be illegally transferred (Gar-On Yeh, 67).

These three characteristics which are specific to China - the policy of hukou, the dual land tenure system, and unregulated and ambiguous land use - are artifacts of the pre-economic reforms era. Chinese urbanization has happened at such a rapid and large-scale pace, that legal and policy changes may not be able to adapt quickly enough.
Although these policies are artifacts of the pre-economic reform period, the informality and informal elements that result, including urban villages, floating population, and unregulated and ambiguous land changes interact with each other and with market demands under China’s new economy. (See Figure 21).

Figure 21 Informal Elements
The informal elements that have resulted from China transition from the economic reforms to Market Forces in Tiantongyuan:

- There is a need for affordable housing for the approximately 50,000 migrant workers.

This need arises in part because the government has historically failed to formally recognize the presence of the floating population and consequently has failed to plan for affordable housing for them.
• There is a need for commercial space. The need stems from several causes.

Tiantongyuan was designed as a residential community for Beijing residents relocated due to redevelopment. Also, Chinese land use plans do not have to be specific and lack zoning legislation, so the land use plan lacks sufficient commercial space. As a result, Tiantongyuan residents and migrant population often need to shop outside Tiantongyuan.

• The transportation infrastructure in Tiantongyuan is severely overburdened as result of inadequate planning. Housing in Tiantongyuan was developed before a transportation system was implemented. The system is further overburdened by the unaccounted migrant population. Furthermore, there is a high jobs and housing imbalance, so most Tiantongyuan residents are forced to commute.

Many of these market forces result from inadequate planning and policy.
Chapter VI Recommendations

This exploration of Tiantongyuan reveals many potential areas of interest for further study; however, the primary purpose of this research is ultimately to identify areas for increasing the economic opportunities of immigrants in order to address rural poverty in China. The following recommendations are for areas of further study or potential policy that can lead improving the economic opportunities and livelihoods of migrant workers in Tiantongyuan.

• Legalizing street vending and protecting street vendors from the street police.

• Legalizing black cabs.

• Creating formal affordable housing for migrant workers.
Tiantongyuan today looks and functions dramatically differently than it did merely a few years ago. Urbanization is an ongoing process and the policies and regulations which guide this process constantly change. Below is an overview of ongoing and potential future changes:

- Changes in government policy towards street vendors. Various policies are being applied in different Chinese cities to legalize their activities and use of public space.

- The Chinese Urban and Rural Planning Act (2008) consists of 1) a master plan of the general land use pattern of the city, and 2) the detailed plan to address areas for immediate development specific areas of the master plan specifying detailed development.

- The detailed plan of the Chinese Urban and Rural Planning Act consists of the detailed development control plan (DDCP) (*KongZhixing Xiangxi GuiHua*).

- Rule on subdividing properties for rental are being tightened and enforced.

- Affordable housing rules have tightened since the beginning of Tiantongyuan so that only those with Beijing *hukou*.

- Yandan has been selected for government demolition.
Chapter VII Conclusion

Despite the fact that unregulated informality is heavily criticized and illegal/ black market activity is prohibited, this analysis of informality in Tiantongyuan reveals that informality may provide benefits for both Tiantongyuan residents and migrant workers. Informality helps meet market demands for commercial space, affordable housing and transportation. Moreover, informality provides economic opportunities for migrant workers. This provision of economic opportunities can help migrant workers. Improving their economic opportunities such as access to work and affordable housing ultimately contributes to addressing the larger problem of rural poverty.
Chapter VIII References


