Government Policy and Urban Form


This article focuses on 'villages-in-the-city' and the attempt to integrate them into the surrounding urban areas. 'Villages-in the city' are formerly urban villages that persisted as urban areas were developed around them. These areas remain unintegrated into the city, and often with dilapidated structures.

Land use regulations for urban and rural land differ in China and are administered by different authorities. As such, rural land that remains in the city is not able to be easily urbanized in the absence of unified regulations. Chung argues that the Land Management Law of 1986 and the City Planning Act have reinforced this divided system, and allowed 'Villages-in-the-City' to kept outside of the authority of planners. The unregulated, improvised infrastructure and high density of these villages pose safety risks. Additionally, they purportedly house illegal internal immigrants who do not have the proper paperwork to live and work in the city.

Though Shenzhen City has been a leader in urban development and market experimentation, even its more aggressive administration was unable to eliminate 'villages-in-the-city.' Such villages have received negative media publicity and the city has tried to introduce sanitary and regulatory changes gradually to address the problems that are posed by villages. Key to incorporating them into the city is bringing them into the administrative and regulatory framework of the city. In Shenzhen the villages will be incorporated into plans which call for redevelopment projects to eliminate the “disordered space.”

To accommodate these changes, the Shenzhen Villages-In-The-City Redevelopment Office has been established and inserted into the existing hierarchy of the city government. With a staff of planners drawn from the city, this group is not subject to the hierarchy of any specific district. Instead, the group answers to a higher city authority, giving them more freedom in redeveloping villages. The city has some funding for incentives for redevelopment, including waiving land fees for projects with lower FAR. Residents of the villages are able to participate in the process through the 'shareholding companies' of residents, formerly rural collective units. As these companies have some financial resources saved from rents on the village land, they are in a position to negotiate with the government planning agency.

Chung looks at the village of Xiasha in the Futian district as a case study of this redevelopment process. Xiasha was fishing village before 1978 and in 2007 their shareholding company had assets of 430 million yuan, generated by business investments initially financed by rising land values within the village. Xiasha residents had previously self-financed some improvements in their village. The Futian district paid for and initiated improvements in infrastructure, while Xiasha shareholding company was the source for the redevelopment plan. Some funds for the development are supplied by Futian District.

Chung concludes that while the policy has extended planning authority into the villages, it does not address the deeper problems of representation or a coherent planning regulatory framework, nor does it prevent future 'villages-in-the-city.'

This article addresses the dual track land system in China, where some land is placed on the market while some is assigned administratively. The authors evaluate land use policy in light of actual land use data and find that government policy has been limited in its effectiveness. Moreover, rampant black market activity by local governments and private actors further undermine land use policy. The paper is divided into four sections- an examination of theoretical approaches to the state and land use, an account of actual state action in China, analysis of land use data, and a summary with conclusions.

The authors find current theories of the state and land use inadequate for describing the complex situation in China; it pursues market reforms and greater land use efficiency. The conflicts between rural and urban interests, as well as conflicts between different levels of government need to be accounted. The state does not have a unified set of interests-rather; the dual track system and the incentives for local governments to develop land contribute to a contradictory set of state interests wherein different levels of government attempt to subvert one another. The authors emphasize the difference between intent and outcome. The authors conceptualize their analysis through “state strategies” rather than state policy, to emphasize the intent behind rules and the implementation of the rules, and not just the rules themselves.

The authors relied on several sources of data- Chinese land use laws, interviews with planners and local officials in several regional land use bureaus and the 1996 national land use surveys. The paper provides an historical account of land use policy since the revolution. By 1956, private ownership of rural land by peasants was essentially abolished, with individuals and collectives having only limited land use rights. Most urban land was state owned by 1958, with the rest converting to state ownership during the Cultural Revolution. As land is a means of production, a socialist government has an ideological commitment to owning the land, beyond the question of private ownership rights.

The article traces the transition from a command economy with central control over land to the current dual-track system. Foreign investment initially spurred the changes, while demand for better living conditions contributed to the changes as income rose. The growth of cities, conversion of agricultural land to non agricultural uses, and the expanding residential use led to the rapid loss of cultivated land. Loss of agricultural land and an increasing population focused international attention on China's land use in the 1990's. The state issued new approval procedures and quotas in order to preserve land; by 1998 the state required that each province have at least 80% of its area designated as basic farmland.

The article finds that the regulations have met with mixed success, due to the persistence of the black market. The majority of this activity, by size and number of cases, involves illegal occupation. Looking at the number of infractions, individuals (usually rural) make up the largest part of the black market. However, looking at the amount of area occupied, it is lower level government and corporations that are involved in the majority of illegal land use.

The authors conclude that opening up the land market did achieve greater efficiency in allocating land, though that efficiency is severely compromised by the lack of transparency. When prices are set in closed negotiations with government or on the black market, the market cannot function without information. The land use system presently benefits private corporations and local governments, rather than the citizens and national government it was originally intended to benefit.

The authors look at transportation modes in China, as well as the policies and land use that affect mode choice. The authors look at historic trends mode share over the last two decades and describe the emergence of paratransit and the private automobile. The authors then evaluate current policy in China, drawing comparisons of Chinese policies and projections to those of Western countries. The article ends with several policy recommendations based on the analysis in the article. While the paper was published in 2005, it was written two years prior, and the assessment of current policies may be somewhat outdated. However, this article provides a concise overview of transportation and land use in the Republic.

Prior to the reforms of the 1980's, many urban workers lived in dormitories or apartments adjacent to their workplace. This land use pattern, combined with limited incomes and opportunities for leisure, led to low demand for transportation. Walking, bicycling and transit were the three predominant modes, with walking being the most common. Buses provided transportation for workers who lived with spouses rather than near their employment, as well as those who were unable to bicycle or walk. Beijing was the only city with a subway system. Transportation infrastructure was limited, with no high ways, and just a few major trunk roads in each city.

Economic reforms, which allowed workers to change jobs and foreign owned businesses to operate, introduced new travel needs. Workers no longer necessarily lived next to their employment, creating commuters and longer trips. Jitney services, which were at least twice as expensive as public transportation, emerged at this time, serving wealthier citizens and travelers. Taxi service also grew during the 1980s and 1990s. Along with increasing incomes and mobility, demand for transportation infrastructure has grown. “The road areas of the major cities were increased from 253 million km squared in 1980 to 1,773 million km squared in 1999, a sixfold increase in 2 decades.” Shanghai and Guangzhou both built subways, and further light rail, high speed rail and mag lev projects are planned. Bicycles retain the largest mode share, despite the increase in other modes and policies that discourage bicycle use in some cities.

The authors find that current land use policies promote suburbanization, which will lead to further dependence on private cars. By using figures from other large cities, they show that a rate of car ownership similar to that of the US would necessitate covering half of a dense Chinese city with roads and parking facilities for the autos. Instead of modernizing by copying American and European suburbs, the authors believe that China should continue with its current dense cities, mixed land use and multi modal transportation. They point to Hong Kong, New York City and Tokyo as high status places with a high standard of living where auto use is low.

The authors argue that China does need to rely on the auto, as their land use pattern is relatively dense and incomes are still low. They offer several strategies for discouraging auto use—increased transportation infrastructure investment, increased prices for cars or gasoline, promotion of bicycles following the Dutch example, and promoting multimodal systems.
This article examines the program of Community Construction, specifically through neighborhood committees. The authors provide a background of the program and its goals. Their research focuses on interviews with Neighborhood Committee Directors from Nanjing. They seek to understand the effects of such policies on citizens.

The Community Construction programs initiated in the 1990's shifted some of the social welfare burden from government by expanding the scope of the Resident's Committees. The authors underline the difference between these policies and Western community development theory, which assumes bottom-up organization.

Starting with the first reforms in 1978, market reforms lead to insecurity for citizens that had previously had job security and a stable, if stark, livelihood. The disabled, retired, unemployed and unskilled in low wage jobs, have increasingly needed welfare, especially as private firms do not have to provide benefits. Resident's Committees have seen their power weaken without the resources to deal with new problems. Moreover, the emerging consumer society and emphasis on private life undermine the previous authority of the Resident's Committees. Shequ (SQ) construction seeks to address these problems by strengthening Resident's Committees capacity while also improving the quality of life of these residents. These reforms are meant to improve communities while also enhancing government presence and legitimacy at the local level. The committees have legal obligations while not officially being part of the government hierarchy. This places the organizations well outside of the typical Western conceptions of self governance.

In interviews, the authors found three frequent answers to inquiries of what self governance means—“election of neighborhood leader, their sense of personal responsibility for their administrative mandate and their approach to solving local problems as they arise.” Generally, citizens vote as households in elections for a candidate among a list of nominees. The process emphasizes the personal attributes of the nominees rather than specific policies or decisions. The directors feel responsible for the residents of their neighborhoods, acting as social workers by helping to find employment and navigate government bureaucracy. Additionally, the director makes frequent social contact with residents, especially the elderly and disadvantaged. SQ Committees also help in problem-solving, informally adjudicating local disputes. A director recounts an argument over the operation of a restaurant that was solved through several meetings. The restaurant agreed to relocate its problematic air conditioner vent and provide more garbage bins. This form of self governance relieves the burden from higher authorities while also providing an opportunity for more local control in problem solving.

The authors conclude that SQ committees are not centers of grass roots initiative, as work within the increasingly standardized confines of government regulation. Moreover, they do not allow participation in the formulation of policy, but only the implementation. As such, they do not achieve the bottom-up, independence that the policy was supposed to create. However, other institutions, such as homeowner's associations, have more independence. This raises further questions about the appropriate role and the potential of SQ committees.
Sustainability


This article is an overview of China's current and past environmental policy. The 2006-11 Five-Year Plan focused on sustainability. Given China's unsustainable growth and lack of citizen involvement over the last several decades, the current plan met with skepticism. The author argues that several reasons will now push China towards genuine environmental policy, including the need for energy, economic ability to do so, and an increasingly engaged environmental civil society. The article looks at recent developments in Chinese environmental regulation and projects the increasing importance of sustainability. As this article was originally published in 2006, the speculation over the potential success of the Five-Year Plan is somewhat outdated. However, the succinct summary and assessment of Chinese environmental policy is instructive.

The author finds several obstacles to change- the State Environmental Protection Agency (SEPA) is inadequately staffed and it imposes insignificant fines. Existing laws and regulations are overly broad and sometimes contradictory. The national government is unable to effect change in the local governments, which are often resistant to regulation.

The author finds the impending energy crisis and the Fourth Generation of leaders important factors in moving towards sustainable development. While China has few energy sources, their demand for energy is expected to grow rapidly in the coming decades. The author sees the current generation of leaders as heavily influenced by the Cultural Revolution—being independent and pragmatic in their policies. Moreover, the author argues that environmental consciousness is a strong theme in traditional Chinese culture, and is becoming prominent again, after the early revolutionary suppression. As Mao's policies greatly damaged the environment, and Deng failed to address it adequately during rapid growth, the Chinese public does not trust government campaigns easily. However, the government has invited suggestions in the current plan.

Environmental groups are a rapidly growing aspect of civil society in China. These groups do not directly oppose the government, and their interests are often similar, in terms of sustainability. As such, these groups have been able to recruit members and gain citizen support without the suppression that other civil movements have faced. International aid and cooperation are other non-governmental sources of pressure. The UN, along with China's trading partners, have helped to fund environmentally sustainable development within the country. Both Japan and Korea are affected by China's air pollution, and as such, also have a stake in improving environmental policy in China. China has moved towards accepting international standards in sustainable development.

The author concludes that unlike previous environmental rhetoric, current Chinese policy is likely to be meaningful. The aforementioned factors—the energy crisis, international support, citizen interest, leadership, and a history of environmental thought in traditional culture—will contribute to actual change. As environmental groups affect change in this area, there is the potential for citizens to realize the power of organization. Sustainable development could undermine the government's credibility, while also enhancing its legitimacy as it makes meaningful changes in the lives of citizens.
Transition and Urbanisation


This article analyzes historic planning practices and transitions, current challenges, and the discourse surrounding planning in China in order to predict possible changes and reforms in Chinese planning. The author has lived and worked in China and augments his historical research and literature review with examples drawn from a Chinese city he has observed change over twelve years.

China has had large cities for at least 2,000 years, though the author stresses that these cities were the result of state power, rather than an urbanized culture. China had four of the ten largest cities in the world in 1500 and Beijing was the largest city in the world in 1800. These large cities had both administrative and economic functions. The state exercised its power through authoritative city planning, and the resulting cities served to legitimate the state. While Chinese city planning is traditionally grounded in theory from the Zhou dynasty (3rd century BC), city layout has varied over time and between periods.

Abramson points to the historic conflicts over market space and the desire for regular urban form as a sign of the state's legitimacy. In the current transition, markets and state functions are in again competing. Similarly, the military-camp like development of neighborhoods that Mao used has roots in the long tradition of cellular planning in China. Chinese tradition has not utilized the concepts of public space in a civic society, nor public space as an inviolable right. All land is ultimately owned by the state. As plazas as monuments are built, their role is questioned. Administrative hierarchies encourage local officials to devote resources to flashy projects such as monuments or historic preservation in hopes of a promotion. While planning continues to serve as legitimization of the state, focus on cellularity, and impose government ideology on the public realm, the author finds ways that planning is challenging tradition in China.

China mandated plans at the county level during the 1980s. Planning is hierarchical, with more local plans based on larger, nationwide or region wide plans. Currently the pressure for growth has superseded the legitimacy of the larger plans, as local officials pursue economic development at all costs. Regulation and implementation are functionally hard to separate, as planning institutes often work closely with the government agencies they are meant to regulate. This has led to chaotic, poorly planned development and local governments profiting from displacing previous residents. However recent policy shifts attempt to build communities and mitigate environmental degradation.

The author looks at the changes in one neighborhood in Quanzhou, in Fujian province to illustrate these trends. The town has an unusually strong history of property ownership which complicated government plans to redevelop the historic “West Street.” As redevelopment stalled for various reasons, planning officials have slowly become more interested in developing the area with residents, to reflect their needs and desires, rather than imposing a larger plan on the area.

The author concludes that planning innovation in China can come from a variety of sources, not only government policy and reform in large cities. Instead he looks to the informal agreements and practices in smaller cities based on obligation and understanding of community interests.

This article seeks to examine the explosive rate of urbanisation in China over the last two decades. The author wants to focus on what we can learn from the urbanisation process and the state of literature that deals with it. As such, he starts off with the promised three questions:

- Can we disentangle the influences of separate contributing factors (transition to a market-driven economy, political devolution and institutional change, demographic changes, globalization, technology change) on the character and extent of urbanization? Is any one of these factors dominant?
- How can we best assess the outcomes of this urbanization process in China? Is it fundamentally a process of convergence to international norms? What is its spatial morphology? Is it efficient and/or equitable? Is it sustainable, environmentally or otherwise? Is it changing the fundamental character of Chinese society itself?
- In light of the above, what forms of planning or other interventions, if any, are called for to guide urbanization in China?

The author points out that the questions are not unique, but the attempt to answer them all at once is.

In order to answer the first set of questions, the author creates a diagram of causal links and feedback loops, with differing levels of influence, between globalization, technology, urbanisation, demography, political devolution, and markets. He finds that while all of these contribute to urbanisation has an effect on markets and political institutions. These factors are both exogenous and endogenous, further complicating the conceptualization of causality. Throughout the analysis, the author finds that land markets are behaving as theory predicts with regards to technology and politics.

Within academic literature, there remains a debate on convergence vs. hybridization in describing China's urbanisation. While certain aspects of China's economy, land use and politics have followed Western and capitalist counterparts, it remains divergent in some aspects. Suburbanization in China has not followed market forces, as government redevelopment has also played a role. The market in China is fundamentally distorted as the government retains ownership of the land. Moreover, changes and market forces will mean different things in different places. The author finds that the market is neither efficient nor equitable, as the government still controls the land and a good deal of commerce, while China remains closed off from international pressure in some ways.

Overall, the author finds that China's rapid urbanisation has been unprecedented in its scale and success. Questions of sustainability arise more from the population size than the fact of urbanisation-the Chinese population would be stressing the resources of the nation regardless of where they lived, and urban lifestyles do not have to entail increased resource consumption. The author calls for a set of urban planning principles and decision making mechanisms that can be applied to individual cities. The article concludes by stressing the importance of data collection and analysis. Currently, it is difficult to access empirical data on the population and their lifestyles, making well-informed planning decisions impossible.

This article is interesting for its focus on market mechanisms in explaining urbanisation in China. Unfortunately, the author attempts to analyze a great deal of information in less than twenty pages, which results in simplifications and almost meaningless abstractions. The article attributes a primacy to market forces in examining political and urban change, while underestimating other factors, such as government intervention.
This article focuses the challenges modernity, urbanization and sustainability present to China. The author centers the paper on the rapid changes that Shanghai has experienced, liking various contemporary issues such as Villages-in-the-city and environmental efforts. Mr. Science and Mr. Democracy is a phrase dating from the early 20th century, and refers to the two concepts that were meant to guide China to modernity. The current government focuses almost exclusively on technical expertise and science, without citizen participation. The author argues as the government tries to regain legitimacy through environmental programs, they may not be able to accomplish the technical demands in addition to falling short of social goals.

Shanghai has urbanized rapidly since the economic reforms. Centralized, top down planning has built a city of skyscrapers, subways, and rapid economic growth. The plans for Shanghai are equally ambitious, and will be featured in the 2010 Expo. China's rapid growth and oppressive governance have led to the 'floating population' and other urban problems outside of the government's ability to regulate. Members of the floating population are internal migrants without the right to live in the city. They work and live illegally in the city, without social rights or a legal existence. Villages-in-the-city often house these immigrants, as the city government does not have the right to impose regulation on the villages. The residents of these nominally autonomous villages have the right to rent their land and avoid environmental and urban regulations, though they do not participate in the rights of other city residents. While the city benefits from this arrangement, which provides cheap housing for illegal, low-wage workers, the problem reduces the legitimacy of the government.

In contrast, Dongtan eco-city is an intensely designed and planned new city where residents will enjoy the latest in sustainable technology. This city is promoted as a prototype for sustainable development. However, the project also diverts funds from relatively more simple and widespread sustainability projects, which could have a larger impact. Though the city demonstrates technological innovation, it is oppressive in its complete lack of participation or engagement.

The author concludes that Shanghai is an energetic, international city. Increasingly it is filled with 'strangers,' both Chinese and foreigners, in search of urban life. Regulating the movement of people may be impractical in the long run.

This article looks at the state of conservation in Shenzhen over the last 30 years, since it became the leading city for experiments with open market reforms. Shenzhen is popularly believed to have been a small fishing village with no historical importance prior to the reforms. The authors point to the regional importance it had in government during the Eastern Jin Dynasty (approximately 331 AD), the historic Dapeng Fortress within the city, and its colonial architecture. The authors seek to address the state of conservation at the beginning of economic reforms, the nature and motivation of conservation projects, and the potential presence of a “heritage identification problem.”

During the 1980's, Shenzhen was focused exclusively on development, using its limited funds to attract profitable industry. The city government had final authority over all projects and could intervene to conserve places relatively easily. Though the city government recognized the importance of heritage in building an attractive city, only one conservation project was attempted. Ultimately it was not carried through due to lack of funding.

In 1988 Shenzhen commercialized its land. This led to rapid redevelopment and the destruction of heritage buildings. Local districts neglected to implement conservation plans or willfully ignored them in pursuit of profit and development. From 1980 to 2006, the estimated number of heritage buildings in Shenzhen fell by 90% from 100,000 to 10,000.

In 2000, Shenzhen was denied “National Garden City” status due to its lack of heritage conservation. Heritage funding was increased and surveys identified previously unrecognized heritage buildings and districts. The Purple Line boundary was introduced as absolute protection for heritage sites within it, removing some heritage buildings from market pressures. Shenzhen's increased interest in conservation is often viewed cynically, as an attempt to market the city. Two examples are the largely-mocked 2003 application for “National Famous Historic City” status and the increased funding for Hakka walled houses that happen to be adjacent to the site of the Universiade 2011 (an international sporting event).

Shenzhen is a city of internal migrants- the population grew from .31 million to 12 million from 1980 to 2006. These migrants are often ignorant or dismissive of local culture. “Village 5” demonstrates the disinterest in local traditions. The Huzhou style houses and a Qing Dynasty Club House brought in from another province, made the estate project very popular. Central and Northern Chinese culture are more well-respected than the local traditions.

Shenzhen’s relatively short history and the consistent underestimation of its history undermine the respect for its local culture. The authors point to the incredible living heritage of Shenzhen and its multitude of internal migrants. Already the city is starting to conserve and celebrate some post 1980 buildings. The authors hope that the city will continue to honor its rich culture and history as a migrant city.
This article studies the rapid growth of Guangzhou and the implications for planning theory in terms of expansion and land use in transitioning cities. The authors address urban spatial structures resulting from the interactions of urban activities and the development process. By examining the changes in Guangzhou the authors seek to understand the spatial implications of transitional post-Soviet reforms, specifically gradual decentralization and marketization.

Decentralization, allowing some decision making at the local level began in 1978, while land markets where established in 1987. Land use rights can now be leased separately from land ownership. As some land is leased below market value to established users, this has created a black market in land, leading to hoarding, profiteering, and the subversion of planning efforts. Decentralization and the introduction of land markets has significantly complicated planning in China, introducing new actors, where previously planning was the purview of the state and its institutions. The focus has shifted from economic-centered planning in a top down style, to a market with multiple actors and an emphasis on developing land for profit.

The paper studies Guangzhou before and after the introduction of land markets through ortho-photographs of 1:10,000 from 1979, 1987 and 1992. GIS was used to overlay information about population, infrastructure and plans. The authors found that development happened closer to the city center after land reforms. Previously development took place away from the city center, nearer industrial locations. Development has shifted from agricultural land to redeveloping urban land. At the same time, leap frog development has expanded the boundaries of the urban area, leading to sprawl and a more dispersed developed area.

The authors conclude that the changes present opportunities and challenges. As localities push for development in order to increase revenue, planning processes are rushed and agricultural land is used for residential and business development. Unauthorized uses are also prevalent. The authors call for reforms in the institutions and philosophy of planning in order to address the challenges of centrally planned cities transitioning into market cities.
This article provides an overview of current planning practices in China. Zhang briefly describes the structure of planning in China, looking at education, employment and status as a profession. The research is based off of interviews with practicing Chinese planners in a number of cities. The author reviews the changes in planning since 1949, focusing on the challenges of planning since the reforms of the 1980s. He concludes that the challenges facing planners in China are tripartite- they must address the changes as citizens, intellectuals and planners.

Currently, almost all planners in China work the public sector, though with market reforms design institutes now serve some private clients. In 1998 a regulation was passed requiring all planners to take an exam similar to the AICP certification exam. These exams are mandatory however for practicing planning.

There are 29 planning schools, and 700 planning students graduate annually. In universities, planning is taught within Architecture and Urban Design departments or in Geography departments. The discipline focuses on physical planning, while the social and economic aspects of planning are separate. There are three planning journals in China- City Planning Review, Urban Planning Forum and Planners.

After the communist revolution Chinese planning was initially influenced by Russian central and industrial planning. Planning activities in China were interrupted by the depression and disasters in the early 1960s. During the Cultural Revolution, planning suffered in the anti-intellectual atmosphere, as planners were forced out of the cities and re-educated.

Since the post-Mao reforms, Chinese planners have faced a series of rapid changes and challenges resulting from such dramatic transition. Reforms led to the emergence of a land market, where previously no one was allowed to own land or claim a significant stake in it. There has been a large rural-urban migration, bringing up questions of equity, housing shortages and urban sprawl in expanding cities.

Chinese planners are now faced with solving the problems that a housing market creates, after reforms promoted markets as the solution to all problems. There is a very large income gap in China which is manifested in residential segregation. The reforms have improved efficiency at the cost of equity.

Planners are under pressure to develop land despite the environmental or social costs involved. They have to implement plans made by higher officials and investors, rather than exercising professional discretion. Planners are forced to rush the process in order to bring development and money to a local area.

As planners face the challenges of balancing equity and efficiency and power and democracy, the author suggests that planning reforms should be examined in the context of larger political reforms.
This article attempts to establish a monetary cost of vehicle emissions in Beijing. In 2003 there were almost 25 million vehicles in China, projected to rise to 90 million by 2020. The 59 million motorcycles in 2003 are expected to increase to 192 million by 2020. The rapid increases in motor vehicles in China has raised numerous environmental and health concerns. The author examines the contributing factors to China's severe air pollution and looks at the environmental effects of emissions. Then the paper looks at the methodology of the study and analyzes the results.

The largest and most affluent “super cities” in China are the worst affected by air pollution. Most vehicles in China are driven in large cities. For example, Beijing has 1.1% of China's human population, but 8.8% of its car population. Vehicle emissions are much higher in China than in developed countries due to less efficient technology. Finally, the high density of the cities does not allow the pollution to dissipate, and there is little chance for it to be absorbed by greenery.

Due to these three reasons, China suffers from extremely high air pollution. An overwhelming majority of the large cities in China exceed WHO's air pollution guidelines for total suspended particles, sulfur dioxide and nitrogen dioxide. Nine Chinese cities made it onto WHO's top ten most polluted cities list in 2000. Vehicle emissions make up an important part of this pollution, contributing an estimated 85% of CO emissions in Chinese cities and 45-60% of NOx emissions.

The study looked at Beijing, which has highly developed road infrastructure and the highest vehicle ownership rates in the country. In response to the increasing air pollution in Beijing, the government has instituted rather strict emissions standards. Currently, they are similar to Europeans standards of the 1990's. However, these standards do not affect the vehicles already on the road, which will probably continue to be used for years. The author claims that there have been improvements in air quality since the introduction of emissions standards, though there is not enough data to demonstrate it. Regardless, Beijing was ranked 27th of 31 capital cities in terms of air quality in 2003.

The study followed WHO and World Bank methodologies to calculate the costs of pollution. Human health effects are the major cost of traffic according to the author. As it is not possible to measure every pollutant and tie it to its effects in humans, an indicator pollutant is studied, PM10 in this case. The paper examines the population exposure and dose-response function, estimating that 60% of the Beijing population is exposed to an ambient concentration of PM10 at levels that posed significant health risks.

Estimating the monetary cost of human lives is perhaps the most controversial aspect of this kind of study. The author used two methods: willingness to pay, or estimation based on out of pocket costs and the loss of production. Using the willingness to pay method, costs are calculated at 973.677 million USD, while the human-capital approach is calculated at 209.781 million USD. The author notes that both of these are underestimates, as wages and accumulated wealth are much higher in Beijing. This means the cost of vehicle pollution in Beijing was 0.7 – 3.26% of the GDP, depending upon the method used. The article does not end with any conclusions.
This article looks at transportation use and availability for the poorest residents in Chinese cities. The data is from a city-wide survey in Hefei focusing on household travel. The article starts with a brief literature review on transportation and urban poverty in China, finding very little of interest. It then describes the methodology of the survey and analyzes the results, examining those of the lowest income groups.

While literature exists on other aspects of urban poverty, there is very little data on transportation among the urban poor. The high levels of poverty in Chinese cities, combined with the increasing sprawl of Chinese cities, make this a pressing issue. In 2005 there were 9.8 million registered urban households under the poverty line, though the rural migrants living in the city without registration are not counted. This population is typically very poor and excluded from social benefits. Chinese economic reforms in the last two decades have been successful in alleviating poverty, but the gains were mostly in the countryside, while the gap between the rich and the poor grew in the city.

Hefei had a population of 1.56 million and an average annual income of $1,210 in 2004. In analyzing the results of the household level travel survey, the researchers defined the poverty level as $1,250 per year per household, or about $403 per person, as average household size in Hefei is 3.1.

The study found that low income households were overwhelmingly more likely to use non-motorized transportation, with almost half of daily trips made by walking, and 32% by bicycle. Buses were used for only 14.19% of trips. The highest income households showed a much lower rate of walking at 36.92% and cycling at 12.31%. Private automobiles and motorcycles were also used. Middle income residents were also much more likely to use the bus. For commuting trips only, there was a slight shift towards the bus for lower income residents, and a larger shift for other groups, perhaps reflecting land use patterns, and people living too far from work to walk. Interestingly, middle income groups were the least likely to walk for any trips. The most affluent residents tend to live in the city centers in China, so they can walk more easily for goods and services. Trip purposes varied with income as well, with the urban poor less likely to commute to work, but more likely to take school or shopping trips. This could reflect the higher number of young children, and the lack of refrigerators, necessitating frequent shopping. Due to the high rate of non-motorized transportation, the urban poor tend to spend a small fraction of their annual income on transportation. However, if a household were to rely on buses, it would take around 30% of their annual income. This is not an acceptable level, especially as Chinese cities increase in size, and residents become dependent upon buses.

The paper finishes with a review of current policies and trends, and makes several policy recommendations. The authors support improving bicycle and pedestrian environments to increase the safety of these modes, along with traffic education for drivers. They also recommend improving transit systems and instituting subsidies or reduced fares for the poor.

The authors address the issue of mobility for poor urban residents thoroughly. They address several aspects of mobility and accessibility, including safety, access and cost. The issue of rural migrants, who are uncounted and unable to access social programs, is addressed throughout the paper.
This article compares transportation in China and India, providing a thorough overview of each country's transportation system. The comparison to India highlights the unique aspects of Chinese land use and transportation arising from a socialist state. The authors rely on a variety of studies, reports and data sources to compare population, safety, land use, infrastructure, and transportation trends. After a brief overall comparison the paper is divided into three main areas of analysis: transportation trends, transportation problems and policy analysis and recommendation. The authors conclude with general recommendations based on Western European cities.

As the two most populous nations in the world, China and India face similar problems as the demand for transit increases along with rising incomes. China has a smaller rate of population growth due to government policy, with a higher rate of increase in income. Both countries have instituted land use policies which encourage sprawl through industrial parks and economic development zones on the edges of cities. However, large differences in government structure and recent history make the comparisons somewhat awkward.

Comparing transportation trends between countries is rather difficult due to discrepancies in data collection. As neither country has nationwide transportation surveys, the methodology can vary between cities as well. Generally, China has a higher rate of non-motorized trips, due to China's higher use of bicycles. In both countries, the share of motorized trips increased with the population of the city. While non-motorized trips account for 40-55% of the trips in large Chinese cities, the share climbs to 70% or higher in smaller cities. In Beijing and Shanghai about 25% of trips are by public transportation, while smaller cities with less developed transit systems have lower shares. China has been undergoing rapid motorization, with an increase in trips by private vehicle as well as public transit, while bicycling and walking have decreased. Car ownership is highly concentrated in the large cities, especially Beijing.

Traffic fatalities have increased in both China and India over the last several decades. Pollution, noise and congestion have also risen sharply with increased automobile use. In Beijing noise averages 70 dB, 25 dB above WHO's recommended safe level of noise for a city. Congestion is egregious in China, with the average speed falling from 45 km/h in 1994 to 12 km/h in 2003. Congestion is aggravated by the pattern of the wealthy living in the city center where there is the least available road capacity. In China road building efforts have concentrated on large arterials and freeways rather than local roads, which create inefficiencies in the system.

China's policies often serve to reduce bicycling and walking share. China has invested in road building while neglecting dangerously run down bicycling and walking facilities. Several cities have adopted explicit anti-bicycle policies, as they are seen to contribute to congestion and high fatality rates. The authors recommend that China reverse these policies and try to encourage non-motorized trips, recognizing the potential reduction in noise and pollution.

The conclusion recommends that both countries move towards a Western European model of development, listing several specific programs and policies for Chinese and Indian cities. As the article demonstrates the huge discrepancies in Chinese and Indian government, planning and land use, it seems that making such broad recommendations to both countries is of limited use. Overall, the article is an informative overview on existing transportation research in China, along with current policy.

This article examines the causes of increasing congestion and commute times in Beijing, focusing specifically on the jobs-housing balance. Using a 1500-household travel survey, the authors find that the jobs housing balance is highly negatively correlated to average community commute times. Moreover, access to transit and private vehicles was not significantly associated with shorter commute times. They recommend that policies to reduce congestion should focus on land use and creating compact, balanced areas.

The article briefly describes the transportation history of Beijing and reviews existing literature on jobs, housing and commutes, before describing the methodology and findings of the research. Prior to the 1980's, Beijing had a cellular pattern of land use typical of Chinese Socialism. Economic reforms have restructured the space dramatically, introducing sprawl and separating housing from workplaces. At the same time, commutes have lengthened. Due to the deleterious effects on the environment and individuals, planners are now focusing on restricting commute times.

Literature on the jobs-housing balance and commuting is contradictory. Several studies have shown that is has an effect on reducing commute times, while other research has found no significant relationship. The authors argue that as the studies use different methodology for obtaining and analyzing the data, such as different catchment areas, it is impossible to compare their conclusions.

This paper uses data from a 2001 housing survey in 60 communities in Beijing, each with an average of 25 samples. Jobs-housing proximity is the first variable used, which is the percentage of how many respondents had jobs within their sub districts. Variables measuring access to transit, local density and distance to the city center were also used. Regression analysis showed that job proximity explained 68.1% of the variation in commuting times. Access to transit or private vehicles had no effect, nor did local density. However, this study looks at sub districts, which may be too small of an area to catch the effects of variations in density. Moreover, work on the jobs-housing balance based on market theory may not be as applicable in China due to the Socialist history and continuing policy of government subsidized housing.

The authors conclude that focusing on affordable housing near employment and the creation of employment in residential areas could be a better long term strategy for reducing commute times and emissions. The findings suggest improved transit may make no difference in commute times, or even increase commute times. Compact land use rather than supply side policies like increasing transit will have a larger effect on commutes. However, the findings are limited by the data set, which had a relatively small sample (1500) and reported time without differentiating between modes of travel.

As the literature review suggested, studying the relationship between urban form and commuting is challenging in terms of concepts and methods. The author's measurement of jobs-housing proximity is innovative, though it may be hard to apply in other cities, as it relies on the small administrative boundaries of sub-districts. Moreover, time without mode information is a crude proxy for distance traveled or even the environmental costs of the trip given the high rate of non-motorized transportation in Beijing. This article still presents intriguing evidence that land use is vital in addressing congestion and other transportation issues.

This article focuses on the relationship between urban development and the emerging land market in Beijing. The author analyzed the land use and prices of land in the market in Beijing, excluding land allocated by the government. The paper finds that the land market in Beijing behaves largely in accordance with expectations based on market theory: density of development decreases with distance from the city center, land use is dependent upon the market value of the location, and the land rent curve shifts over time.

The author provides a brief overview of land use in Beijing, emphasizing the spectacular rate of growth since land market reforms. Previous to the 1990's, Beijing had the cellular land use typical of post-revolution China. The highly mixed use development allowed workplaces, residences, shops, schools and other needs to be within walking distance for most of the population. Beijing, as the capital, was relatively less industrial than other Chinese cities, with 1/5 of its land devoted to industrial uses, while the fifteen other largest cities in China had double the rate of industrial land use. The housing stock and infrastructure was inadequate and dilapidated in large areas of the city. After initial experiments with land leasing in the 1980s, China instituted land lease regulations in 1991 which allow the government to lease land to buyers, as well as buyers being able to transfer leases to others.

The author analyzes data collected from the 1463 land use rights grants from 1993 to 2000, including “land use type, date of granting, location, size, total square footage, floor-area ratio, leasing period and prices.” The study focuses on land within a 25 km Euclidian buffer of Tiananmen Square, or the city center. Using GIS, the author mapped the density and the price of land overall and divided into two periods- from 1993-96 and 1997-2000. In general, price and density fell with distance from the city center. The drop-off was more extreme between the 0-5km boundary and the 5-10km boundary than it was for the other boundaries. Commercial and office space had higher rents than residential, which in turn had higher rents than industrial. The author analyzes the statistics in detail and finds some evidence for capital substitution as rent increased, using the two disaggregated periods.

The author concludes that the land market in China is developing in a similar manner to markets in developed countries. The market is affecting land use decisions and encouraging capital substitution. The study is limited by the quality of the data available- though it is detailed, it does not address administratively allocated land. While this article provides an interesting analysis of the land market in Beijing, the analysis is somewhat imprecise, using a 25 km buffer divided into 3 successive 5 km buffers and one 10 km buffer. These circular buffers do not take into account how the rings of Beijing differ by direction (East vs. West, North vs. South) such as the different levels of development or access to transportation. By only looking at land development that happened within the market, and excluding analysis of the multitude of actors in land development decisions, the author may overlook important details. Nevertheless, the article provides a general view of land values in Beijing and how they differ by use and location.
This article looks at the controversies and challenges involved in the conservation of older districts in Shanghai. Since the real estate boom of the 1990s, Shanghai has been increasingly redeveloped, destroying historic parts of the city. At the same time, conservation efforts have become more common and have achieved some results. This article, originally written in Chinese, looks at a planning study of Northern Old Hongkou in Shanghai and the conservation efforts made there.

The Hongkou District is in a government designated Historically and Culturally Significant Zone. The area features several historic monuments, along with a mix of residential and commercial buildings dating back to the 1900s and post-revolution buildings. While heritage conservation is recognized as a general goal, the criteria for selection have been very controversial. Officials do not want to expand conservation districts too much as it impedes development and limits the supply of gross floor area.

Aesthetics and the shameful historical status of some buildings were the most controversial topics in designating historical buildings. The authors point to the status of a building that once housed the Japanese Naval headquarters. The authors argue that being a symbol of national shame is a reason to conserve a building, in the interest of remembering history, while the initial reports on the building called for demolishing it for that very reason. Currently, the building still stands though it is not yet designated. China only recently allowed for buildings over thirty years old to be deemed historic, a significant shift from the previous requirement that they be pre-revolutionary. The authors cite buildings from the 1970s and the 1980s that have been destroyed because they are “ugly.” The authors maintain that as aesthetic tastes change, exceptional buildings from the modern era should be left standing for future generations to view and judge.

The authors observe that conservation in the district is fraught with politics. While residents may want to stay in the neighborhood, they are cynical about the actual chance to do so, so they focus on getting the highest price possible for the land, rather than trying to challenge redevelopment practices. The authors found that some of the residential housing lacked basic amenities such as kitchens and that some infrastructure suffered from neglect and was gravely deteriorated. Conservation does not mean that there will be no demolition; instead it should be a process of “incremental redevelopment.” This method could preserve the feel of the space and keep the community intact while still improving the lives of residents and revitalizing the area economically. This “adaptive reuse” approach however lacks clear practices, and it has been criticized as a transfer of wealth and real estate to the upper classes, by effectively pricing the poor out of their neighborhood.

The authors argue for “a compromise in principle between change and conservation.” Their academic study had to find compromises with the more development oriented plans and respond to “pressures on the ground.” They underline the need for an incremental approach that includes both development and conservation, in order to maintain the historic significance of places while improving the living standards and stimulating economic growth. The speed of redevelopment is key in achieving this balance.

This article focuses on the conversion of agricultural land to non-agricultural uses since the introduction of market reforms in China. The author analyzes land use data as well as Landsat images, showing that agricultural land is being lost to increased urbanisation, expansion of industry and rural residential uses. Though scholarship has focused on rapid urbanisation in China, relatively little attention has been paid to the land use aspect of China's transition. With this study the author seeks to answer basic questions about the amount of non-agricultural land, its purpose and locations. The study also looks into changes in land use over time and the causes of change in land use patterns. The author also asks how this information can be used to guide land use policy.

The study follows the official classification of land in China. Agricultural land is land used for cultivation, pasture, orchards, etc. while 'construction land' is all used, non-agricultural land. In this paper non-agricultural land refers to industrial, urban and rural residential, land used for transportation (roads, railways, etc.) and any other use not related to agriculture. As the frequent changes in the definition of urban population has created confusion and controversy, the author relies on non-agricultural population and “the urban built-up area in urban districts” as indicators of urbanisation. Data from nationwide land surveys from 1981-1996 are used along with data from China's statistical yearbooks. Landsat images of Guangzhou are also used as a case study of a large city.

The author is critical of the 'urbanisation from below' theory, arguing that while early urbanisation occurred in small cities and through immigration, expansion of medium and large cities has become more prominent since the 1990's. Municipal revenue increasingly depends on revenue from land use rights, creating an incentive for local governments to grant land rights and encourage real estate development.

The 1996 land use survey shows a high degree of density in urban areas- non-agricultural land is only 3% of the total area in the country. Two-thirds of that land was in rural areas. Urban settlements and industrial areas took up 9% of the non-agricultural land each. The survey also showed that land use varied by region, with the eastern coast being the more urbanised than the western and central regions. However, the area of non-agricultural land in China increased by 8.5% from 1990 to 1996 corresponding with a 3% reduction in cultivated land during the same time. The growth of non-agricultural land comes primarily from cultivated, not unused, land. The author points to Shandong Province between 1992 and 1996 where expansion of rural settlements contributed less than 11% of the growth in non-agricultural lands, while urban settlements, industrial, and transport took up the rest.

The author presents a number of case studies to support his argument that medium and large cities are now driving the conversion of cultivated land in China, in part due to government policies and increasing industrialisation. He concludes that government policy has led to a dual track system where converting non-urban land is dramatically cheaper than using designated urban land already within city boundaries. “Hollow villages” with vacant or underutilized land in the central area have become common, as have villages built close to another with duplicate facilities. The author argues that government policy should address these inefficiencies in the land use system.

This article gives a detailed overview of the evolution of land use in the 1980's and 1990's in China. The article was initially published in 2005, though it relies on 1996 data due to the scarcity of reliable data.

This article looks at the redevelopment of Xintiandi, a project in the Luwan district in Shanghai. This area of Shikumen was redeveloped through cooperation between the district government and Hong Kong developers. The authors analyze the power mechanisms that resulted in this project, suggesting the 'rent gap seeking regime' model. The paper is based on the case study of Xintiandi through informal regime analysis.

The authors argue that regime analysis developed as a theory in Western countries and cannot capture the unique features of the Chinese political system and land market. They propose Rent Gap Seeking Regime which emphasizes the cooperation between public and private actors. The rent gap captures the importance of the transition from low, non-market rents to the current market-value system.

The case study is divided into four parts: a brief overview of redevelopment in Shanghai, an example of public-private cooperation, an analysis of the process that created the project, and an account of the effects of displacement during redevelopment. The Shikumen are buildings combining Southern Chinese and British architecture, built when the British occupied areas of the city. The area became a lower middle class residential neighborhood during the war with Japan, and after the revolution, disinvestment continued. Since the early 1990's Shanghai has deliberately sought foreign investment in order to redevelop property, resulting in 23 million square metres of housing eliminated between 1992 and 1997. District governments have slowly gained more power in these decisions, to the point that they now often negotiate with the foreign investors and submit a plan to the city to be approved. After approval, it is the district government which issues the permit. As leasing land is a significant money making activity for the city, there is pressure for district governments to pursue such urban redevelopment projects.

In the Xintiandi case, the district government negotiated directly with the Shui On Group over the terms of the lease. The final project was a joint development between the Shui On Group and Shanghai Fuxing Construction, which was set up by the district government in the 1990's. Shanghai Fuxing Construction had a minimal amount of shares- its role was to ensure government presence in the project. The authors recount the lengthy negotiations over construction costs and land use. The project resulted in a successful cultural area of restaurants and shops, attracting investors from around the world and further driving up rents.

This increase in rents affected surrounding areas as well, leading to further development and displacement of residents. Relocation companies contract with the district government, negotiating prices for an entire neighborhood. The process allows for numerous ways to skim off the top, including irrelevant service fees, or purchasing inferior replacement housing for those who are relocated. Recent relocation laws have made the situation even worse for residents as they are now compensated based on area rather than the number of residents in the dwelling.

The authors conclude by showing the differences between IUR and RGSR theories, such as the emphasis on the roles of various levels of government and the pressure to solve housing problems on the district level. The article tries to expand urban regime theory beyond a Western context. It also provides a detailed description of the relationships between the different levels of government and private firms that are involved in urban redevelopment.

This article looks at the connection between theory and actual planning practice in China, using the arts district M50 as a case study. The research is based on a series of short and in-depth interviews with artists, architects, scholars, company directors and others involved with M50. The article presents a detailed history of how M50 emerged as an arts district, then links its history to four theories of the state in contemporary China.

Before the 1990s artists in China overwhelmingly worked for the state as salaried workers. Increased international interest in Chinese art in the 1990s led to higher prices and private art galleries with foreign owners. In 1998, an architect opened a design studio in an abandoned grain warehouse along Suzhou Creek in Shanghai, an historic manufacturing district. Artists that had chosen to go freelance also established studios in the warehouse. Along with an adjacent abandoned warehouse, the area became popular with avant-garde artists and galleries. In 2000 an artist Xue Song opened a studio at a nearby warehouse at 50 Moganshan Road, as his work needed a better system of ventilation than the warehouses could offer. The building was owned by a textile production company that had been shut down by the government, but was still required to pay its 1000 employees a salary and pension. The company, SCSC, had to rent its buildings to “urban industries” in order to pay the salaries. Though art was not an officially sanctioned “urban industry,” the company was able to rent space “underground” to artists. When the government evicted the artists from the two original abandoned warehouses in order to build condominiums, artists started to move into SCSC, since there was an existing social connection with Xue Song.

While SCSC had been trying to attract urban industries, specifically electronic manufacturing, the management was afraid that pollution would be an issue again. Gradually, they realized that the artists already in the space were non-polluting, profitable, and relatively low maintenance tenants. At the same time, increasing academic attention was being focused on the potential for art districts to help in historic preservation and industrial heritage. Simultaneously, researchers at the Institute of Economic at the Shanghai Academy of Social Sciences were looking at the success of artist districts in Europe and North America from an economic perspective. The Research Center for National Historic Cities at Tongji University helped to develop a plan for preserving the buildings as an artistic district. After the government announced that some buildings were to be demolished, the RCNHC actively advocated for preservation and artists and galleries located to the space in order to protest the planned demolition. While the preservation plan contradicted the official state plan for the area, RCNHC was able to prevail due to its reputation and status as a state-owned research facility, along with media attention and support from the artists. In 2005, SCSC was able to operate above ground, openly allowing artists to rent the space. SCSC has since raised rents and become more selective in its tenants, choosing artists over other light manufacturing uses.

In light of this case study, the author concludes that development and planning processes in China contain conflict and struggle. State power is not monolithic, and there is opportunity for societal forces to take part in planning and development. In this case, SCSC and the artists acted against state regulations. Once the illegal uses were established and successful, the government officially sanctioned them, suggesting co-optation to some of the artists. The case study demonstrates that restructuring does not necessarily follow the state's plans, and there are a variety of actors involved in actual developments.