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Policy and politics behind the public transportation systems of China's medium-sized cities: Evidence from the Huizhou reform

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ABSTRACT

China is currently experiencing accelerated urbanization, with total urban population accounting for 52.6% of the country's total population in 2012. The next 10 years is foreseen to be characterized by the rural-to-urban migration of more than 300 million citizens. The consequent pressure on the environment compels small and medium-sized cities to accommodate the influx of migrants—a situation that inevitably brings new challenges to public utility management in the country. Most of these cities lack systematic management and consistent standards in the formulation of public transportation policy because of a vague decision-making mechanism. We empirically investigate the decision-making process for public transportation policy in China's medium-sized cities, focusing specifically on the ownership reform of the public transportation system in Huizhou, Guangdong. We apply Kingdon's multi-stream model and extensively interview stakeholders who shape public transit policy in the study area. On these bases, we discuss how the three streams—problems, policy, and politics—converge and initiate the reform of public transportation systems. Kingdon's model enables the identification of weak links in the transportation management systems of China's medium-sized cities.

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1. Introduction

Enhanced public transit systems are necessary not only to provide better public service, but also to reduce demand for personal vehicles and alleviate the various problems caused by rapid motorization in a densely populated country, such as China. Improving the public transit systems in the country is a difficult endeavor because China currently has more than 600 cities¹ (National Bureau of Statistics, 2012), with most urban areas undergoing dramatic transformations. The most critical challenge is the unprecedented population growth, largely brought forth by the unabated urbanization (Peng, 2011) that the country has experienced since the economic reform in the 1980s. The population of

Chinese cities is expected to increase from 440 million in 2000 to 800 million in 2020, mostly on account of migration from rural areas (Xinhua News Agency, 2011). The increase in the world's largest human migration process has exerted tremendous pressure on transportation services. These problems have been exacerbated by rapid increases in income, which have encouraged many people to shift to personal transportation (Wen and Ye, 2011).

In numerous medium-sized cities,² public transportation is characterized by a low modal split at about 10%; this value is even lower in small-sized cities³ (National Bureau of Statistics, 2011). The low modal split is attributed to the inferior-quality transportation systems and unfavorable transportation landscape in these cities. The metropolises are characterized by limited and sometimes poor public transportation networks, delayed departures and arrivals,

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¹ The concept of “city” in China considerably differs from that in the Western world because China divides its administrative divisions into provincial, sub-provincial, prefectural, and sub-prefectural regions as well as townships and villages on the basis of political autonomy, economic status, and population size. Only when an administrative division's development indicators exceed those of a county can the former be officially categorized as a city. Note, however, that county-level cities are usually supervised by sub-prefectural governments and comprise rural areas that are many times the size of urban areas made up of towns and villages.

² The original official 1989 definition of large, medium, and small cities in China is no longer applicable because of dramatic population expansion. According to the Annual Report on the Development of Small and Medium-Sized Cities in China 2010, cities are classified on the basis of non-agricultural population in downtown districts; the categories are <500,000 for a small city, 500,000–1,000,000 for a medium-sized city, 1,000,000–3,000,000 for a large city, >3,000,000–10,000,000 for an extra large city, and >10,000,000 for mega cities.

³ In China's statistics, modal split includes nonmotorized modes, i.e., walking and biking.

and inconvenient transfers and high fares—problems that inevitably promote private car ownership, particularly because of contributory factors such as inexpensive licensing fees, parking, and gasoline prices. Researchers (Zhang and Hu, 2002) pointed out that the previous policies of China have, in fact, encouraged individual transportation, causing a series of congestion and environmental problems.

A representative case of the aforementioned circumstances is Huizhou City, situated in mid-south Guangzhou at the east end of the Pearl River Delta. It neighbors Shenzhen and faces Hong Kong across the straits (Fig. 1). Huizhou is defined as a medium-sized city because the Central Committee and the State Council of China has mandated the local government to restrict the population of downtown districts to 1 million.⁴

Huizhou was conferred the “National Civilized City” award, earning the highest score among hundreds of Chinese cities for its well-balanced social, cultural, and economic development; the city has also been listed in the “Top 10 Happiest Cities in China” for many years. Huizhou is an outstanding reflection of economic development in China. In 2012, its GDP per capita exceeded US\$8300⁵—a value expected to surpass US\$10,000 in 2016 (Statistical Bureau of Huizhou, 2013). Similar to the economy of many other Chinese cities, that of Huizhou continually increases at a rate of around 10% per year. The city maintains an economy classified as upper-middle level. In the next five years, more than a hundred small and medium-sized cities in China are expected to reach the per capita economic level sustained by Huizhou.

Despite the economically active and livable conditions of Huizhou, its public transportation (i.e., bus) system is fraught with inefficiencies. The government invests an average of nearly 10 billion yuan⁶ in social welfare (e.g., education, health care, security, public housing) improvement each year, but direct subsidies devoted to bus services amount to only 5 million yuan. Consequently, state-owned bus companies experience severe operational difficulties. The equivalent of hundreds of millions of dollars are spent updating energy-saving buses, but employees are denied reasonable wages, leading to frequent strikes, sabotage, and unsatisfactory services. On bus routes with low passenger traffic and consequent few opportunities for revenue generation, service providers cannot sustain necessary services. On lines with excessive passengers, Huizhou's private and state-owned transportation companies fiercely compete for passengers, causing serious traffic accidents.

What went wrong with the public transportation system of Huizhou? How can other cities in China learn from Huizhou's situation? To shed light on these issues, this communication explains the initiation and adoption of an important policy agenda for Huizhou's bus system; that is, the shift from diversified private ownership to a state-controlled market. We investigate how this policy took form, focusing on the role of specific stakeholder groups and the interaction between interest groups and policymakers. The policy analysis reveals the weak links that small and medium-sized cities in China should improve.

The rest of the communication is organized as follows. In Section 2, we describe our theoretical framework and research data. Sections 3–6 discuss the policy setting, policy interactions between stakeholders, and political intervention during the policymaking process. Section 7 concludes with overall findings.

Fig. 1. Geological location of Huizhou in Guangdong, China.

2. Theoretical framework and data

In Western countries, public policy has been systematically studied. Scholars, such as Cohen et al. (1972), developed the garbage can model to thoroughly discuss the reasons why public problems are included in policy agenda. Kingdon (1986) conducted extensive interviews and research on the decision-making agenda of the US Federal Government. He formulated recommendations on the basis of the garbage can model and put forward the multi-stream (MS) model of decision-making processes. The essence of the MS model is that it lays down the course for preparing public policy solutions at the juncture of three streams, namely, the problem, policy, and political streams. When these streams converge, problems are placed on policy agenda, for which the key period is referred to as the “policy window.” The MS model explains why some public policy solutions are accepted and others are rejected in government agenda, finding extensive application in the analysis of actual cases. For example, Kendall (2000) used the model to explain the key role that the UK prime minister played in the recent policy changes enacted for the nonprofit sector. Mills (2007) used the model to investigate Florida's reorganization of its higher education system. Kingdon's model was also adopted in examining the policymaking process in developing countries. Budiarto (2009) used the model to show how defects in policy streams contributed to the development of policies that led to serious land disputes in Indonesia.

In the current work, we use the MS framework to address the following research issues:

- (1) the conditions that led to the opening of the Huizhou bus service market to infusions of private capital;
- (2) the analysis of the problem presented by the privatization of public transportation businesses;
- (3) the interaction between company policy and bus system policy, that is, the dynamics between stakeholders after privatization;
- (4) the manner by which the Huizhou reform was introduced into policy agenda.

Issues (1) and (2) belong to the background and problem stream; issue (3) falls under the policy stream; and issue (4) is classified under the politics stream.

From 2008 to 2012, we conducted a progress monitoring-oriented investigation of the Huizhou public transportation system. We extensively studied public and internal documents related to the bus transit system, referred to news archives, and held 46 rounds of interviews (Table 1).

⁴ Huizhou's overall city plan as approved by the Central Committee and the State Council of China (see http://www.gov.cn/jzwgk/2012-01/18/content_2047410.htm, in Chinese).

⁵ For comparison, the overall GDP per capita of China was around US\$6100 in 2012.

⁶ As of 1 June 2013, US\$1 is equivalent to 6.2 Chinese yuan.

Table 1
Composition of interviewees.

Participant category	Organizations interviewed
Political	People's Congress of Huizhou City and Guangdong Province Planning Bureau, Transport Bureau, Public Utilities Bureau, Auditing Bureau, Finance Bureau, Price Bureau, Development and Reform Commission, State-owned Assets Supervision and Administration Commission
Academic	Huizhou University, Tongji University South Nongovernmental Think Tank
Business	Huizhou Bus Company, private bus companies in Huizhou
Social	Journalists from the Nanfang Media Group Selected users of Huizhou News Online

3. Conditions conducive to the opening of the public transportation market to infusions of private capital

For a long period, city governments in China played the dual role of policymaker and municipal service provider. Similar to the public transportation companies in other Chinese cities, those in Huizhou had been state-owned since 1963. Under such a system, government functions and enterprise conduct overlap (e.g., no clear delineation was applied to classifying government and public institutions, as well as related government functions in public administration, vis-à-vis the contributors of state-owned assets). Thus, a typical administrative monopoly is formed, thereby resulting in heavy fiscal burdens, low efficiency, and poor services. Moreover, the conflict among gradually increasing oil prices, maintenance fees, and environmental protection expenditures has become a progressively serious matter.

Given this backdrop, public transport enterprises incurred heavy losses, driving them to restrict business operations. Such negative effects rapidly spread across the urban public transport systems, resulting in more adverse outcomes (Fig. 2).

After the 1997 Asian financial crisis, the government adopted a fiscal policy that proactively promotes economic development: the budget for infrastructure expenditure was increased and taxes were reduced (Sahoo et al., 2010). During this period, China incurred huge fiscal deficits because of many large-scale projects. From 1998 to 2001, the fiscal expenditure and fiscal deficit grew at a rate of 19.8% and 62.4%, respectively. As suggested by the Maastricht criteria,⁷ a deficit of 3% is the limit at which fiscal sustainability remains possible; this safety cutoff is also known as the rate at which fiscal risk is still controllable (Afxentiou, 2000). From 1998 to 2001, China's fiscal deficit was around 2.8% (Table 2), but its financial landscape was replete with hidden debts, mainly consisting of loans for the construction of local infrastructure. According to the estimates of the World Bank, China's implicit debt in 2002 accounted for 50%–70% of the GDP (Rabinovitch, 2013). By economic rule and fiscal policy, such phenomenon should be prevented from prolonged occurrence—a restriction that highlights the Chinese government's failure to sustain funding for transit systems.

In March 2000, former Chinese President Jiang (2002) presented the slogan “correctly handle the relationship between reform,

development, and stability...continue to emancipate the mind... and forge ahead through innovations” during the review of the work of the National People's Congress (NPC). The statement was directed at the corruption of local government officials and the stalled reform. A key point of the former president was to clarify the type of governance required from the ruling party under the reform and opening up policy and under the development of market economic conditions. Subsequently, the national government launched a vigorous learning campaign, with all departments emphasizing the need to “forge ahead through innovation.” To the transportation departments and their auxiliary divisions, public transportation services would become an innovative breakthrough. Although the national government did not issue an innovation-oriented policy at that time, many government ministries and committees highlighted the need to encourage the infusion of social capital into the development of public transportation; these institutions also advanced participation in the operation and management of public transportation through joint ventures or similar cooperative efforts.

In December 2002, the Ministry of Construction issued “suggestions on speeding up the marketization of municipal public utilities” (Fu et al., 2008), which primarily revolved around according complete access to construction investors, opening the management and operations market to civil sectors, and allowing the infusion of domestic and foreign capital into the operation of municipal public utility enterprises. The suggestions also encouraged the establishment of a franchise system for municipal public utility services. The rights and obligations of the government and franchisee enterprises were specified in contracts or other forms of agreement. A call for transforming the management mode of the government was also raised: the management of municipal public utility institutions was to shift from direct management to macro management; industry management was to be converted into market management; and enterprise-oriented governance was to move toward that which emphasizes accountability to constituents and society. Localities successively introduced suggestions to accelerate the reform of municipal public utility management; an important recommendation was to promote the diversification of investments and the marketization of management for the municipal utility industry.

Under policy guidance and financial pressure, Huizhou opened the urban public transportation market, giving rise to an influx of private capital in the public service sector. For urban routes, state-owned Huizhou Bus Company had 36 bus lines and 526 buses; 7 private bus transportation enterprises (Huinan, Jintong, Taihu, Baichuan, Jinda, Chengtong, Yuntong) owned 15 bus lines and 253 buses. With the privatization of Huizhou's bus market gradually becoming a trend, the governance of public transportation has been transformed from state-owned control to mixed holding or private jurisdiction. In managing urban transportation, the Huizhou government maximizes private sector resources to increase the efficiency of the entire transportation system. At that time, the government believed that privatization can compensate for the current deficiencies of state-owned enterprises, thereby eventually forming a public–private mode of governance. This mode was believed to translate to a win–win situation for the government, private enterprises, and passengers.

4. Problems arising from privatization

The privatization reform of public utilities in Huizhou was made possible through the introduction of a competition mechanism and the dissolution of state monopoly, for which bus enterprises of different management modes were granted entry into the public transportation market. The reform, in turn, enabled public

⁷ The Maastricht criteria pertain to the five standards of convergence outlined in an agreement signed by EU member states in February 1992; the agreement mandates compliance with the standards for eligibility to adopt the euro. The influence of these criteria extends beyond the EU; for example, China's Ministry of Finance references the 3% limit when it plan its fiscal budget.

Fig. 2. Cycle of bus transit development in Chinese cities.

transportation enterprises to build a competitive but co-existent relationship. Nevertheless, the privatization process for city bus services was confronted with new problems.

After public transportation operations were privatized, service quality still failed to conform to the standards outlined in the expected development path. Most private enterprises earned lower-than-expected revenues, compelling them to reduce service quality in favor of guaranteed profits. Competition between bus companies was fierce and small-scale bus enterprises resorted to various illegal methods to earn high profits. Some bus companies added random stops to their routes to acquire more passengers, added surcharges to standard fares, and reduced hygiene and safety conditions to cut down on maintenance costs. Other operators violated their contracts with the government in significantly downgrading service quality.

From 2008 to 2010 (before the bus ownership reform), the changes and developments in the Huizhou public transportation system were tracked using the Huizhou e-government database. The data show that complaints regarding public transportation rank first among the top 4 major public complaints: public transportation services (795 cases), medical services (740 cases), social security (298 cases), and environmental pollution (297 cases). Within the 795 cases, the complaint messages that revolve around public transportation amount to 1756, among which the top 5 are as follows:

- (1) unreasonable layout of the bus network (637 complaints, 36.3%);
- (2) irregular service schedules and long waiting times (451 complaints, 25.7%);
- (3) high bus fares (202 complaints, 11.5%);
- (4) unsafe driving (119 complaints, 6.8%);
- (5) poor service attitude (95 complaints, 5.4%).

Ironically, the problems that had previously occurred under the state-controlled system recurred under the new scheme. According to Kingdon's MS model, such problems would affect national mood and may trigger new calls for reform. In Huizhou's case, the citizens have expressed strong dissatisfaction over the lack of government regulation and disorderly market competition after the privatization of public transportation services. Nonetheless, the feedback from citizens does not indicate or suggest the desire for ownership

change in the city's bus system. The final solution suggested by the government is a reconstructed ownership reform, not an improvement to the current operation mode. This direction was prompted by the unsuccessful policy interactions between policy-makers and market players.

5. Interaction between policymakers and enterprises

The stability of the policy stream depends on intellectual support because workforce composition (employees' level of education, competencies, etc.) significantly determines the concreteness and feasibility of formulated policy. Intellectual support also affects final policy outcomes. Without solid policy, problems will never be solved. Unfortunately, the academic structures of talent pools among the government departments in small and medium-sized cities are inferior to those in large cities. An example is neighboring Shenzhen, which is home to 55% of civil servants who possess bachelor's degrees or higher. By contrast, Huizhou's workforce is composed of less than 25% of such talents. In work units with strong professional requirements (e.g., transport planning), employees who hold bachelor's degrees or higher account for 80% of the workforce in Shenzhen, but in Huizhou, such employees account for less than 20% of the workforce.⁸ The difference in academic structures means that large cities can establish and own research institutions under local government departments and ministries; such research institutions are responsible for drafting important policies and always function as key actors in the government's policymaking process. In Huizhou, however, official transport organizations can perform only basic administrative functions and do not have their own decision-making departments. Most analysis and planning tasks are outsourced to research institutions or universities in other cities.

Mertha (2009) categorizes Chinese policy entrepreneurs into three groups: bureaucratic entrepreneurs who oppose existing policy, journalists in a liberal media environment, and NGOs. In Huizhou, these three do not significantly contribute to problem resolution through sound suggestions. As confirmed by our interviews, the Huizhou government and bus companies engage in inefficient policy interactions because of the bureaucratic system that prevents timely and effective responses to issues; most of the problems that arise from the privatization also remain unresolved.

5.1. Dynamics between the government and the state-owned enterprise

Although state-owned Huizhou Bus Company owns most of the bus lines and buses in the city, it was the only company that suffered losses. After the privatization of the city bus system, for-profit private bus companies preferred routes that span areas

Table 2
Selected economic data on China (1997–2001).

Year	1997	1998	1999	2000	2001
Actual GDP growth (%)	8.8	7.8	7.1	8.0	7.3
Fiscal expenditure growth (%)	16.3	16.9	22.1	20.5	18.6
Fiscal deficit growth (%)	10.0	58.4	89.1	42.9	−0.7
Ratio of fiscal expenditure to GDP	12.4	13.8	16.1	17.8	19.6
Ratio of fiscal deficit to GDP	0.8	1.2	2.1	2.8	2.6

Source: National Bureau of Statistics (2002).

⁸ These data were collected from the internal reports provided by our interviewees.

characterized by high population density (see Section 5.2). Nonetheless, routes with limited passenger traffic also require coverage to ensure adequate provision of services to the public, but such routes are plied primarily by the state-owned bus company. The cost of operating a single bus reaches 2000 yuan per day,⁹ but the daily average revenue of the Huizhou Bus Company is around 1500 yuan per bus. These figures translated to an annual loss of 13 million yuan in 2008 for the state-owned bus company.

To sustain service provision, the Huizhou Bus Company desperately needed government subsidies. However, it was granted only about 5 million yuan—funding that was devoted to compensating for reductions to gross revenue, such as fare discounts provided to students and free tickets for elderly people aged 65. The bus company did not obtain sufficient funding from the government, and a huge discrepancy on how subsidies should be allocated by the government existed.

Some of the officials we interviewed stated that the government regards such discrepancy as a product of the corruption scandal in the state-owned company in 2005. The Huizhou Bus Company applied for permission to raise the basic fare from 1 to 2 yuan in 2004, the reasons being the “substantial increase in operating costs, absence of compensation for the policy-induced losses, and heavy imbalance of expenditure and revenue.” Because of strong opposition from the public and anonymous letters from the company’s internal management department, the deputies of the NPC suggested an audit of the bus company (the first public auditing of China’s state-owned bus companies in medium-sized cities). The audit results astonished everyone: the company implemented two business modes, in which the rights to service profitable routes were illegally subcontracted as the company operated on only the loss-generating routes. Revenue reports were also falsified. The audit findings show that if the company had operated on all the routes under a unified financial reporting system, the profit rate of 2005 would have been as high as 45.61% under the applicable price increase scheme. Thus, the Standing Committee of the People’s Congress of Huizhou Municipality deemed the company as having no good reason to raise fare prices. The scandal embarrassed multiple parties, including the officials who received disciplinary sanctions. This event also drove the government to intentionally reduce the public transportation budget: on the one hand, the Financial Bureau and the NPC were not inclined to set an agenda for reviewing the subsidy requirements of the bus company; on the other hand, even when the subsidies were to be awarded, they were provided as compensation only for unconventional costs, which were not made known to the public.¹⁰

With the introduction of the “financial transparency movement”—a campaign for the truthful disclosure of financial information—the currently chaotic management of state-owned public transportation systems was confronted with serious social challenges.

5.2. Dynamics between the government and private enterprises

Unlike state-owned bus systems, privately managed bus companies earned substantial profits after the privatization. Private capital was initially infused into the transit system of Huizhou

through the exploitation of various political relations instead of through bidding—a practice that directly resulted in the difficult establishment of an effective supervision and exit mechanism.

Our investigation indicates that at the time, franchising was set up only as a simple service offering, for which a rough plan regarding departure frequency and route was formulated. The government failed to modify the requirements for franchising eligibility in accordance with traffic volume and road network conditions every other five years (the intervals at which contracts are renewed or extended). More surprisingly, no specific supervisory departments were allocated to the monitoring of service quality. On the one hand, the fiercely competing privately owned enterprises promoted the development of the Huizhou public transportation system; on the other hand, they caused numerous problems, such as cutthroat competition, disorder, and confusion. The privately owned public transportation companies aggressively competed for profitable routes and increased the number of buses devoted to these routes, leading to decreased deployment of buses to unpopular routes. To compete for passengers and increase profits, bus drivers usually travelled at high speeds and made additional stops. During holidays, the bus companies increased fares, but offered poor services (e.g., refusing to provide free rides to the elderly). Although residents frequently complained about these problems, officials of the Transportation Bureau treated the complaints as isolated cases; that is, they were regarded as criticisms and attempts to blame drivers, instead of reported to the superiors of private transportation companies for long-term resolution.

The private bus companies tended to require already overworked employees to render service under conditions that violate labor laws to minimize cost and increase profit. The absence of systematic operations management led to a lack of concern and ineffective supervision of drivers and conductors. Owing to the profit-oriented nature of these companies, employees were frequently underpaid. Consequently, incidents such as successive strikes occurred in many bus companies.¹¹ Underpayment also caused high employee turnover (30% for most of the bus companies in Huizhou) and insufficient training, as well as forced staff to render overtime work because of the lack of employees. Such conditions caused serious safety problems. On 23 June 2009, Li Guoqing, the driver of bus 889 of Chengtong Company, recklessly drove for 7 km in the downtown area of Huizhou to express his dissatisfaction with excessive work hours—an incident that resulted in 4 deaths, 80 injuries, and 28 vehicle collisions.¹² This traumatic incident was the consequence of poor administrative management.

In their desire to avoid tax payments and pursue preferential policies, managers were unwilling to implement authentic disclosure of business data and business performance. A more disturbing issue is that the false business data typically misled the planning and design departments, which underestimated traffic volume in many newly built roads.

Given that the private companies were negligently monitored and evaluated, the traffic departments in Huizhou failed to effectively supervise such companies in terms of the following aspects:

- (1) safety inspection for private transportation enterprises;
- (2) hiring and management of drivers, training and testing, and dynamic tracking of drivers of medium-sized and large buses;

⁹ In terms of operations cost, our investigation reveals that the daily average is constituted by the following expenses: ~600 yuan for the labor cost of drivers and crew members, 1200 yuan for diesel, 165 yuan for depreciation, 150 yuan for maintenance costs, ~6% of the daily operations revenue for company management costs, and 3% business tax.

¹⁰ One example is the provision of billions in funding for the bus company to purchase new energy vehicles. A proportion of the sales generated serves as commission fee. The bus company used these commissions to maintain operations.

¹¹ The representative is Taihu Company, whose employees went on two large-scale strikes in September 2009 and May 2010. In May 2010, all the drivers and conductors collectively resigned because they were dissatisfied with their salaries. As a result, about 60,000 regular passengers taking the lines had no buses to take.

¹² See <http://english.sina.com/china/p/2009/0624/250745.html>.

- (3) road management, night traffic management, and measures for preventing fatigue during driving;
- (4) customer-friendly services.

Among the other problems that gave rise to the aforementioned deficiencies were the absence of clear guidelines for identifying weaknesses in capabilities, the local government's unwillingness to bear the risk that accompanies a shift from the status quo, and decision makers' reluctance to deviate from traditional yet ineffective practices (Johnson et al., 1993).

6. How the reform was introduced into policy agenda

The shift from diversified private ownership to state control in Huizhou was heavily driven by a single force, revealed in our interviews as the vertical intervention from upper-level government. Contrary to typical practice, however, the central government did not intervene; rather, the provincial government did.

Vertical intervention models introduce a powerful government as the third party that holds a hierarchical position superior to those of innovating and learning local governments. Upper-level governments may publicize and accelerate the approval of policy innovations; approval rapidly goes from one subordinate government to others through mandates, including administrative regulations and incentive policies (Berry and Berry, 2007).

Public transportation systems are oriented toward public service, a feature that inescapably dictates government responsibility in the development of public transportation schemes. The experts whom we interviewed indicate that government jurisdiction covers at least four areas:

- (1) the orientation of public transportation development, especially the specification of the roles and functions of public transportation;
- (2) the formulation of laws and regulations, as well as macro policies on public transportation development;
- (3) the adjustment and integration of public transportation management systems and mechanisms; and
- (4) the formulation of mechanisms for the funding and financial subsidies required for public transportation development.

Despite a clear-cut definition of areas of responsibility, however, most local governments in China accomplish only the first and second tasks. Many cities lag behind in adjusting and integrating public transportation management systems and mechanisms, as well as fail to implement specific management and assessment mechanisms. In 1986, China put forward a policy stipulating that "metropolises should give priority to public transportation with harmonious development of various vehicles"; the government clearly emphasized that developing public transportation takes top priority given that it is the primary solution to urban traffic problems (Li, 2001). Nonetheless, the rapid development of the automobile industry since the mid-1990s gave rise to a strategic orientation more distinct than public transportation: automobile consumption as the foundation of the car industry, with private consumption as the key component of industry development. In 2004, the Ministry of Construction issued the "Opinions on Priority to Develop Urban Public Transportation" (City Construction No. 38); at the national level, this set of recommendations was the first initiative on proposing public transportation as a social welfare measure related to national economic progress and livelihood improvement (Deng et al., 2013). In 2007, the Legislative Affairs Office of the State Council solicited suggestions on urban public transportation regulations; at the legislative level, such solicitation was the first effort at clarifying the public interest nature of China's

public transportation systems. Given the lack of specific operating strategies and assessment goals, the aforementioned regulations impose minimal constraints on public transportation institutions.

A distinct characteristic of China's reform of its economic system is the relationship between the central and subordinate governments. The central government's assessment of local governments focuses mainly on economic indicators; that is, indicators such as employment and increases in tax revenue reflect the political performance of a local government. In other words, the central government assumes that economic growth in one area translates to improvements in public administrative performance when in fact, the two do not exhibit a positive relationship. Although the Chinese government drafted a clear goal for equalizing public service after 2006 (Feng, 2011) (i.e., realize social justice and resolve the contradictions of social welfare), the coverage and standards of equalization were not uniformly defined until July 2012.

Our interviews also confirm that the vertical intervention from the central government was minimal and exerted no influence on the public transportation systems for a long period. As a deviation from the norm, Guangdong Province tentatively delineated the definition and scope of basic public service equalization and the roles of urban public transportation in 2009. The Guangdong government indicated that equalization should, overall, "establish the dominant status of public transportation in the urban traffic system. By 2011, for every 10,000 people, megalopolises and large cities should have at least 15 buses, or equivalently, 10 buses in small and medium-sized cities. The public transportation in megalopolises and large cities service more than 35% of travel, or equivalently, more than 25% in medium-sized cities and more than 20% in small cities. The bus speed in rapid transit routes and ordinary routes should be greater than 25 and 20 km/h, respectively..."¹³

The goal set by Guangdong has, however, exerted great pressure on the Huizhou government. Some of the interviewees expressed their doubts about how the goal was established. In 2009, the bus system in Huizhou was characterized by a modal split of only 7.5%, and for every 10,000 individuals, 7 buses were available (Statistical Bureau of Huizhou, 2010).

The Guangdong provincial government said that it will include the equalization of basic public services as a criterion in the government performance assessment. At the same time, it may introduce an external assessment system. After decomposing the targets into specific individual goals, the Huizhou government was compelled to, at the least, double the number of buses by buying more units and increase the modal split of the bus system by frequently providing services at an increasing rate. Private companies cannot devote funds to such actions without additional government financial support. Thus, only the state-owned company can operate on the new routes. Meanwhile, improving the travel share of public buses necessitates reducing fares, another feature that private bus companies cannot accommodate. The government recognized that realizing these goals by 2011 is impossible, but it was determined to at least move toward the goals. The interviewees suggested that coordination and planning be entrusted to the Huizhou Bus Company.

7. Discussion

Using the MS framework, we analyze the process by which the mandate to shift from diversified private ownership to a state-controlled market was adopted. We phrase the discussion in terms of the three streams indicated in Kingdon's model.

¹³ The document is in Chinese and the full version is posted online. See http://zwgk.gd.gov.cn/006939748/200912/t20091214_11575.html.

Problem stream: The inefficiency of Huizhou's transit service has caused many unexpected problems, including high fares, irregular operations, low service quality, and high accident rates. The Huizhou Bus Company had been grappling with these problems before the privatization reform, yet the challenges remain unresolved. The failure to resolve such problems in the past 10 years exacerbated the inferior status of the city's public transportation system.

Policy stream: The policy debate over bus transit management has long been an issue after the privatization. The bureaucratic system prevents the resolution of the problems encountered by private companies because (1) the dominant market player has strong political connections, enabling it to acquire contracts; and because (2) the bureaucratic system hinders effective operations monitoring and performance evaluation given the lack of political will and intellectual support.

Politics stream: China's central government never imposed strong constraints on the manner by which public transit systems are developed. Its long-standing position is to encourage privatized companies to participate in system development and operations in the public sector. Nevertheless, the evaluation system set by the Guangdong government is a concern. The guidelines do not comprehensively cover privatization or nationalization issues, but outline only some bus system evaluation indicators (i.e., number of buses, modal split of bus service). Huizhou's officials believe they cannot satisfy the standards delineated by the indicators under the current market structure.

The streams in the MS framework are not fully independent, but periodically intertwined. In Huizhou's case, these three streams intersected in 2010. The bill that stipulated the shift from diversified private ownership to state control was approved by the executive committee of the Huizhou Government in late 2011. Given that the government and the transportation companies engaged in inefficient interactions, no major policy breakthrough was made before the reform. Nevertheless, the bus 889 incident and the public service equalization target put forward by Guangdong accelerated the reform.

Private companies encounter problems when they undertake public welfare projects. For example, the public interest nature of such initiatives causes policy-induced losses, leading to the low infusion of private capital. Despite these challenges, the criticality of shifting back to state control in managing bus systems is debatable. The resultant monopoly may form a scale economy, minimize disorderly competition, and encourage repeat investment, but it can also cause low efficiency, promote bureaucratic management, and suppress innovation. We believe that neither state ownership nor private operation is the key problem.

On the basis of our findings, we conclude that the challenges to Huizhou's public transportation development may be overcome with a three-pronged approach: (1) The Huizhou Transportation Bureau should form a dedicated research body that will conduct comprehensive investigations into and analyses of the previous and current challenges faced by the city. Effective planning and implementation are, first and foremost, grounded on solid foundation. In-depth examinations enable the accurate identification of the key obstacles that impede progress in reforming Huizhou's transportation landscape. (2) Existing resources should be evaluated to determine which can be maximized—a task that can translate to savings because unnecessary investment into new divisions will be prevented. At the same time, the Huizhou government should consider investing in important resources, among which talented researchers and planners are a crucial need. (3) Finally, an effective incentive scheme for transport employees should be in place. Manpower is one of the most significant drivers

of any project, especially one that requires long-term monitoring and confronted with a spate of obstacles.

Huizhou's traditional public transport planning substantially centers on programming road facilities. The focal points are the development of transport capacity and the site configuration of transport facilities, but the necessary supply and demand analysis and quantitative investigation are disregarded in the process. An inherent defect therefore exists in Huizhou's strategy for developing public transport.

Similar to other small and medium-sized cities, Huizhou lacks a talented workforce and feasible schemes for public transport planning and management. Thus, the “investment-valued, management-despised” approach has persisted, in which huge investments in upgrading vehicles are emphasized, whereas the routinization and standardization of internal management are neglected. Moreover, the management system of the city is incomplete. Existing rules and regulations inadequately satisfy the general needs of the development of a public transport unit. This condition enables the proliferation of insufficient ideas for the management system. Finally, the guarantee and incentive mechanism in the city is unstable, with internal management failing to motivate staff participation to the highest degree. Encouraging involvement necessitates a solid guarantee and incentive mechanism for high-performing employees.

In the reform of Huizhou's public transportation system, much attention has been directed to mode of ownership; that is, whether business jurisdiction over the system should be assigned to private companies or state-owned firms. The MS framework shows that similar to how the problem, policy, and politics converge, many factors figure importantly in the resolution of Huizhou's transportation issues. Resolving ownership mode in isolation will only serve as a superficial solution. As in any other developmental issue, all areas that potentially influence progress should be thoroughly encompassed in problem identification, solution formulation, and policy implementation.

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