Urban Greenway System 城市绿道系统 优化设计 Optimum Design

交通与发展政策研究所(中国办公室) 编著



Institute for Transportation & Development Policy (ITDP-China)

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我非常荣幸向大家介绍《城市绿道系统优化设计》这本书。中国绿道建设始于广东,2010年开始在全国范围内得以迅速推广。兴建绿道的城市从最初广东省珠三角地区9个城市到现在北京、河北、福建等地区的六十多个城市。绿道的建设倡导了"绿色出行,低碳生活"的新生活理念,不但极大的改善了居民的生活质量,还给市民提供了舒适便捷的出行方式。尽管绿道发展在国内取得了巨大的成绩,但在"连通、连续、隔离、可达、服务"等方面的设计却普遍存在人性化设计缺失的问题,完善以上五个方面设计是保证绿道设计高品质的关键因素。

交通与发展政策研究所(Institute for Transportation and Development Policy, 简称 ITDP)成立于 1985 年,总部位于纽约,是一家非营利机构,其宗旨是推广在环境、经济、社会方面可持续发展的交通政策,并支持示范性交通运输方案,致力于公共交通(尤其是大运量公交系统)和非机动交通工具的推广、交通需求管理,以及土地利用规划的改善等。

ITDP 近二十年来一直致力于绿道和慢行系统的研究及相关项目设计,拥有世界顶级的绿道专家团队。绿道在中国发展伊始,ITDP 第一时间就介入到其规划、设计和建设进程中。在过去的几年里,ITDP 一直致力于高品质绿道的设计,基于广州、东莞、惠州、天津、北京、武汉、宜昌等城市的实际情况,结合 ITDP 团队的国际绿道规划、

I am very pleased to introduce the book, *Urban Greenway System Optimum Design*. The construction of greenways in China originated from Guangdong and expanded rapidly in China since 2010. The first parts of cities with greenways constructed in China were the nine cities in the Pearl River Delta, Guangdong Province. More greenways were later built in Beijing and more than 60 cities in other provinces including Hebei and Fujian. Greenway construction, when done well, has the potential to not only greatly improve residents' quality of life, but also to put into practice the new concept of "green travel, low carbon life", providing a safe and convenient way to travel. Despite the rapid expansion of greenway construction in China, however, there are many common design problems relating to connection, continuity, separation accessibility and services. These are key areas of greenway performance, and improvements are needed as key factors to ensure high quality greenway designs.

The Institute for Transportation and Development Policy (ITDP) was founded in 1985 and had been headquartered in New York. IDTP is a non-profit organization whose purpose is to promote environmental, economic and social aspects of sustainable transport policies and support exemplary transport programs. ITDP dedicates itself to public transport (particularly mass transit systems), the promotion of non-motorized transport, transportation demand management, and improvement of land-use planning.

ITDP has carried out greenways and NMT research and project design for 20 years. Now ITDP has a world-class greenway expert team. As soon as the construction of greenways began in China, ITDP was involved in the design, planning and construction process. In the past few years, ITDP has been committed to enhancing good greenway design and planning in Chinese cities including Guangzhou, Dongguan, Huizhou, Tianjin, Beijing, Wuhan and Yichang drawing from local and international experts. This research includes development of urban greenway planning and design principles in several cities. ITDP hopes that these efforts will help in the process of greenway construction in China in the future.

ITDP's work is not only about the construction of greenways, but is also committed to

Preface

设计及建设经验,提出了适合中国城市发展 的绿道规划与设计准则,希望对未来中国绿 道的建设有所助益。

ITDP 的工作不仅限于绿道的建设,也致力 于推动可持续交通在全球的发展。ITDP 在 世界银行、欧洲复兴开发银行、亚洲开发银 行定位城市交通政策时扮演着重要的角色, 在联合国可持续发展委员会制定交通部分策 略方面也发挥了重要的作用,并编写了联合 国发展计划署的交通政策。2010年3月, ITDP 在广州合法注册了广州市现代快速公 交和可持续交通研究所,推动中国城市可持 续发展的交通模式发展。目前 ITDP 已经与 广州、兰州、天津、武汉、哈尔滨、宜昌等 城市签订了合作备忘录,为他们的可持续交 通项目(BRT、NMT、绿道、公共自行车 和停车管理等)提供技术支持,其中广州及 宜昌 BRT 交通走廊结合绿道的规划、设计 及建设分别荣获多项国际大奖, 也期待着未 来更多的城市能够取得类似的成功。

> 卡尔·费 ITDP 东亚及东南亚区域负责人

promoting the development of sustainable transport around the world. ITDP plays an important role when the World Bank, the European Bank for Reconstruction and the Asian Development Bank set their urban transport policy. In addition, at the United Nations Commission on Sustainable Development, ITDP plays an important role in the strategy, and edits the transport policies of the United Nations Development Programme. In March 2010 ITDP was registered in China as the Guangzhou Modern BRT and Sustainable Transport Institute, in order to promote sustainable modes of transport and urban development. ITDP has signed cooperation memoranda with the cities of Guangzhou, Lanzhou, Tianjin, Wuhan, Harbin and Yichang, so that ITDP can provide technical support while these cities continue their traffic projects in areas of BRT,NMT, greenways, bike sharing and parking management. The Guangzhou and Yichang BRT corridors planned with key inputs from ITDP, which both include greenway components, have received major international prizes. ITDP looks forward to having the chance to achieve similar successes in more cities in the future.

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Karl Fjellstrom Regional Director, East & Southeast Asia, ITDP

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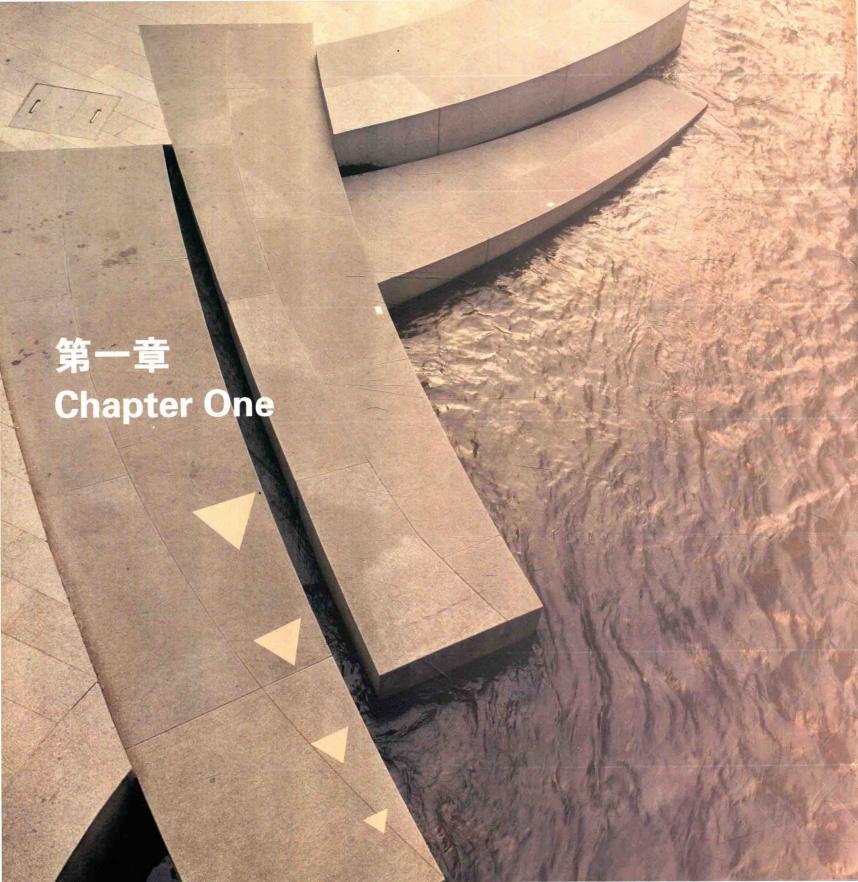
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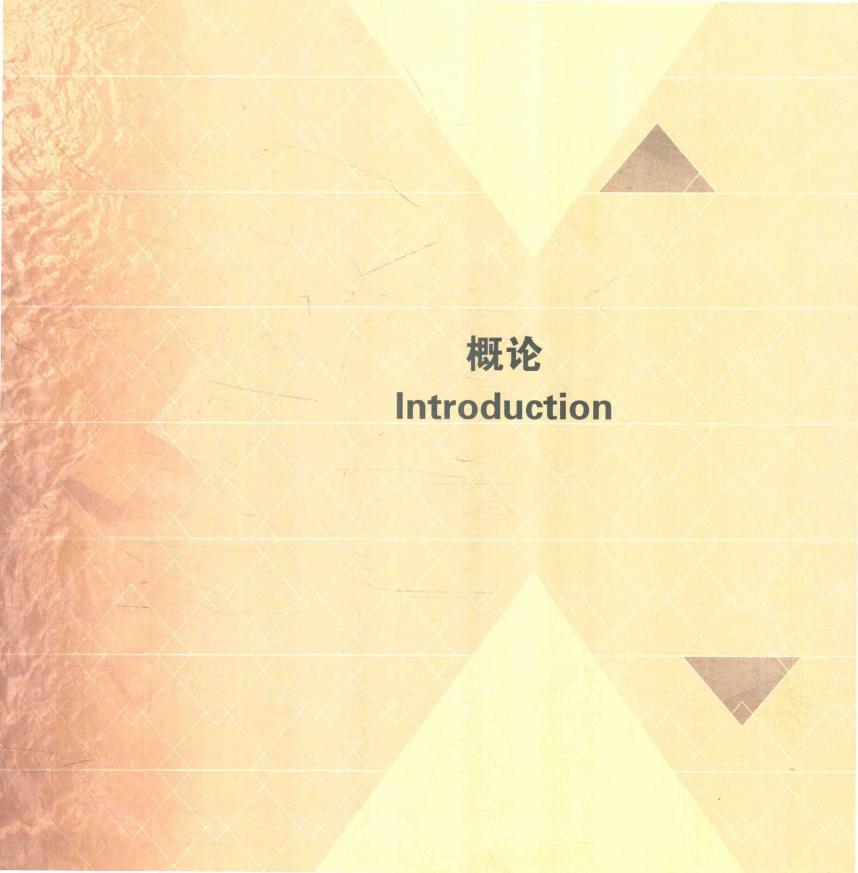
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Chapter One

绿道的发展史

Development History of Green

世界上第一条真正意义的绿道始建于 1867 年,是 Frederick Law Olmsted 设计的美国波士顿公园绿道。而 1996 年制定完成的《泛欧生态和景观多样性战略》,为欧洲各国协调绿道规划建设提供了基础性框架。经过一个多世纪的理论探索与建设实践,特别是 20世纪 80 年代绿道得名以来,建设绿道成为一个国际运动,在全世界蓬勃发展,世界上有数千个国际、国家和区域层次的绿道项目。绿道系统的规划建设也逐渐成熟和完善,并成为世界各国解决生态环保问题和提高居民生活质量的重要手段。目前,主要发达国家基本上都进行了城市绿道系统建设。

The world's first greenway was constructed in 1867. It was the Boston Public Garden greenway in the United States, designed by Frederick Law Olmsted. *The Pan– European Biological and Landscape Diversity Strategy,* made in 1996 provided a fundamental framework for the greenway construction in various European countries. After one century's theoretical research and constructive practice, especially after the definition of greenway in 1980s, greenway has become an international movement and is developed in fast speed. The world has thousands international, national and regional greenways. The construction of greenway system gradually become mature and improved. It has become a significant measure to enhance civilian's living standard and to solve the ecological and environmental issues.

中国的绿道建设起步较晚。2010年,广东省批准《珠江三角洲绿道网总体规划纲要》,在此规划里国内第一次出现了绿道的定义,开始了中国绿道的建设步伐。广东省最早的绿道建设主要为景观类绿道的建设,大部分绿道设置在实施条件较好的城市外围地区。这些绿道在投入使用后出现了一个难以回避的问题:尽管拥有高质量的绿道,但是由于绿道距离社区过远,居民到达不便,导致绿道使用率偏低。而在市区内部距离社区较近的绿道却很受市民欢迎。

The greenway construction in China was carried out in a late start. In China, the construction of greenway started after *The Pearl River Delta Greenway Network Master Plan Outline*, which was sanctioned by Guangdong province in 2010. The beginning of greenway construction in Guangdong

