


# Freight Mobility & Intermodal Connectivity

## China Scan

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中国

And now a word from our sponsors:

# The International Technology Scanning Program

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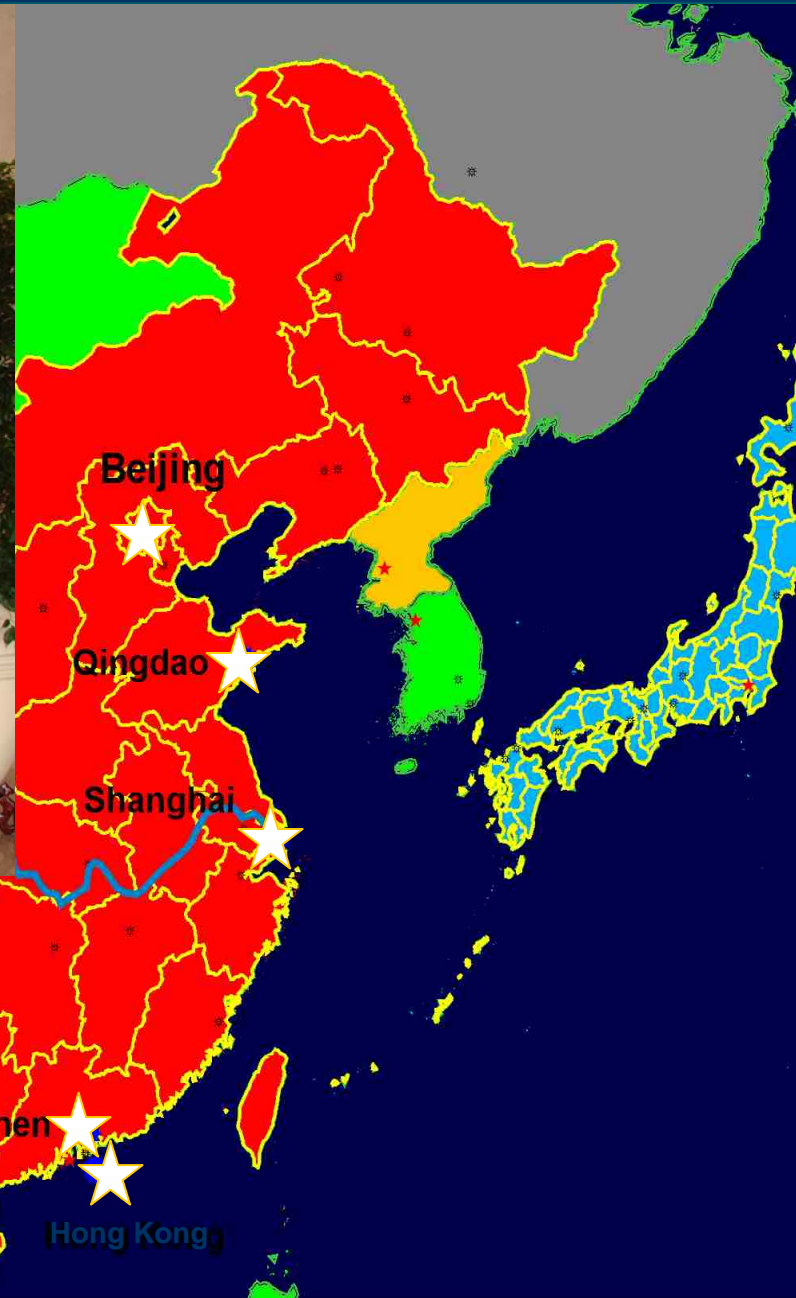


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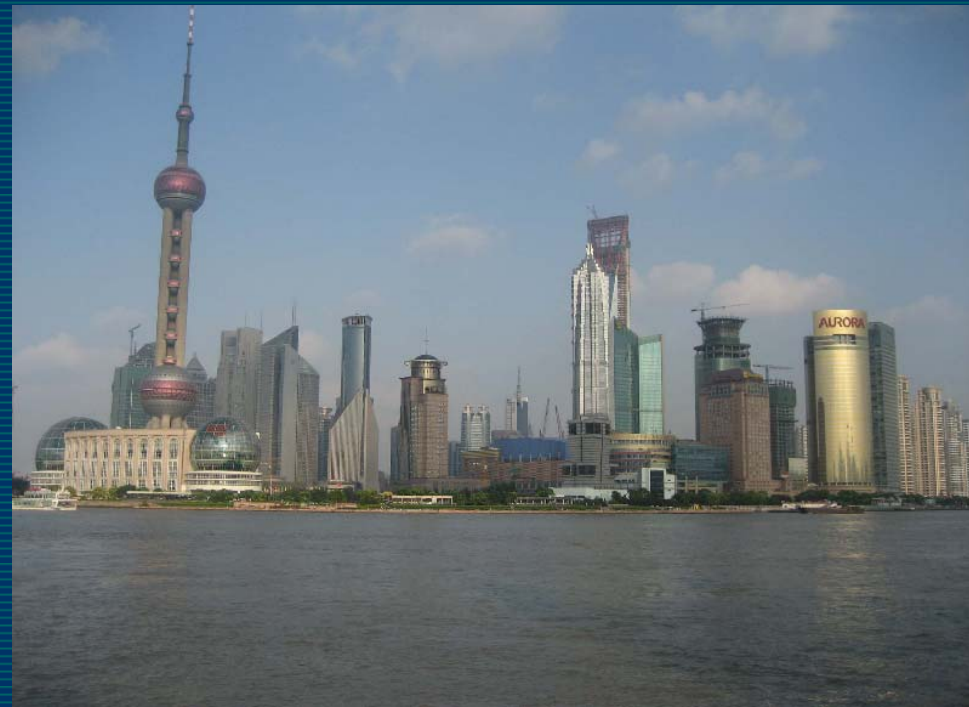
In cooperation with NCHRP

# WHO WE ARE & THE SITES WE VISITED...



# WHAT WE FOUND....

Everything you've heard about China's explosive growth and massive infrastructure investment is true.



100 cities w/1M+ people

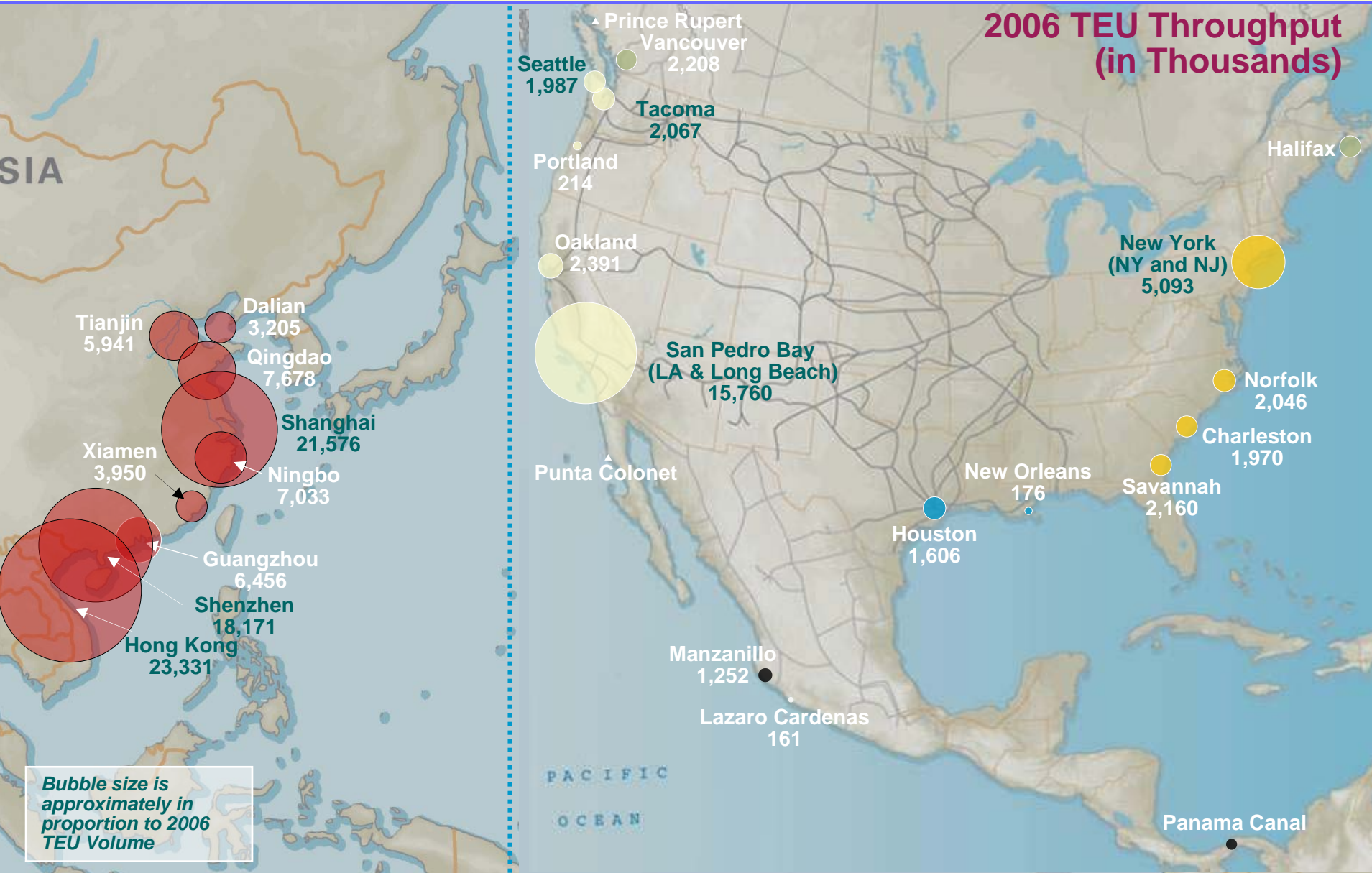
# SOME FACTS....

- 10.5% annual GDP growth (2002-2006)

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  - China will invest 9% of GDP for new infrastructure through 2011
  - 4 of top 10 highest volume container ports are in China
  - 35M personal vehicles (2005) – 100M by 2020
  - 52,000 mile national expressway (interstate) system planned (41% complete)
  - Logistics costs are high – 21% of GNP (versus 10% for U.S.).
  - Average trucking firm size – 1½ trucks.
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# CHINA & US MAJOR PORT CAPACITY



# RAIL SYSTEM



# 2010 INTER-CITY EXPRESSWAY NETWORK

## 国家高速公路网布局方案



# SIGNIFICANT TRANSFORMATIONAL DRIVERS

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- Substantial urbanization (west to east; rural to urban)
  - Government policy to foster growth in western provinces (in addition to coastal provinces)
  - Government focus on jobs and economic opportunity
  - Rapid growth in private investment (but still strong governmental equity role)
  - Rise in environmental concerns
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# SYSTEM INVESTMENT APPROACH

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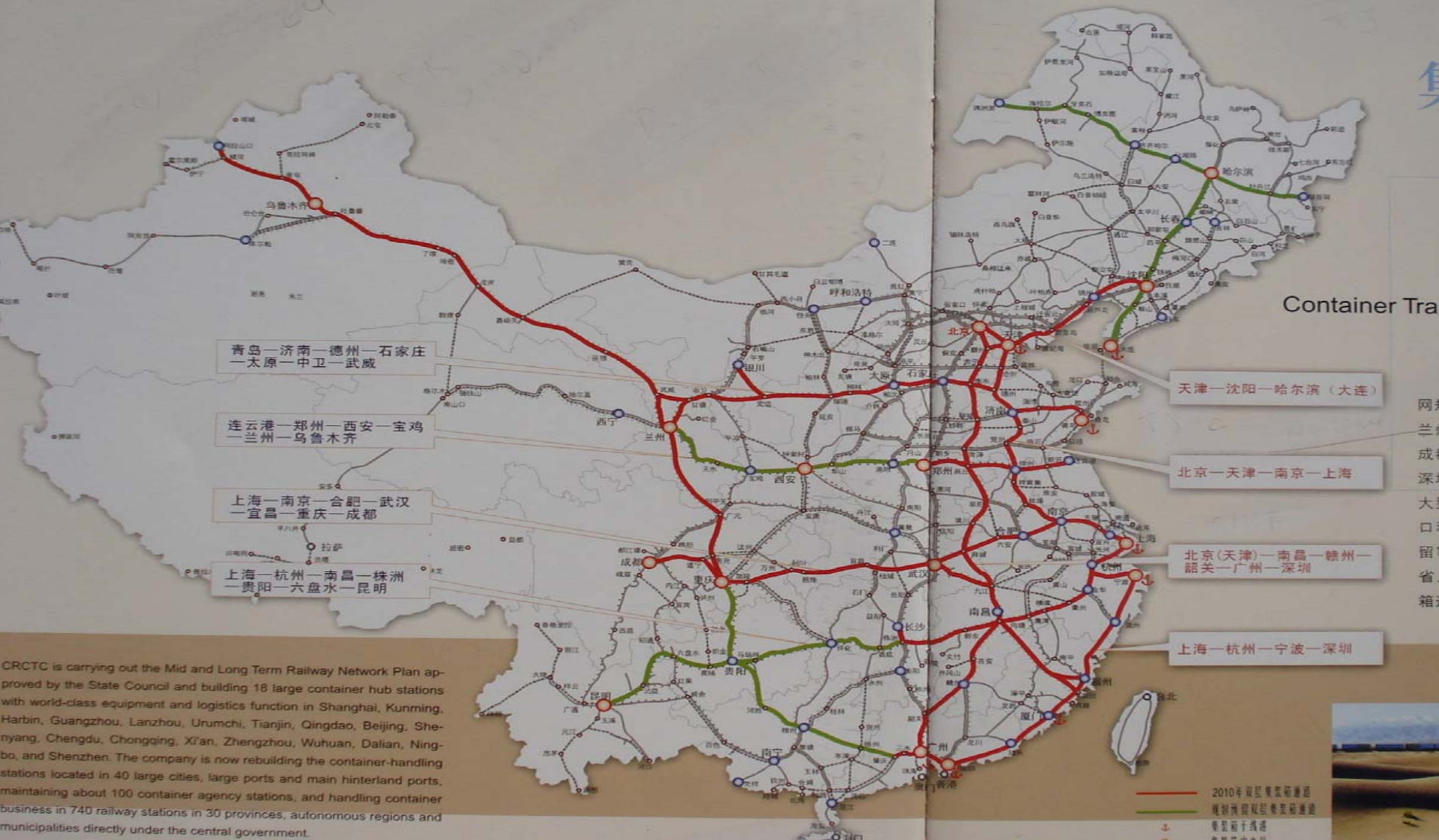
- Government at all levels generally view transportation investment as an economic development strategy.
  - Investment often occurs in anticipation of demand, that is, before it exists.
  - Bottlenecks are viewed as losses in system efficiency and are targeted for investment.
  - Projects are developed rapidly.
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# OBSERVATIONS

- o No appreciable difference in how landside access and intermodal connectivity is being developed.
- o National strategic plan – provincial/local implementation
- o Use geography to maximum extent
- o Results v. Process oriented
- o Government planning drives business investment
- o 90% of exports manufactured in coastal provinces (500 km of the coast)
- o Trucking immature / CFS
- o Government's not here to do 'popular things' – courage.
- o Intergovernmental cooperation is limited. Private sector participation at strategic level is absent.

# INTERMODAL RAIL

## Layout of Railway Container Transport Stations and Yards



CRCTC is carrying out the Mid and Long Term Railway Network Plan approved by the State Council and building 18 large container hub stations with world-class equipment and logistics function in Shanghai, Kunming, Harbin, Guangzhou, Lanzhou, Urumchi, Tianjin, Qingdao, Beijing, Shenyang, Chengdu, Chongqing, Xi'an, Zhengzhou, Wuhuan, Dalian, Ningbo, and Shenzhen. The company is now rebuilding the container-handling stations located in 40 large cities, large ports and main hinterland ports, maintaining about 100 container agency stations, and handling container business in 740 railway stations in 30 provinces, autonomous regions and municipalities directly under the central government.

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# YANGSHAN, SHANGHAI



# LINGDANG, SHANGHAI



15 Miles

300 SQ KM

12 Miles

SITE  
物流园区

Dishui Lake  
滴水湖

Introduction

ProLogis P

Shangha

Lingan

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To East Sea Bridge 东海大桥

# TAKEAWAYS

- Can't dismiss achievements due to political structure.
    - “He'll be playing me and I'll be playing pool.”
  - Transportation = economic development
  - National Strategy - Strategic Investment
    - Objectives / performance measures
  - Public Private Partnership (driven by the public)
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# IMPLEMENTATION PLAN

- **Reviving a National Focus**

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- **Evolution of Access to Yantian** (dedicated truck lanes)
- **Understanding China's Performance Measures** (development & management)
- **Vessel Bunching Study**
- **Three Scan Study – Lessons Learned Synthesis**
- **Exchange**
  - US – China data exchange program
  - OS/OW CMV management
  - Trucking Information Management System

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谢谢

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