Traffic Development in Guangzhou

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1 Road Traffic

1.1 Traffic Situation

- GZ, China National Central City, hub of the Pearl River Delta, capital of GD Province.
- In 2015, 2.504 million motor vehicles, 75.7% cars (1.887 million).
- Evening peak period: car speed in CBD drops by 55% from 22.5km/h to 21.2km/h.
- Traffic demand exceeds supply. Insufficient parking spaces (about 650 thousand, 26% of total car number).
1.2 Present Road Network

- 2 ring roads, 1 semicircular expressway, 17 radial roads, 7 access roads.
- A total of 4505km arterial roads within GZ boundary (express way & fast roads: 1067km, trunk roads: 3438km).
1.3 Present Inter-Province Corridors

- 7 transport corridors linking GZ with other provinces via National or Provincial expressways.
1.4 Traffic Flow Growth

In 2015, the day time 12-hour inbound and outbound traffic flow volume on the roads between GZ & other Delta Regional cities is about 1.207 million standard unit cars, an increase of 9.8% over the previous year, a growth margin bigger than 6.3% of 2014.
2 Public Transportation

2.1 Present Rail Traffic

- 9 metro lines, 266km, ranking 3rd of China, longer than HK & Singapore metro mileage, annual passenger volume 2.05 billion person trips (daily average 6 million person trips).
- 11 lines/sections under construction, 303km. 15 lines to be completed in 2018 with a total length of 564km.
2.2 Multi-level Public Transport Systems

Multi-level Public Transport Systems: regular bus, BRT, modern tram car, customized shuttle bus...
Public Transportation

Haizhu Tram Car
2.3) BRT

BRT on Zhongshan Avenue:

- Largest Asian BRT Single Line Passenger Carrying Volume:
  800 thousand person trip/day.
- BRT Speed: 12.5km/h $\rightarrow$ 23km/h (84%)
- Other Car Speed: 18km/h $\rightarrow$ 23km/h (28%)
3 Traffic Management

3.1 Government Policy

(i) Planning & Construction: regulate urban function & population; improve traffic infrastructure.

(ii) Service Enhancement: enhance traffic service functions, raise traffic operation efficiency.

(iii) Management Reinforcement: strengthen traffic administration and on-the-side direction, exercise traffic congestion rectification.

(iv) Demand Regulation: combined regulation & control measures for sustainable development.
3.2 Intelligent Transport System Development

- 1 center, 2 platforms, 2 networks, 15 subsystems. System & facility are developing into a mature stage: SCATS (imported in 1990s), Traffic Command Center (open in 1993), GZ-ITMS (established in 2006), ITS expanded from signaling to many traffic aspects.
3.3 ITS application

GZ JINGMINTONG (Police-Civilian Communication) Go Easy App
GZ XINGXUNTONG (Trip Info Communication) App
3.4 ITS Development Plan

Development Planning Guidelines for GZ ITS in the 12th five-year Plan Period

GZ ITS Development Plan (2011-2015)
Conclusion

4.1 New Traffic Momentum:

New trip mode (Uber, Dididache-Ridesharing Taxi-hailing); diversified traffic participants & social investors; more service focus on client experience; intelligent traffic as crucial element for building GZ into a smart city

- We should have:
- Higher Efficient Management Mechanism;
- More Open Management Philosophy;
- More Humanized Management Interface;
- More Advanced Management Means.
Conclusion

The Development Vision:
Automatically Detecting Traffic Congestion.
Proactively Regulating Traffic Control.
Fast & Accurate Law Enforcement.
Proactively Identifying Traffic Accidents.
Fair & Transparent Police Administration.
Standardized & Efficient Facility Maintenance.
Whole-Trip Public Service.
Online Business Handling Available At Home.
The end