



CIL

CENTER FOR INNOVATIVE LOGISTICS

Association with



An Overview of Mega City Logistics

**Case Study: CP ALL's 7-ELEVEn
Bangkok, Thailand**

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Fast Facts: *Bangkok*

Area

- City 1,568.737 km² (605.693 mi²)
- Metro* 7,761.6 km² (2,996.8 mi²)

Population (2010 census)

- City 8,280,925 (or 12.6% of Thailand's population)
- Density 5,300/ km² (14,000/ mi²)
- Metro 14,565,547 (or 22.2%)
- **Metro Density 1,900/ km² (4,900/ mi²)**

* *Bangkok Metropolitan Region includes some areas of the other 6 provinces*





Fast Facts:

CP ALL Public Company Limited

- Established in June 1, 1989 (under CP Group: CPF, TRUE, CP ALL)
- **7,663** Stores (updated April 2nd, 2014); **3rd largest of the world**
- Average annual growth **550** stores/year (expected to 10,000 in 2019)
- Average 1,400 customers/store/day (> 7 Millions/day)
- More than 140,000 employees
- 3 DCs and Chilled DCs supporting East and West areas of Bangkok





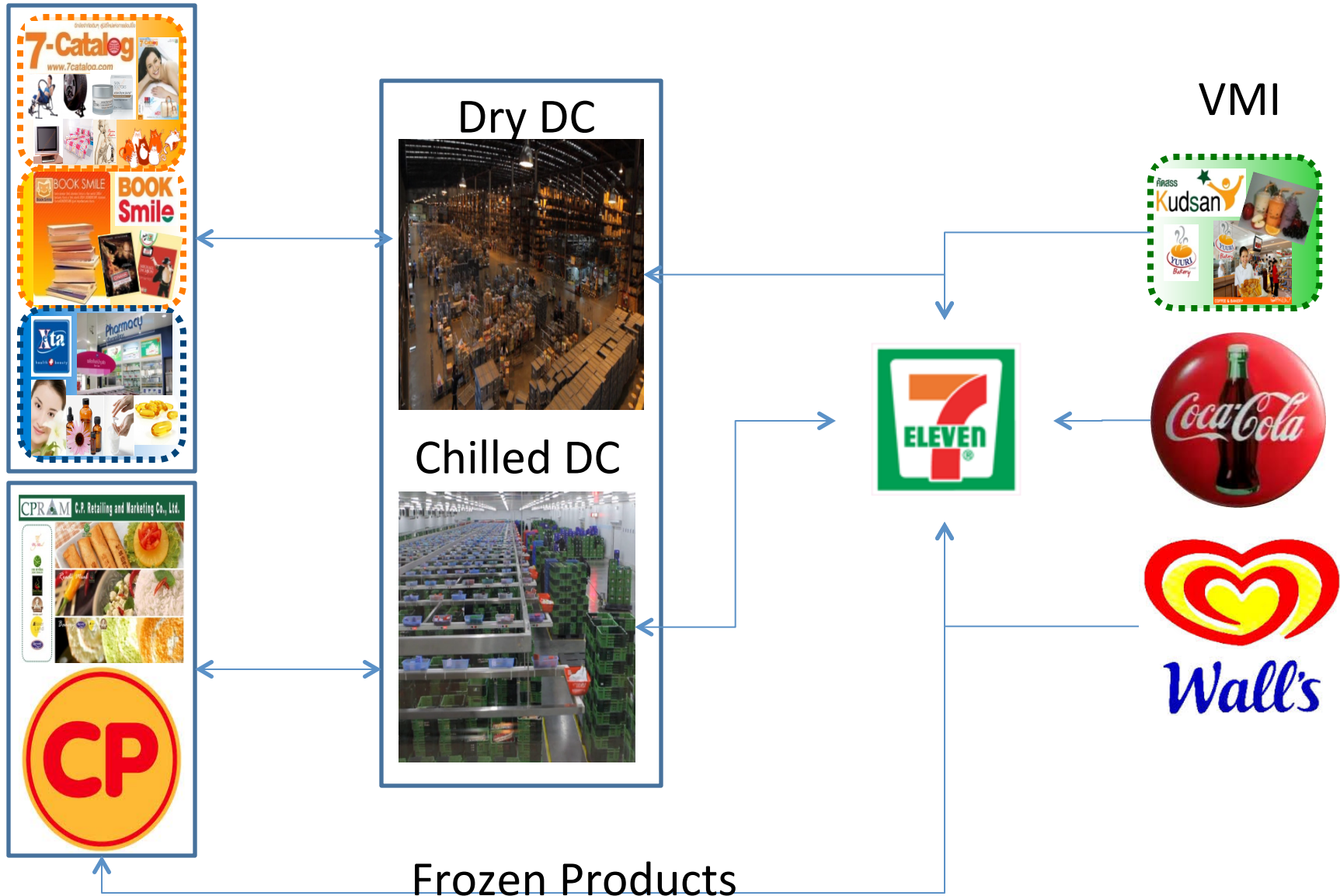
"Part of Thai Life"



7-ELEVEN



Supply Chain Network



Quick Info: *DCs and CDCs*

	East DC			East CDC			
Ordering period	3 days	5 days	6 days	3 days	4 days	6 days	7 days
# Stores	116	2	1325	647	182	255	34

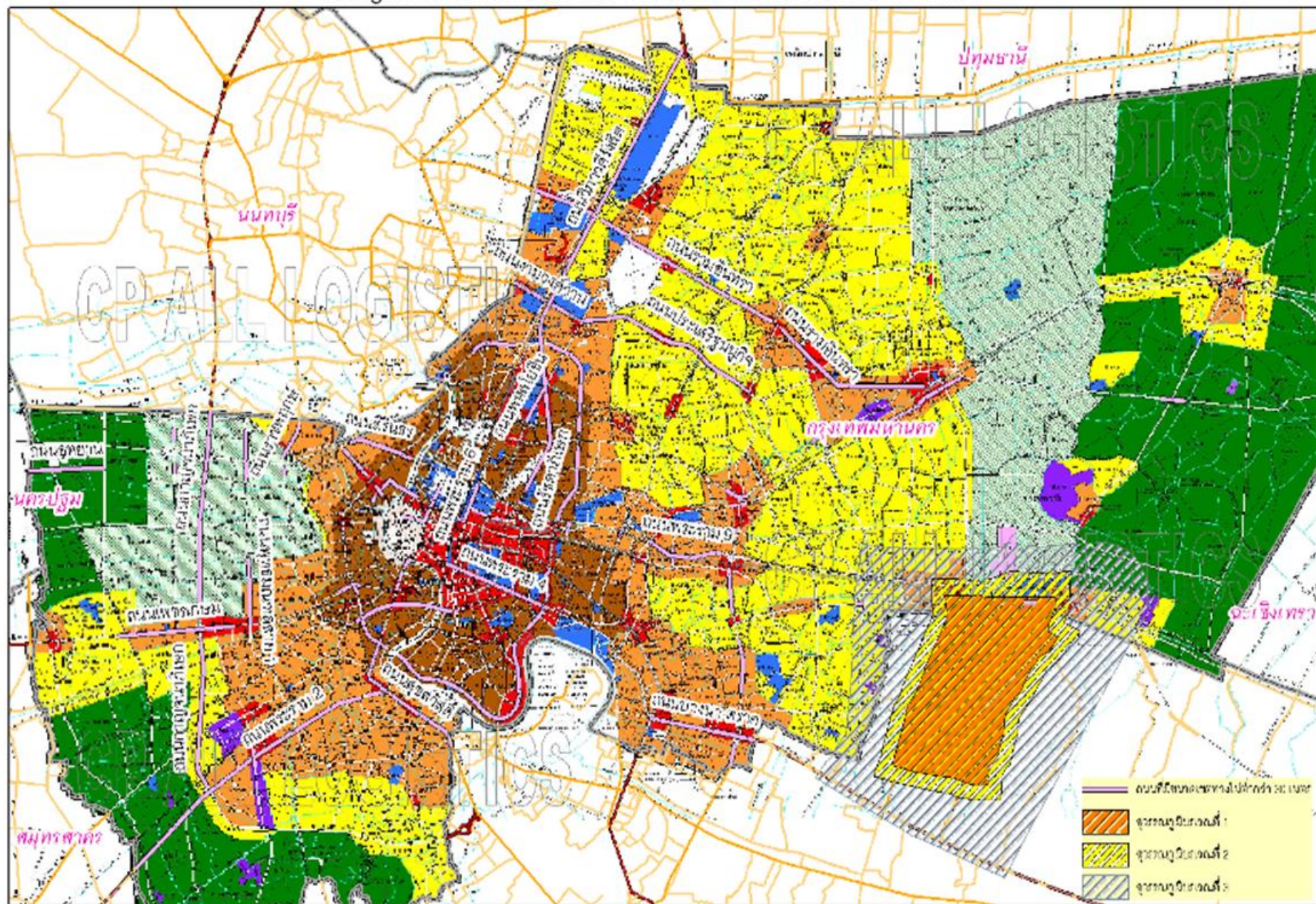
	West DC		West CDC			
Ordering period	5 days	6 days	3 days	4 days	6 days	7 days
# Stores	1	1598	863	217	238	481

	DCMC		DCMC
Ordering period	7 days	3 days	7 days
# Stores	273	343	238

Total **1,699** vehicles or **3,592** trips per day to serve:

- 2,139 stores in Bangkok
- 1,176 stores in Suburbs of Bangkok

Bangkok Roads with the Width of 30 Meters or Greater



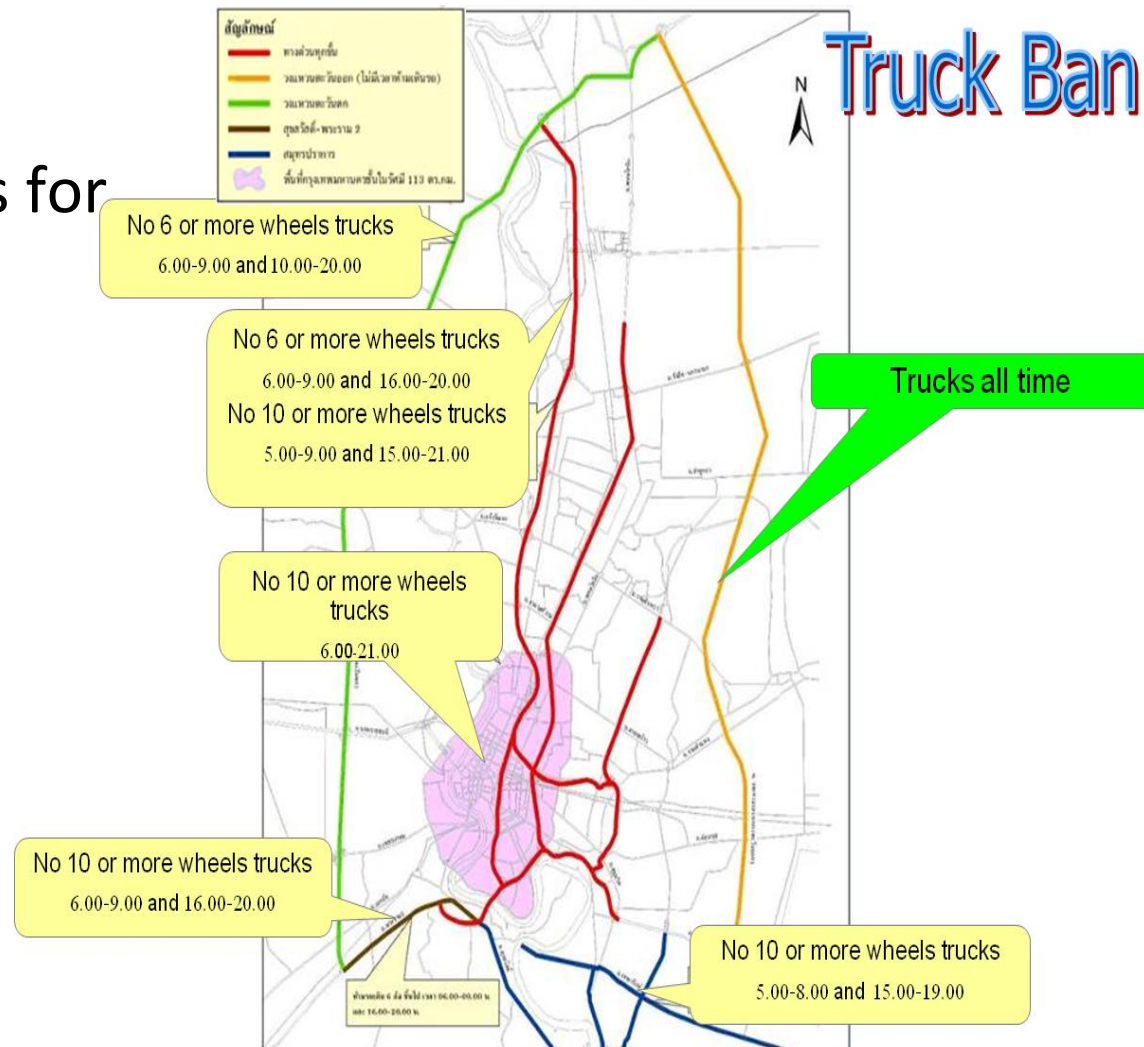
เอกสารนี้เป็นทรัพย์สินทางปัญญา ลิขสิทธิ์ของ บริษัท ซีพี ออลล์ จำกัด (มหาชน) เพื่อใช้ในการศึกษา

ห้ามเผยแพร่ข้อมูลภายนอกหาอื่นได้รับอนุญาตเป็นลายลักษณ์อักษร

Issues: *Truck Ban*

Truck Ban

- Specific time windows for trucks
- Limited time for consolidation at DCs
- Unreliable *Drop & Go* distribution



Solutions: What CP ALL is doing

Urban Planning

- Convincing the City Council of Bangkok and Thai Government to:
 - Reconsider zoning for building warehouses/hubs,
 - Provide L/U bays
 - Authorize frequent-parking vehicles

*Upon a mutual collaboration among



SAHAPAT



Solutions: What CP ALL is doing

Truck Ban

- Big 4-wheel trucks with max capacity and well-designed arrangement of items and routes (through computation, GIS, and demand forecasting)



Challenges: *Future of Retail Businesses*

- An absolute proof of correlated impacts between urban planning and logistics cost/efficiency: *Mega City Logistics Lab*
- A promise on lower carbon emission and fuel consumption: *Green Logistics*
- A smart traffic-flow system: *AI*
- A solid attraction for professional drivers: *Social Status*

*Thank
You*