

Importance of Infrastructure to California NGV Partnership



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Technology Implementation Manager

California NGV Partnership (CNGVP)

- Established in February 2002, with AQMD Board approval as Chairman Glover's initiative
- CNGVP is led by a 33 member Steering Committee comprised of private and public stakeholders
- Steering Committee has formed 5 working groups to achieve CNGVP's goals:
 1. Infrastructure
 2. Platform Development
 3. Outreach & Deployment
 4. Secure Funding
 5. Health Impacts

Tasks of Infrastructure Working Group

- Identify existing and planned infrastructure
- Validate vehicle targets
- Infrastructure to meet vehicle targets
- Fuel supply gaps
- Station reliability, redundancy, access
- Mass deployment of home fueling appliance
- Develop infrastructure expansion plan

Existing Infrastructure

Region	CNG		LNG
	Total	Public	(Public)
N. Calif. (PG&E)	30	22	9
S. Calif. (SoCalGas)	145	50	9
S. Calif. (Long Beach)	4	4	1
San Diego (SDG&E)	26	4	2
Southwest Gas	1	1	1
<u>TOTALS</u>	206	81	22

Infrastructure & Clean Fuel Vehicles

FUNDING PROGRAMS (1998 - Present)

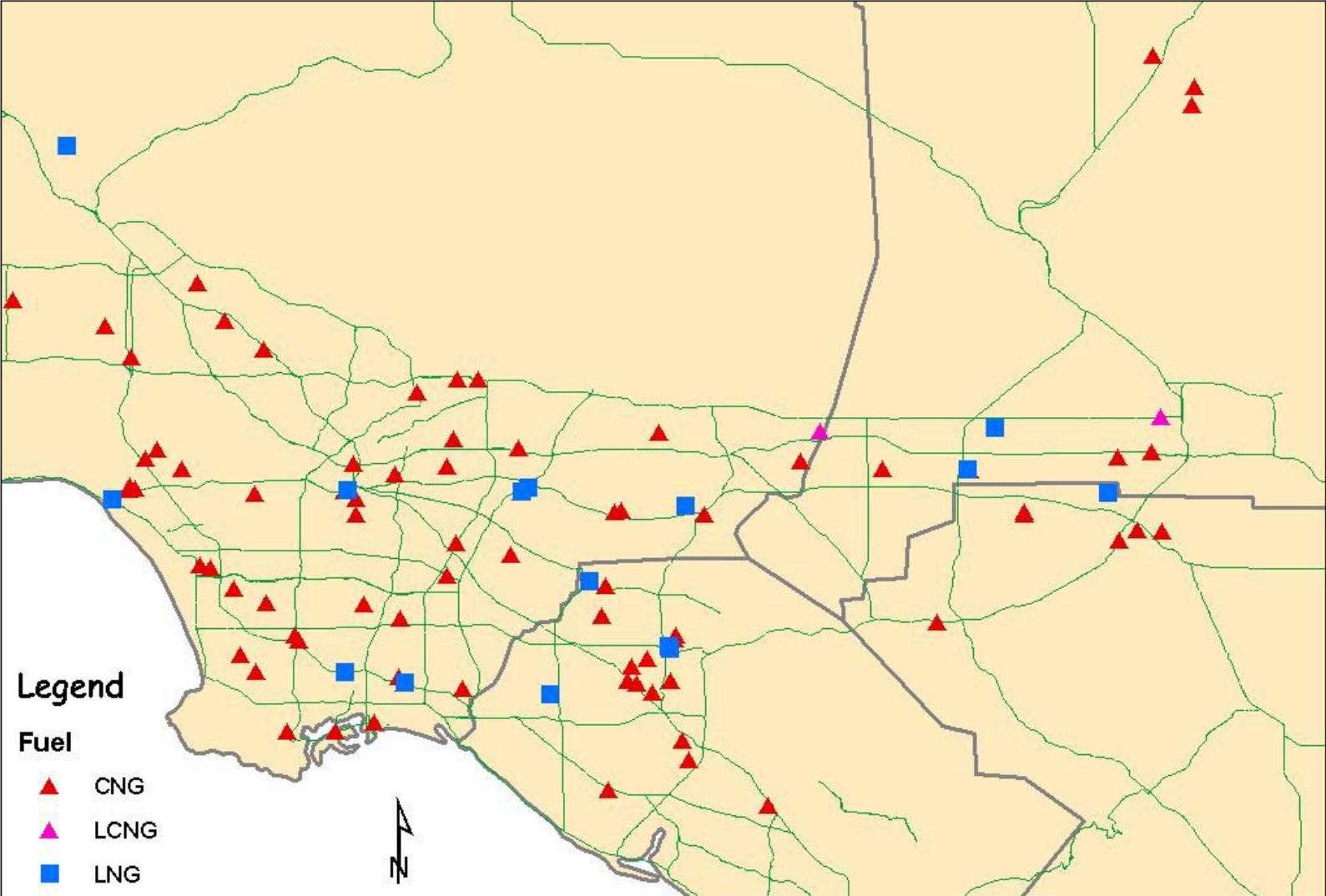
Infrastructure

	AMOUNT	# OF PROJECTS
-Clean Fuel Fund	\$ 4,311,000	35 CNG, LNG, LCNG
-Carl Moyer	\$ 2,169,000	11 CNG, LNG, LCNG
-Settlement Account	\$12,421,000	26 CNG
-Settlement Account	\$ 6,000,000	(City of LA Fueling - TBD)
-1309.1 Priority Reserve	\$ 3,449,000	9 LNG, LCNG
-CEC Funds	\$ 1,236,000	5 CNG , LCNG
-Lower-Emission School Bus Fund	\$ 1,554,000	22 CNG

TOTAL

\$31,140,000

Natural Gas Fueling Facilities



Partnership Goals

	LD	HD
3-Year Goal	33,000	10,000
5-Year Goal	90,000	25,000
10-Year Goal	250,000 -500,000	100,000

CALIFORNIA



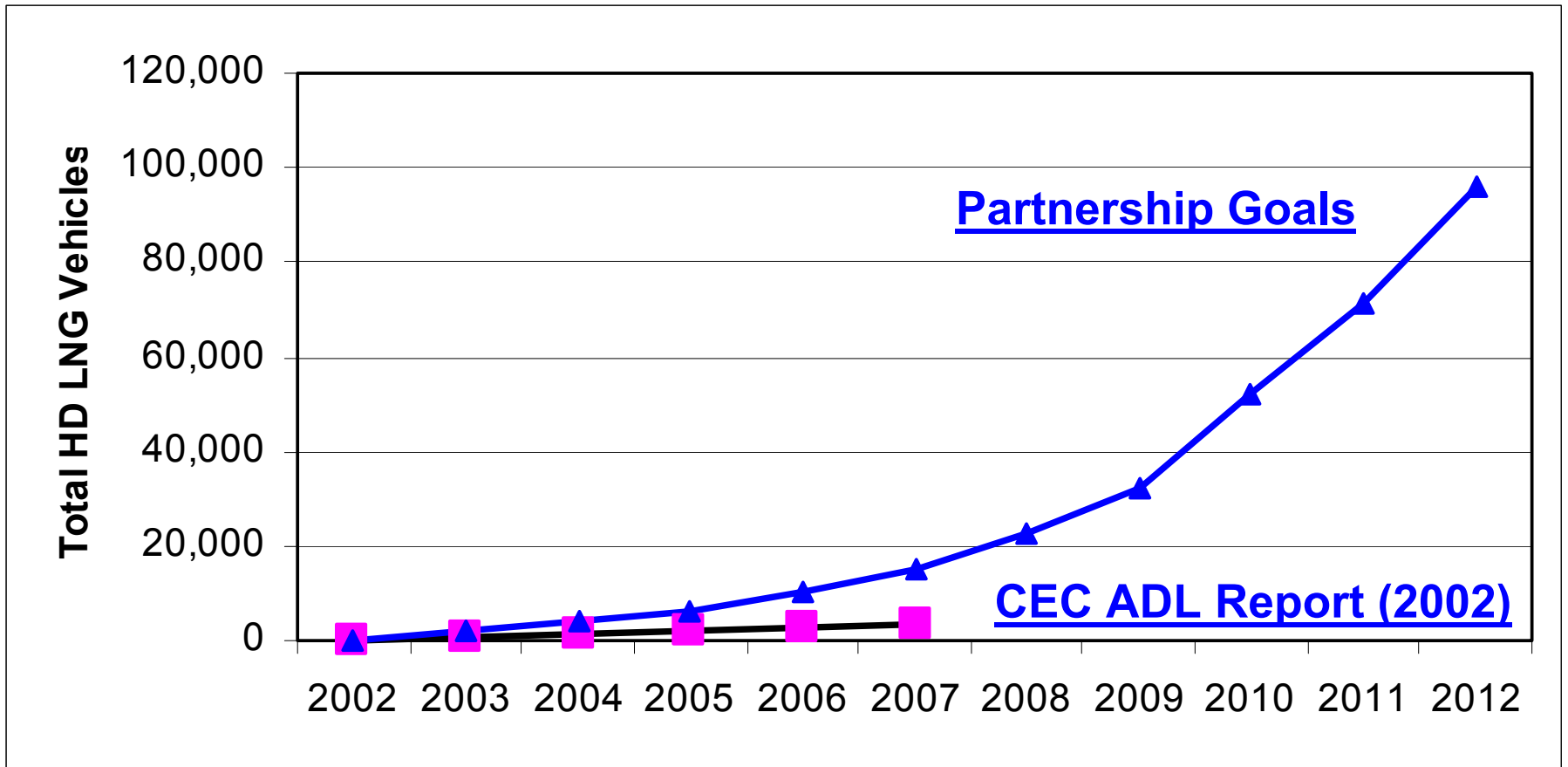
Infrastructure “Gaps”

- Infrastructure expansion should adhere to good business model
 - Anchor fleet
 - Minimum vehicles/throughput
 - Public access option
- AVOID – “Build it and they will come”

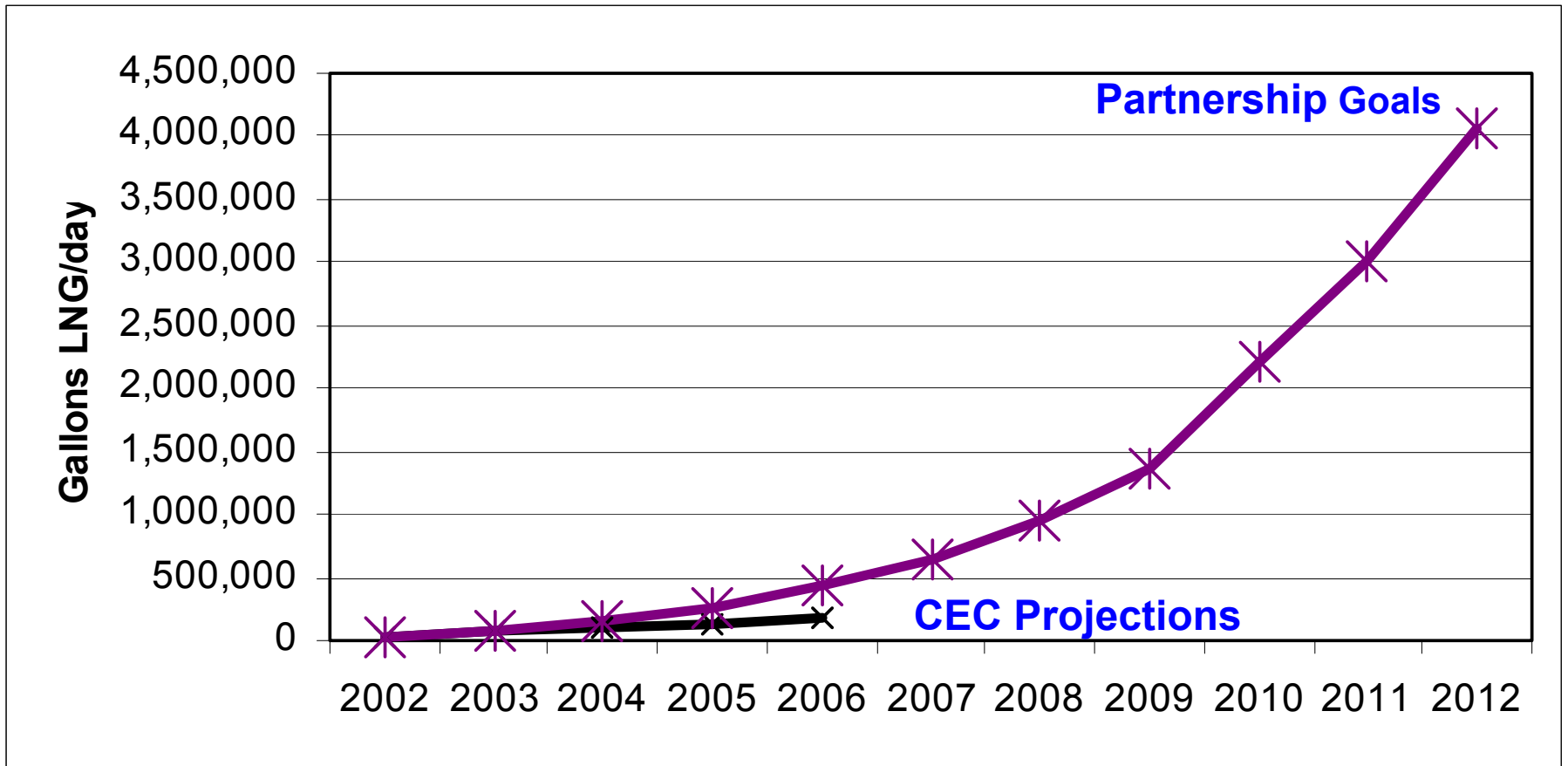
LD Infrastructure

- Currently 180+ Stations for 16,000 LD Vehicles
- Approximately 90 LD Vehicles/Station
- Future Requirements
 - 1,100 Stations per 100,000 Vehicles
 - Larger Number of Smaller Stations for Lower Vehicle Density
- Further Evaluate Mini-Station Concepts

HD Vehicle Growth



LNG Production Capacity Needed



Planned LNG Sources

○ Denotes existing LNG sources

★ Denotes planned and potential LNG sources

