

Transit Agency Survey Preliminary Results

ACT Workgroup Meeting

August 29, 2016

California Environmental Protection Agency

Air Resources Board



About the survey

- **Purpose:**
 - To gather information about operations of transit systems and fleet characteristics at different divisions or depots
 - To help ARB better estimate individual fleet costs and understand potential barriers to deploying zero emission buses
- **Content:**
 - Part A: information about the transit agency
 - Part B: information about each division
- **Distribution:**
 - March 2016 to over 150 transit agencies

Overview

- **Transit Agency Questions**

- Bus purchase (cycle, method, recent and expected purchases)
- Fuel procurement (yearly contracts, spot market, utility, off-site)
- LCFS participation
- Enhanced mobility programs

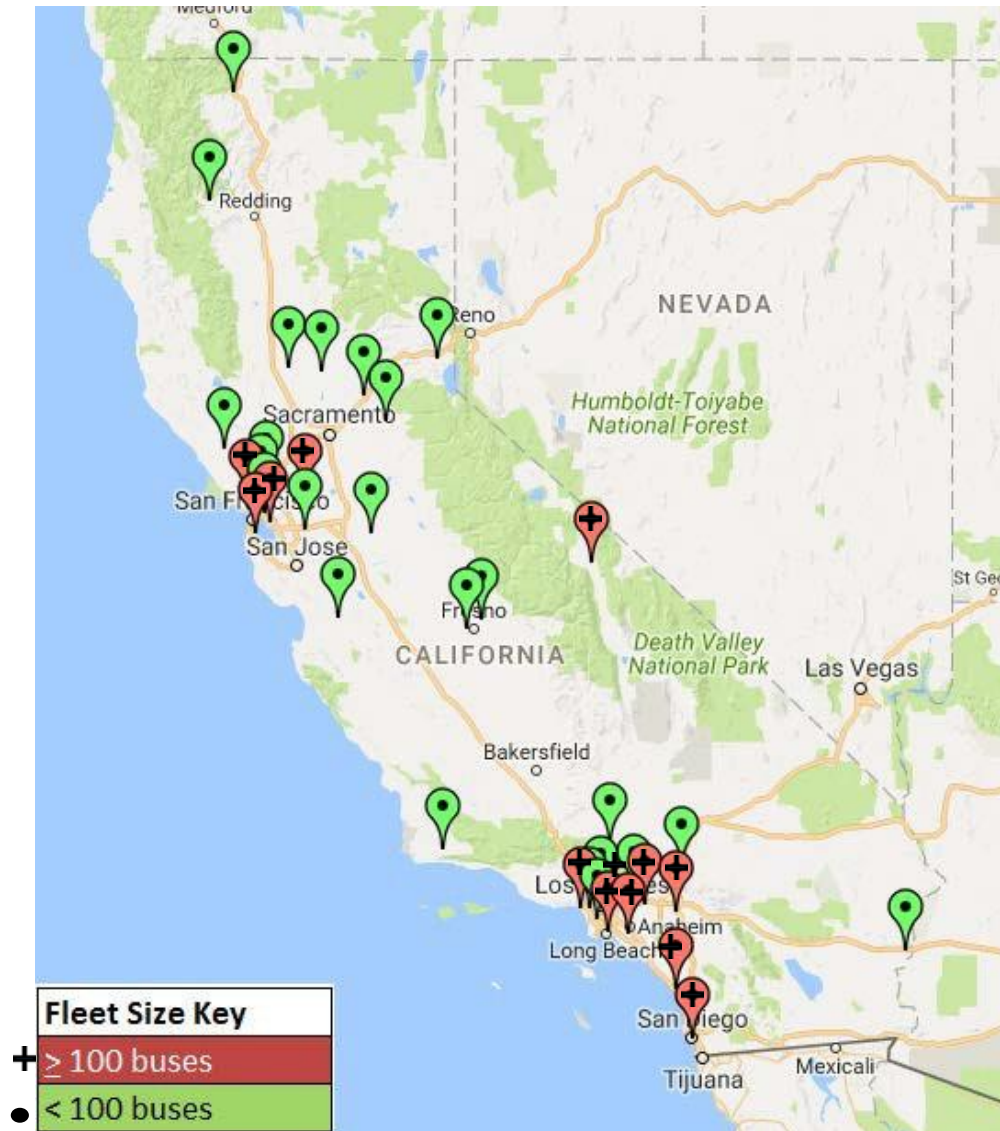
- **Division Specific Questions**

- Division characteristics (location, parcel size, bus capacity)
- Operation & routes (peak/base ratio, park/dispatch, bus number and type, daily mileage distribution)
- Electricity use (utility provider, on-site production, back-up system)
- Fueling infrastructure, costs, and recent improvements

Acknowledgement of Survey Respondents

AC Transit	Long Beach Transit
Anaheim Transportation Network	Los Angeles County Metropolitan Transit Authority
Antelope Valley Transit Authority	North County Transit District
City of Clovis Transit	Orange County Transportation Authority
City of Culver	Palo Verde Valley Transit Authority
City of Gardena's GTrans	Placer County Transit Services
City of Glendora	Riverside Transit Agency
City of Modesto	San Benito County Local Transportation Authority
Colusa County Transit Agency	San Diego Metropolitan Transit System
County of Trinity/Trinity Transit	San Mateo County Transit District
Eastern Contra Costa Transit Authority	Santa Monica Big Blue Bus
El Dorado County Transit Authority	Santa Rosa CityBus
Foothill Transit	Santa Ynez Valley Transit
Fresno County Rural Transit Agency	Siskiyou County Transit
Glendale Beeline	Solano County Transit (SolTrans)
Golden Empire Transit District	Victor Valley Transit Authority
Golden Gate Transit	Western Contra Costa Transit Authority
Humboldt Transit Authority	Yuba-Sutter Transit Authority
Livermore Amador Valley Transit Authority	

Respondent Profile: Location

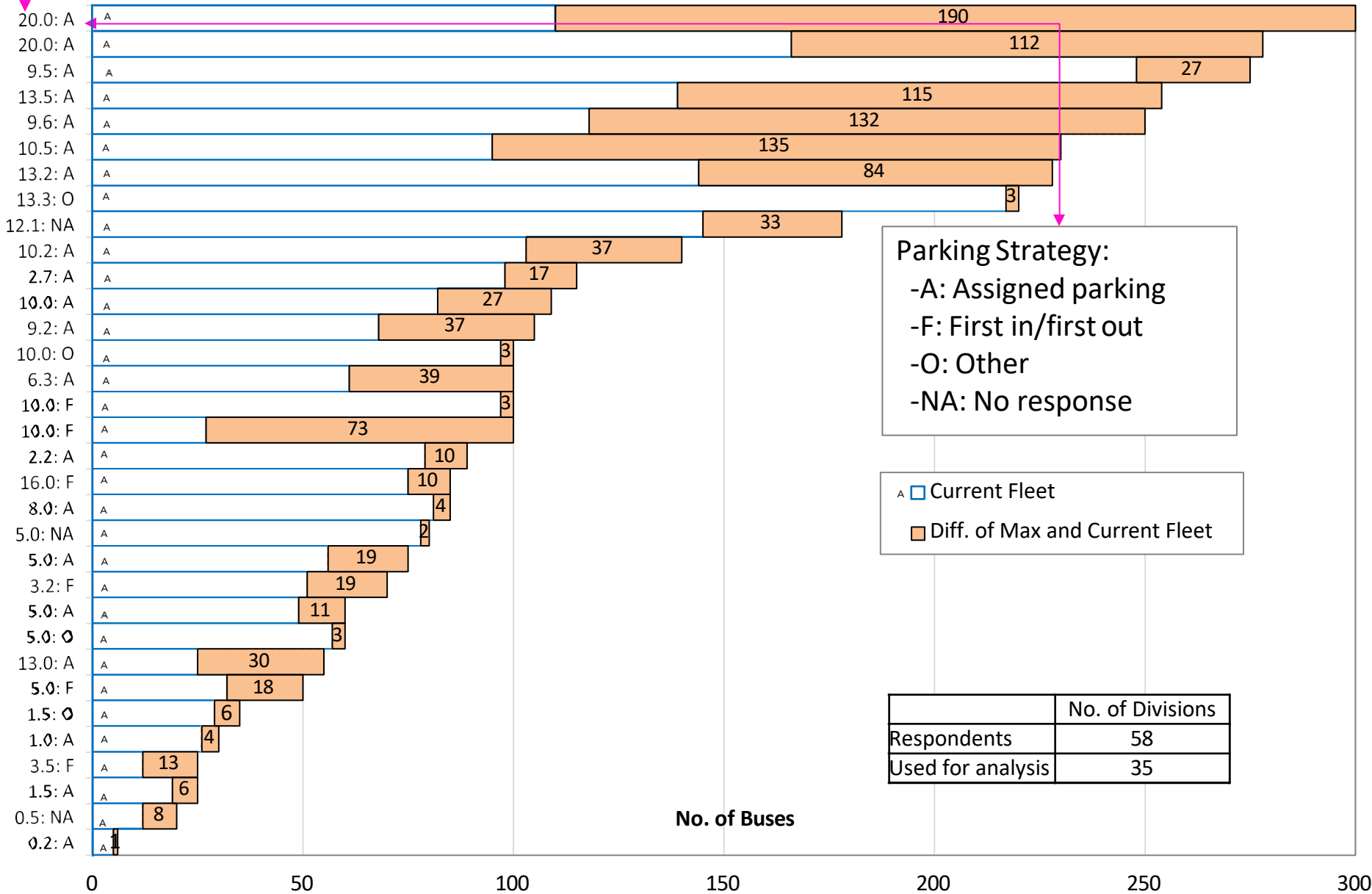


Division size

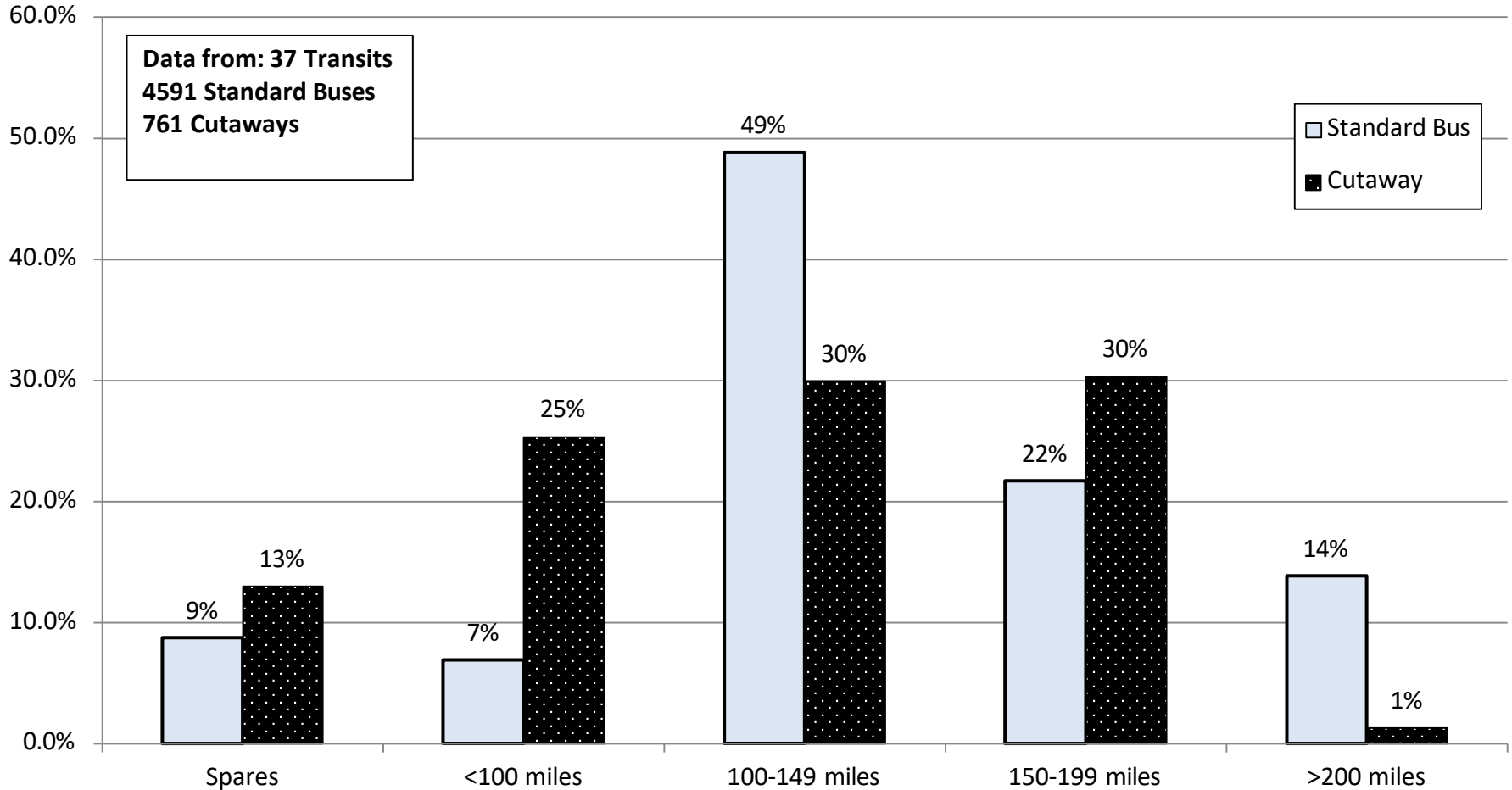
Lot size (Acres)

Current No. of buses

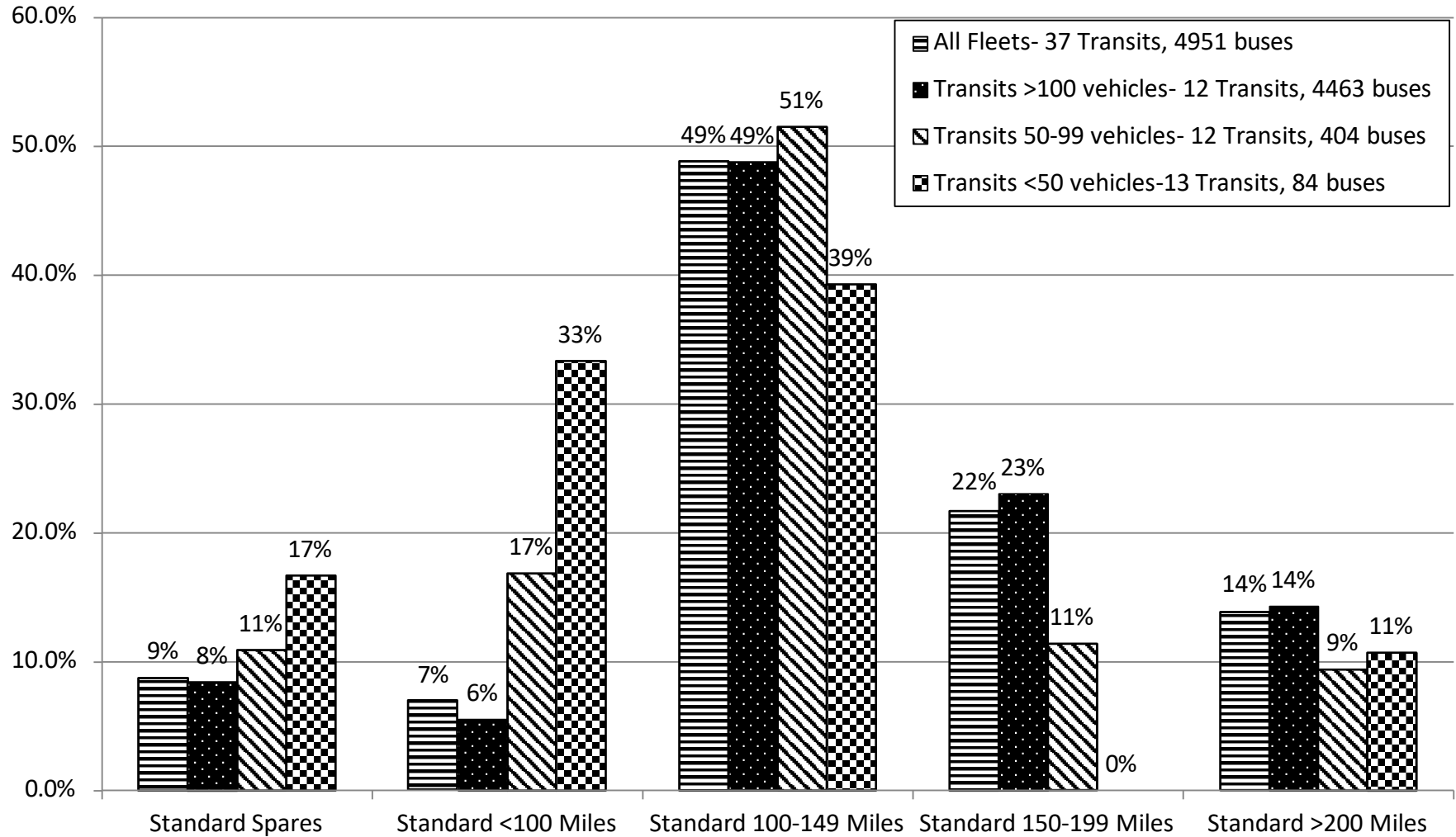
Maximum No. of buses



Daily Mileage Distribution Standard Buses and Cutaways

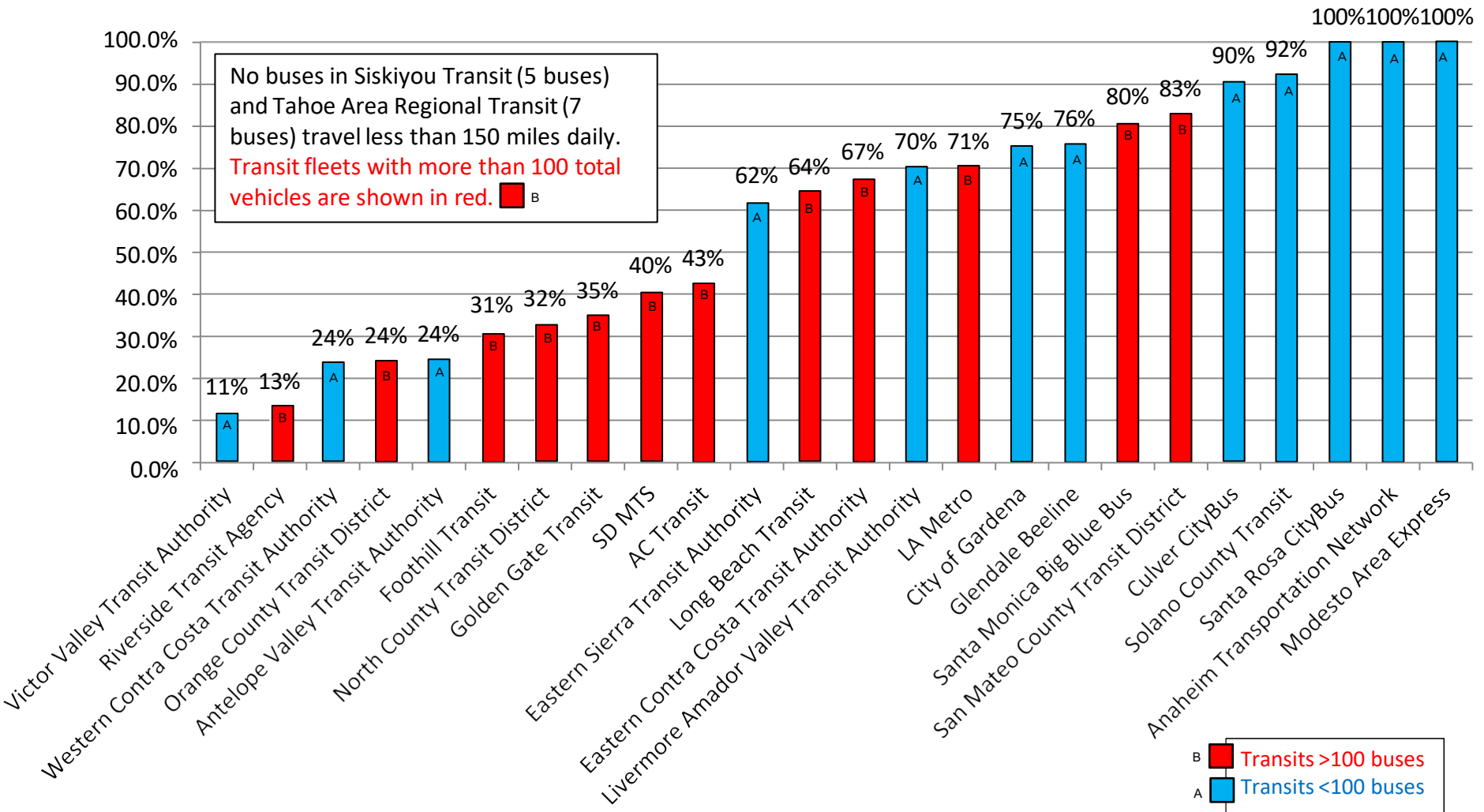


Daily Mileage for Standard Bus by Fleet Size



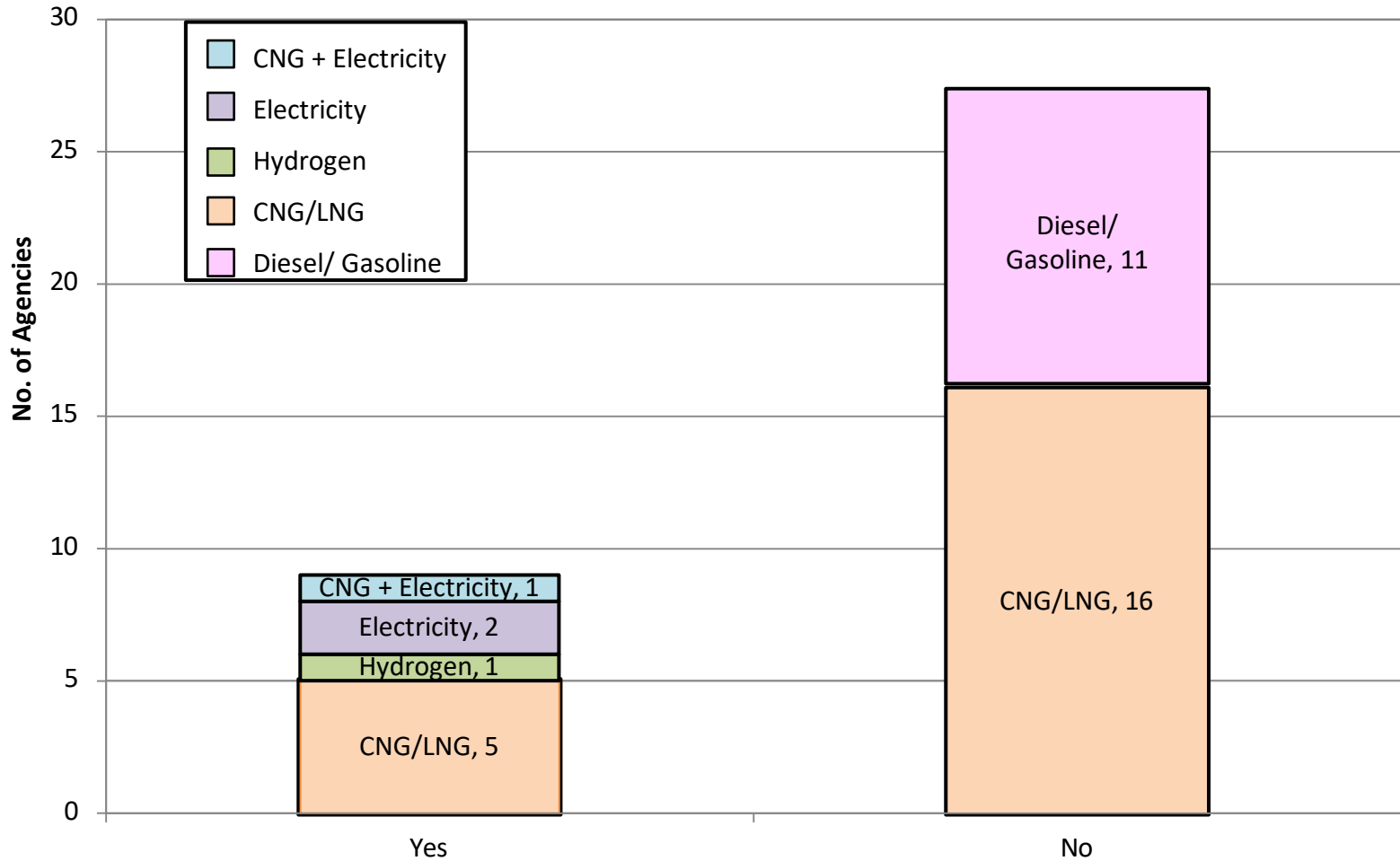
Daily Mileage for Standard 40 ft.

Percent of standard buses driven <150 miles/day



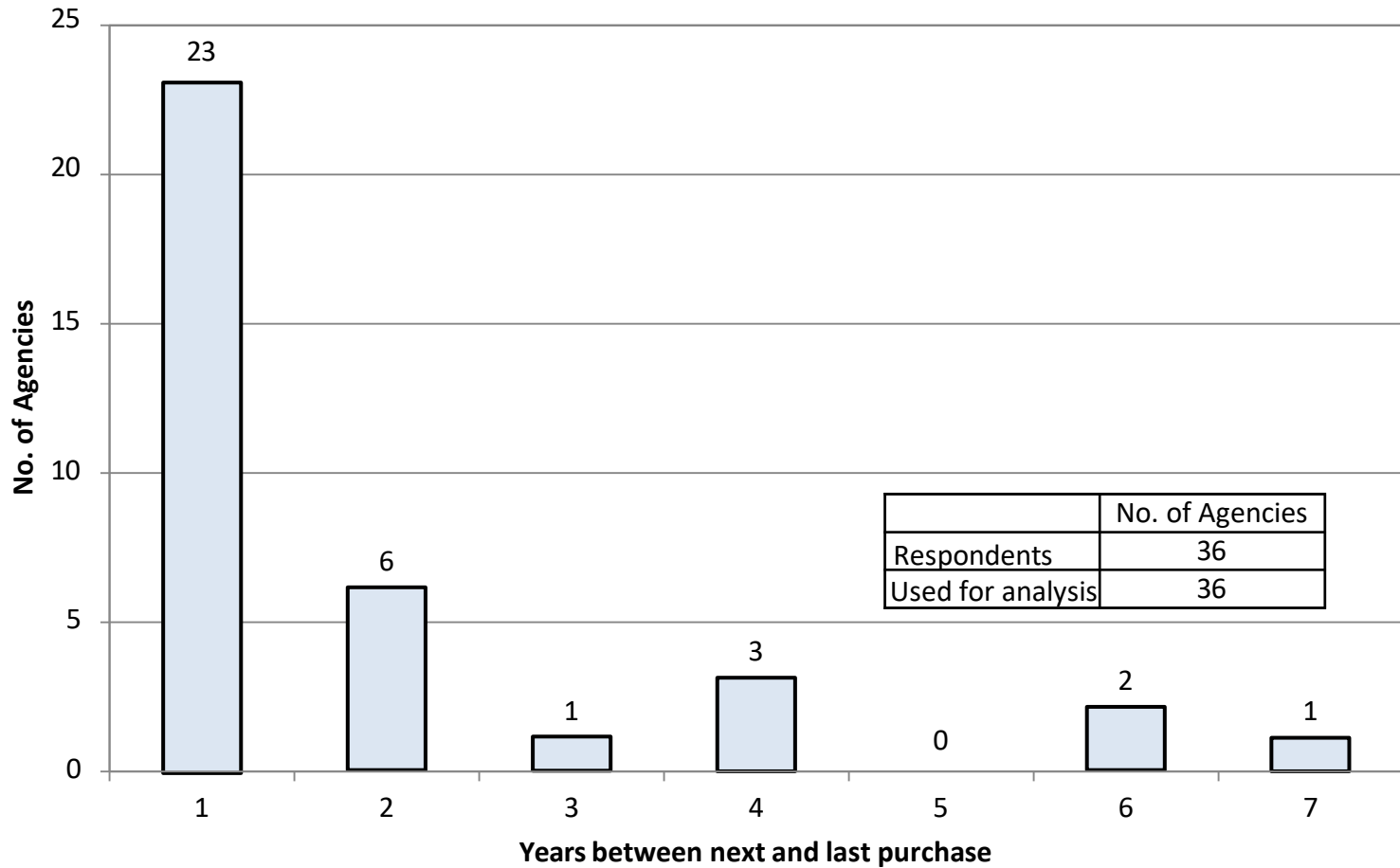
* Antelope Valley has committed to become all electric in 2018 with a depot charging strategy. Foothill Transit committed to going all electric by 2030

LCFS Program Participation



	No. of Agencies
Respondents	36
Used for analysis	36

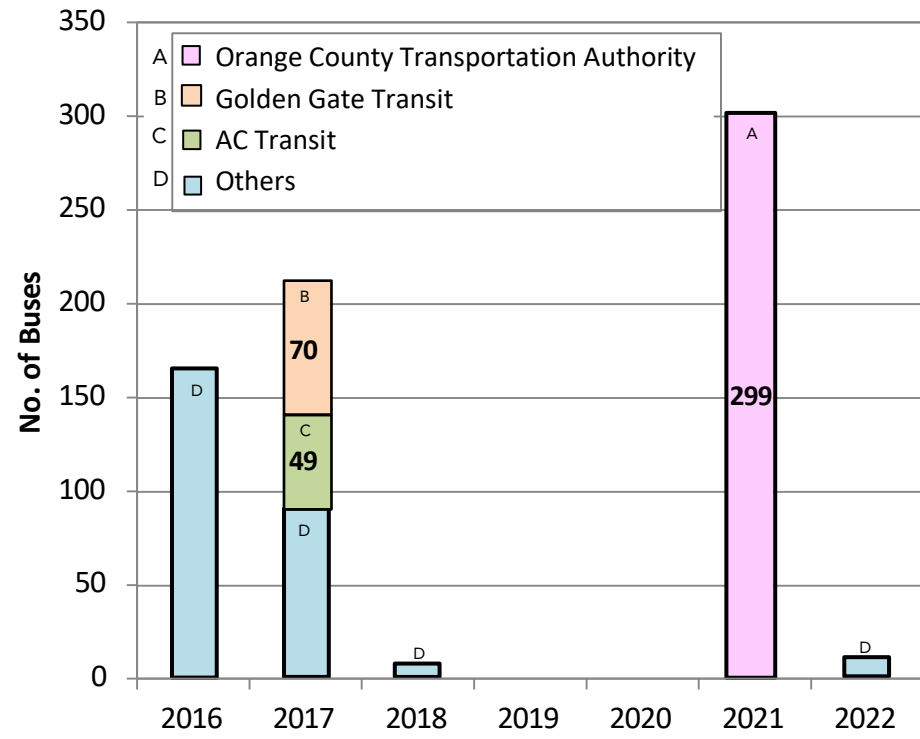
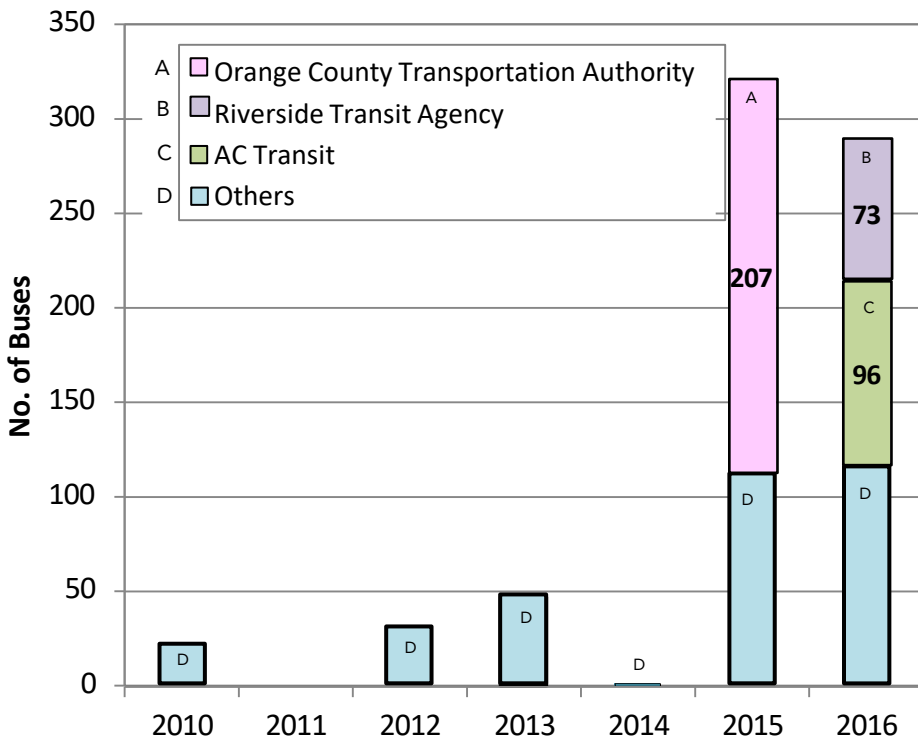
Bus Purchase Frequency



Past and Planned Bus Purchases

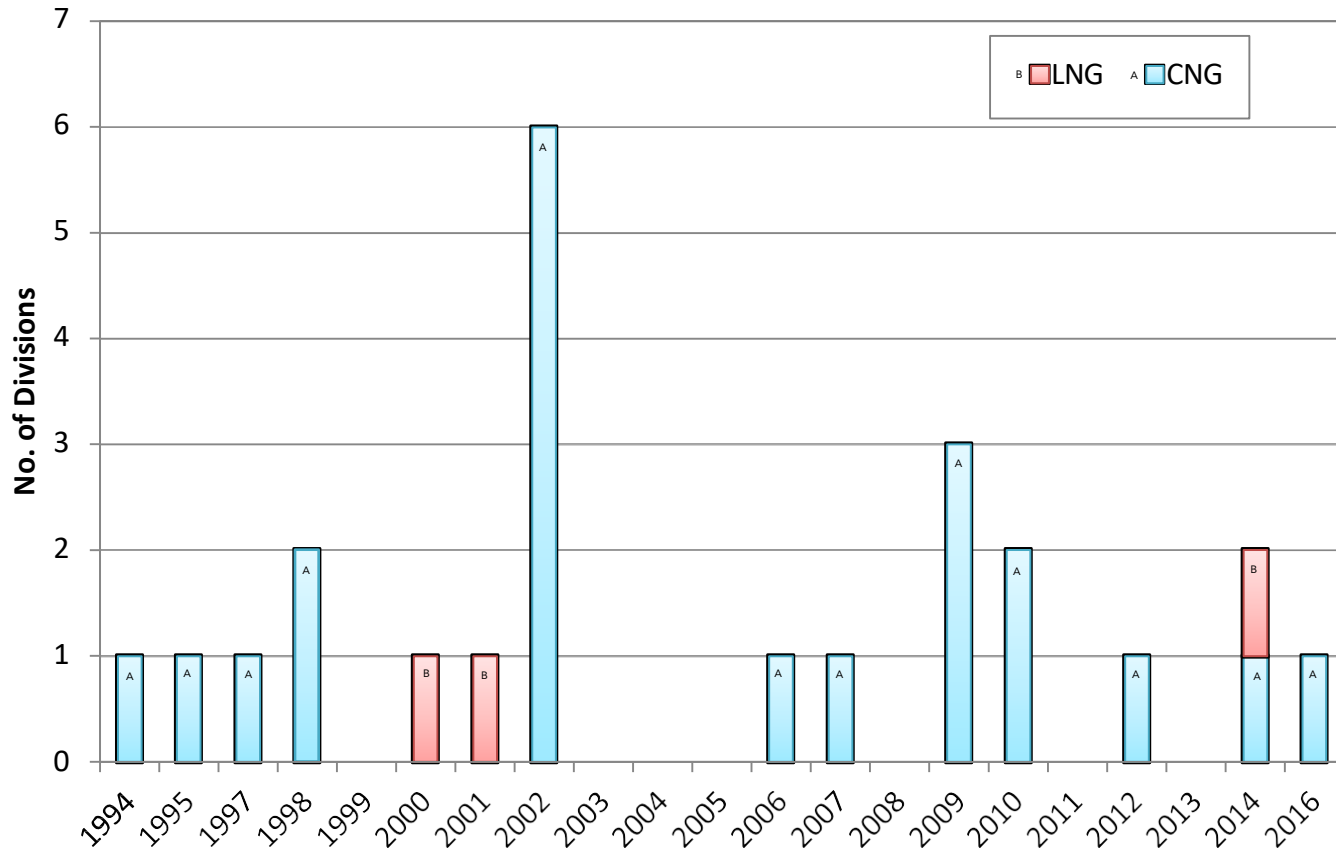
Last purchase

Next purchase



	No. of Agencies	No. of Buses (Last Purchase)	No. of Buses (Next Purchase)
Respondents	36	NA	NA
Used for analysis	29	701	690

Year of Installation for NG Infrastructure



No. of Divisions
 Respondents 25
 Used for analysis 24

Survey Results Summary

- Responses represent about 50 percent of the buses in the State
- Helps identify fleets with higher likelihood to have operational barriers
- Plan to meet with individual transits to learn more
- Information about fuel costs, and existing infrastructure to be assessed in case studies
- Plan to follow-up with respondents about incomplete information or apparent discrepancies
- We are still accepting surveys