



# Voice of the Customer Pre-event Survey

Administered by CALSTART  
Presentation by Fred Silver VP  
CALSTART

# VOC Survey

- To assist in understanding the Opportunities and Barriers for the introduction of Fuel Cell buses into your fleets
- Both a before and after survey will be conducted to understand the value and learnings from today's workshop
- A report will be published- but not to worry- no names will be attributed to any answers

# Who are the Respondents

- 100% transit fleet
- 11 respondents/8 Transit fleets
- At least 7 respondents are here at the workshop today
- Vehicle Experience
  - 85-100% operate cutaways, 40 foot and 60 foot buses
  - 60% operate motor coaches
- Knowledge of Fuel cell buses
  - 60% rated as moderate knowledge and 40 % minimal-0% advanced knowledge
- Alt Fuel Experience
  - 80% Experience with Hybrids
  - 60% with natural gas
  - about 10-20% with propane, fuel cell or battery electric
- 75- 88% said would consider buying fuel cell bus at same price as Diesel, NG, Hybrid and battery electric

# Daily Usage by Type?

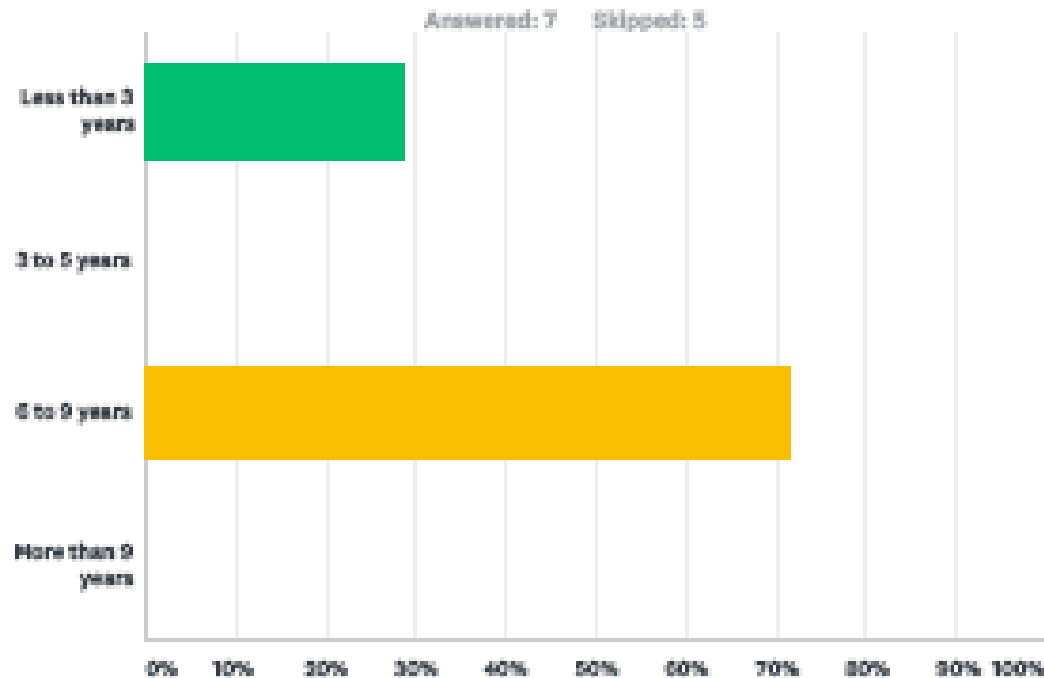
	At least 50 miles/day	At least 100 miles/day	At least 150 miles/day	At least 200 miles/day	Total
Cut away buses (20-30 feet)	11.11% 1	44.44% 4	22.22% 2	22.22% 2	9
34-40 foot buses	10.00% 1	30.00% 3	30.00% 3	30.00% 3	10
Articulated buses	25.00% 1	50.00% 2	25.00% 1	0.00% 0	4
Motor coaches	0.00% 0	25.00% 1	50.00% 2	25.00% 1	4

# Payback Period a Split Decision

7 respondents

5 Non respondents

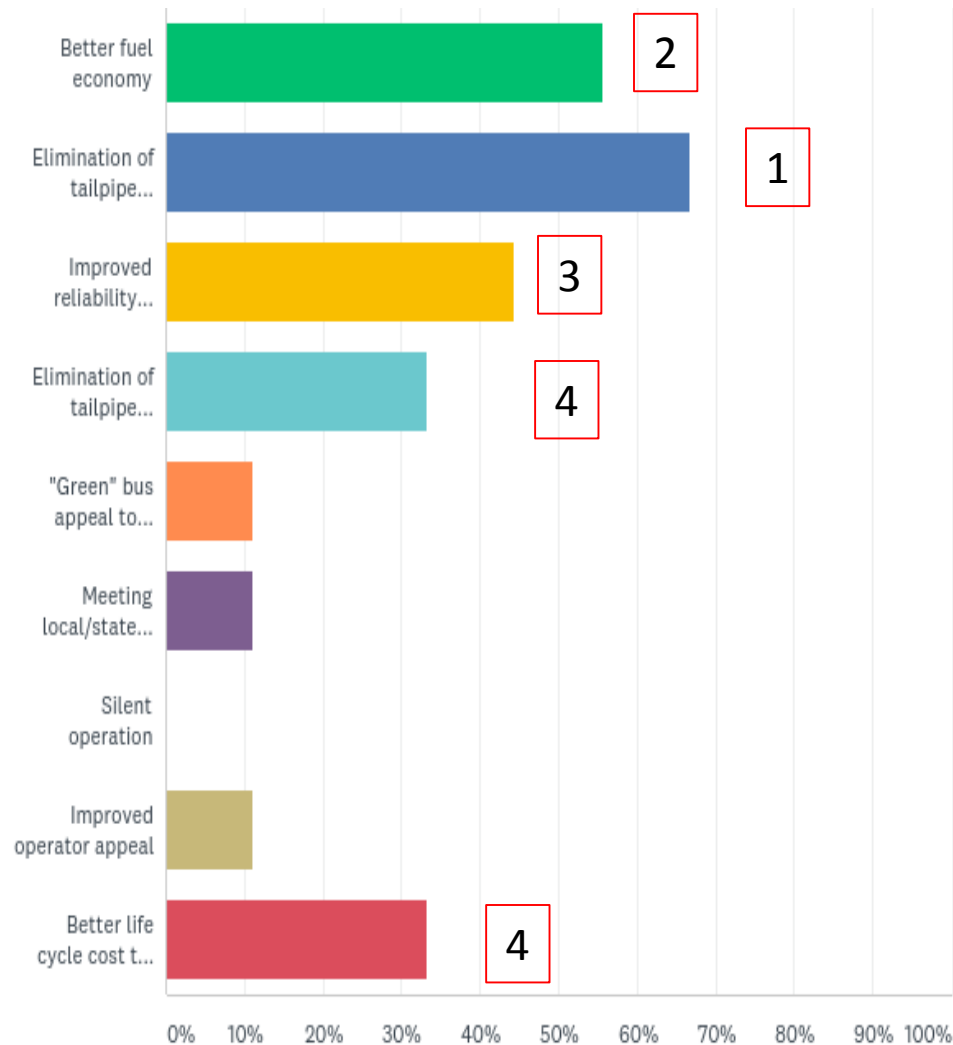
**Q7** Payback expectations - what is the maximum expected payback of new ZEBs?



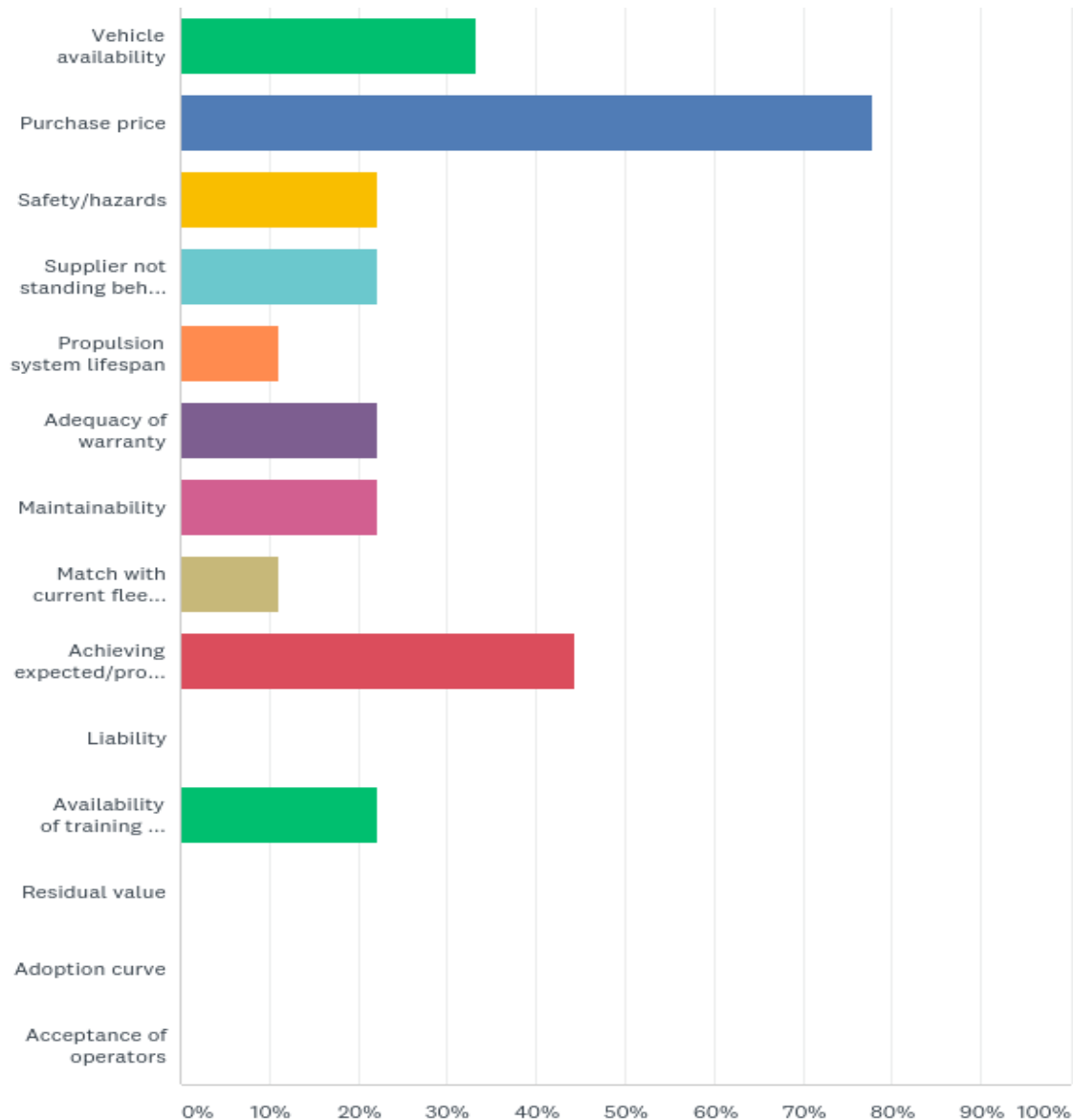
# ZEB Attributes

9 respondents

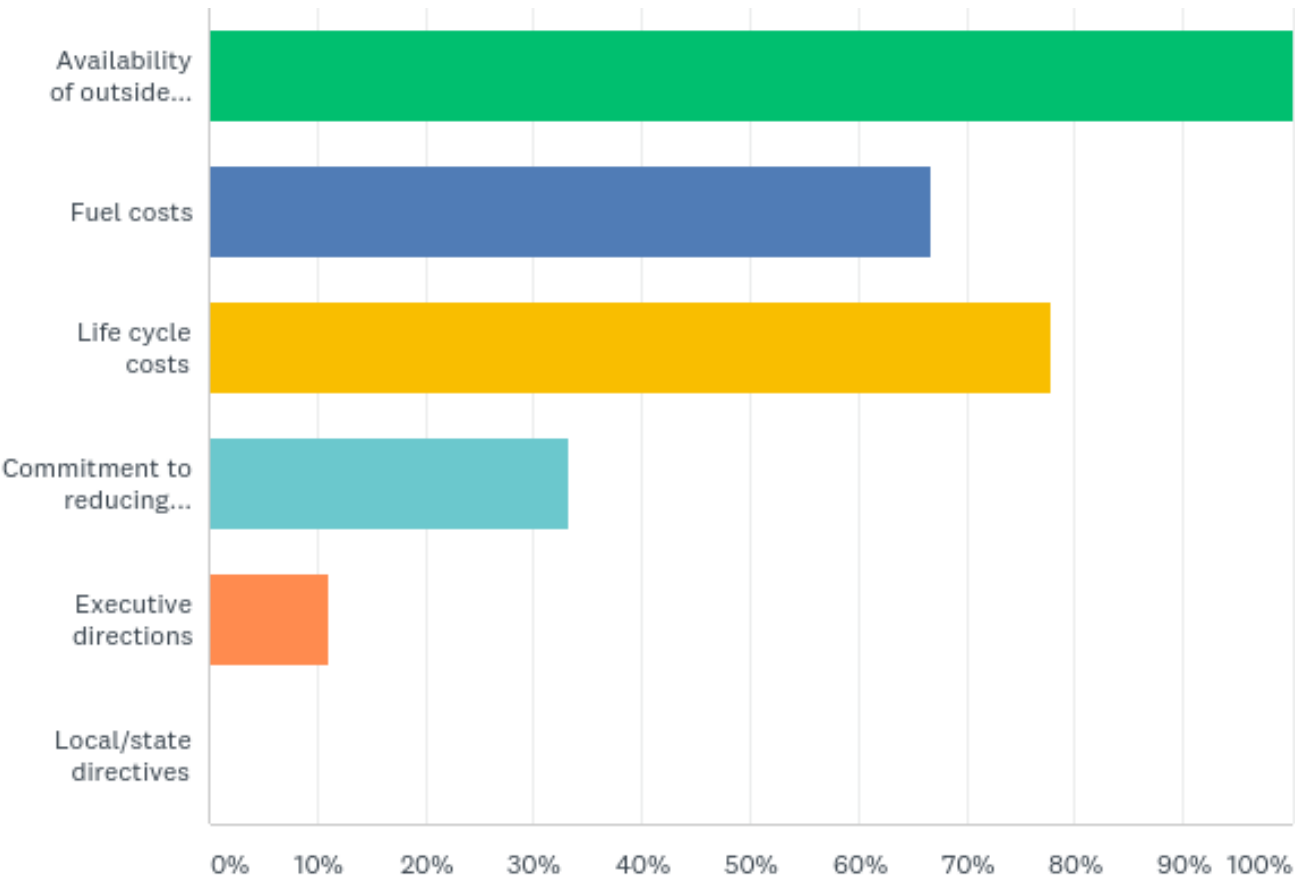
3 responded to better life cycle costs



# What are the potential barriers to ZEB adoption? Select top three concerns.



# What issues are most important when deciding to invest in ZEBs? Select your top three issues





# Roundtable Wrap-Up

- We want to hear about what you may have learned today or
- Any comments on the feedback on the VOC Survey or
- Any new barriers or opportunities you would like to emphasize

# THE MIDWEST HYDROGEN CENTER OF EXCELLENCE

*A Key Initiative of the Renewable Hydrogen Fuel Cell Collaborative*

## 2017 PUBLIC TRANSIT WORKSHOP JULY 27, 2017

