

Preliminary Draft Survey for Review and Comment
June 28th , 2017



**Draft Part 2 Survey:
Off-Airport Transportation Shuttles
Sample for Comment, 2017**

THIS IS A SAMPLE SURVEY FOR REVIEW AND COMMENT. PLEASE PROVIDE COMMENTS ON THE PROPOSED TEXT AND QUESTIONS TO Mr. Anthony Poggi at anthony.poggi@arb.ca.gov BY JULY 21st, 2017

Introduction

Promoting the development and use of zero-emission airport ground transportation will help the California Air Resources Board (CARB) achieve the emission reduction strategies outlined in the Mobile Source Strategy, State Implementation Plan and the Sustainable Freight Action Plan. Vehicles like off-airport transportation shuttles that operate on fixed routes, have stop-and-go operations, maintain low average speeds, and are centrally maintained and fueled are ideal candidates for targeting zero-emission electric technologies.

The purpose of this survey is to gather detailed information about everyday operations of airport ground transportation fleets and to better understand variations among different types of fleet operations. This survey will help CARB to better estimate individual fleet costs (including vehicles and infrastructure) and understand potential opportunities and challenges associated with incorporating airport shuttles with zero-emission operating capabilities into the fleet. Accuracy and completeness of fleet data, including data collected in this survey, will be vital to CARB's efforts in developing a measure that integrates efficiently with businesses involved with airport ground transportation and achieves the desired emission reductions.

Directions

This survey is designed to be completed by companies that operate shuttles providing ground transportation to and from a specific airport. Companies that provide shuttle service to multiple airports will complete one survey for each airport. If you are writing your responses by hand and need extra space, you can add extra pages at the end of this survey with the company's name, your contact information and the question number to which the answer refers.

Surveys should be returned directly to the California Air Resources Board upon completion. CARB will work closely with Airport Shuttle Bus Workgroup to interpret the results. Please submit any inquiries, along with the completed survey(s) by XXXXX to Mr. Anthony Poggi at anthony.poggi@arb.ca.gov. You can either submit the electronic version via email or you can print the survey and mail it to the following address:

California Air Resources Board
Incentives and Technology Advancement Branch, 5th Floor
Attn. Anthony Poggi
P.O. Box 2815
Sacramento, CA 95812-2815

Thank you for your assistance in completing this important survey. We appreciate your efforts.

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1. Company/Contact Information

Company Name	
Mailing Address	
City	
State/Province	
Zip	
Phone Number	
Primary Contact Name	
Primary Contact Email	
Primary Shuttle Bus Contact Name (if different from above)	
Primary Shuttle Bus Contact Phone Number	
Primary Shuttle Bus Contact Email	

2. What the total number is of shuttles your fleet? Include only shuttles/buses/vans that transport passengers to and from the airport.

3. Please describe the nature of your business (e.g. off-airport parking, hotel, tourist attraction/destination). For businesses that exclusively operate shuttles please describe what type of destinations are serviced by your fleet (other than airports).

4. Have you reduced or expanded the number of buses in your fleet over the last 5 years? Do you have plans to do so over the next 5 years? If yes, please describe the reason(s) for the expansion/contraction and the number of vehicles involved.

5. What are the NAICS codes for your business?

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6. The proposed regulation may require in-use diesel and CNG shuttles be replaced with zero-emission shuttles. Will your business be disproportionately impacted by such a regulation due to your size/scale/service type etc.? If yes, please explain and provide information below.

7. Please fill in the blank spaces below to provide information about your shuttle purchase cycle.

- Average vehicle lifespan: years.
- Average turnover: vehicles per year.
- Average number of vehicles purchased simultaneously:
- Percentage of shuttle purchases involving used vehicles: %

8. Please rank the following factors in order of importance when evaluating shuttle purchases: total cost of ownership, capital cost, payback return, cost-sharing opportunities, fuel economy, performance, safety, capacity, reliability.

9. Do you currently have or are you in the process of purchasing any zero-emission vehicles in your shuttle fleet? If yes, how many?

10. Do you consider the purchase of zero-emission shuttles or other zero-emission technology in your annual vehicle purchases? If not, what are the issues that prevent the purchase of ZEVs?

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11. Who do you contact when beginning a new vehicle purchase? (e.g., dealer, chassis manufacturer, body manufacturer, co-op, or internal purchasing agent)

12. Are you using any low carbon fuels in your vehicles that service airports in California? If yes, please select the fuel type(s) below. If no, please select the box next to "None".

- CNG
 Renewable CNG
 Battery Electric
 Hydrogen
 None

13. Have you signed up for the Low Carbon Fuel Standard (LCFS) Program (e.g. utilizing the reporting tool, credit banking & transfer system)? Yes No

14. Describe how you typically purchase fuels by fuel type. (e.g., annual contracts, spot market, utility, off-site, etc.)

15. **Shuttle/Bus Route Information:** Please fill in the table below with information about your shuttle fleet's route(s). Use a different line for each unique route traveled by vehicles in your fleet. Please begin with the routes that are most commonly traveled. If you need extra space please use table provided on the following page.

Route #	Round Trip Distance (miles)	Number of Stops	Maximum Speed (mph)	Average Speed (mph)	Round Trips per Day	Varied or Fixed?*
1	Ex: 4	3	35	20	20	Fixed
2	8	7	50	25	10	Fixed
1						
2						
3						
4						
5						
6						

*A fixed route is considered one in which vehicles repeatedly transport passengers between the same locations (e.g. off-airport parking lot and an airport). The number of stops along the route may vary but general route traveled and round trip distance are consistent. A varied route is one where the origins, destinations, locations of stop, and/or the round trip distance of the route may fluctuate.

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Route #	Round Trip Distance (miles)	Number of Stops	Maximum Speed (mph)	Average Speed (mph)	Round Trips per Day	Varied or Fixed?*
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8						
9						
10						
11						
12						
13						
14						
15						

Survey continues on the following page

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16. Ground Transportation Shuttle Information: Please fill in the table below with information about each shuttle operating in your fleet. For your convenience, please group similar/identical vehicles together. Please only include vehicles that are involved in passenger transport to/from an airport. There is no need to repeat identical information for consecutive vehicles (see example below).

	Last Six Digits of VIN #	License Plate #	Body Type (e.g. Low Floor, Coach, Cutaway Van, Minibus)	Length (feet)	GVWR	Engine Model Year	Fuel Type	Capacity		Operation				
								Seated	Total	Avg. Miles		Daily Hours of Operation	Estimated Daily Idle Time (minutes)*	Mid-Day Refueling Required? (Y/N)
										Annual	Daily			
1	Ex: 63490	9X4XXXX	Cutaway	25	14,500	2010	CNG	22	22	65,000	180	15	60	N
2	225320	3C2XXXX	“ “	“ “	“ “	“ ”	“ “	“ “	“ “	“ “	“ “	“ “	“ “	N
3	109754	8Z3XXXX	Van	20	10,000	2013	Diesel	16	16	52,000	140	12	90	N
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*Daily idle time refers to the amount of time the vehicle is stopped with the engine running while on route (e.g. loading or unloading passengers). To estimate the daily idle time use the following formula: **#of daily round trips x avg #of stops per round trip x avg. #of minutes idling at each stop.**

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								Seated	Total	Avg. Miles		Daily Hours of Operation	Estimated Daily Idle Time (minutes)*	Mid-Day Refueling Required? (Y/N)
										Annual	Daily			
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								Seated	Total	Avg. Miles		Daily Hours of Operation	Estimated Daily Idle Time (minutes)*	Mid-Day Refueling Required? (Y/N)
										Annual	Daily			
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								Seated	Total	Avg. Miles		Daily Hours of Operation	Estimated Daily Idle Time (minutes)*	Mid-Day Refueling Required? (Y/N)
										Annual	Daily			
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Thank you for completing this survey!