

Final Report

Anaheim Resort Transportation Project

Contract # AB 2766/ML08024

Contract Period through June 30, 2017

February 4, 2013



Prepared for:
Mobile Source Air Pollution Review Committee (MSRC)
under the AB 2766 Discretionary Fund Work Program

Acknowledgements

Key Personnel:

Diana Kotler	Executive Director
Linda Johnson	City of Anaheim
Leo Lavato	A-Z Bus Sales, Inc.
Don White	Creative Bus Sales

This final report is submitted in fulfillment of Contract #AB2766/ML08024 by the Anaheim Transportation Network under contract with the City of Anaheim for partial sponsorship by the Mobile Source Air Pollution Reduction Review Committee (MSRC) for the purchase of 17 alternative fuel transit buses. Work was completed as of December 18, 2012.

The statement and conclusions in this report are those of the contractor and not necessarily those of the Mobile Source Air Pollution Review Committee (MSRC) or the South Coast Air Quality Management District (SCAQMD). The mention of commercial products, their sources or their uses in connection with material reported is not to be construed as either an actual or implied endorsement of such products.

Project Description & Work Performed

The ATN is a private non-profit transportation management association governed by a Board of Directors comprised of 13 individuals who represent business interests of its constituency including The Walt Disney Company, the City of Anaheim, and the Anaheim/Orange County Visitor & Convention Bureau. The ATN was formed 18 years ago for the sole purpose of providing a uniform, comprehensive transportation system. ATN administers Anaheim Resort Transit (ART) service with governance from the Board of Directors and all participating business interests.

The ATN's long track record of contract performance demonstrates a thorough understanding of the management, operational and fiscal policies necessary for the provision of a comprehensive transportation system in the City of Anaheim.

The ATN began to provide ART service for community in May 2002. The ART service meets all ADA standards, as well as the applicable air quality and traffic circulation requirements. In May 2011, the City of Anaheim approved a renewal of a franchise with the ATN for the operation of the ART system.

As The Anaheim Resort® continues to go through growth and development, the ATN strives to provide transportation services to meet transportation demands of the city and the traveling public. As of 2013, that ATN's fleet for the operation of the ART system will be comprised 72 alternative fuel buses to provide public transit services for business establishments located in the cities of Anaheim, and portions of Orange and Garden Grove, Buena Park and Santa Ana.

Patrons of the ART system continue to easily access the area's destinations, such as Disneyland® Resort District, Anaheim Convention Center, Anaheim Stadium, Honda Center, The Outlets at Orange, Knott's Berry Farm, MainPlace Mall and Discovery Science Center, as well as numerous other entertainment venues located throughout the area. The ART transit service allows travel in Anaheim without the need for a car resulting in emission reductions created by millions of single occupant automobiles.

ART service operates 365 days per year and offers frequent, regularly scheduled service on 20 routes within the area. In Table 1 -- Anaheim Resort Transportation Performance Indicators, ATN's fleet and ridership information is provided for the past four (4) fiscal years.

Through the MSRC Contract # AB2766/ML08024 funding award, the ATN was able to purchase and deploy 17 alternative fuel buses. Description of the types of buses acquired by the ATN is provided below:

Number of Vehicles:	9
Manufacturer:	El Dorado LPG StratCraft Bus
Size:	32-foot
Engine Specifications:	8.1 L Vortec
Estimated Annual Mileage:	41,000
Anticipated Service Life:	7 years
Total expected life-time mileage per bus	287,000
Total expected fleet life-time mileage	2,009,000
Percent within SCAQMD jurisdiction:	100%

Number of Vehicles:	8
Manufacturer:	Glaval CNG Entourage Bus
Size:	33-foot
Engine Specifications:	Cummins CNG
Estimated Annual Mileage:	41,000
Anticipated Service Life:	7 years
Total expected life-time mileage per bus	287,000
Total expected fleet life-time mileage	2,583,000
Percent within SCAQMD jurisdiction:	100%

FUELING INFRASTRUCTURE

Fueling for the LPG buses is provided on-site at the ATN's facility located at 1280 South Anaheim Boulevard, Anaheim, CA 92805. Expo Propane installed a propane fueling station on property, in return for a five-year annual fueling contract. The LPG fuel station consists of one tank with 1,100-gallon capacity.

The newly acquired eight (8) CNG buses are fueled at the public access station operated by Clean Energy. The station is located in the Anaheim Resort at the corner of Harbor Boulevard and Orangewood Avenue. The ATN is slated to move to a new operating location by mid-2013. At that time, the ATN plans to explore, with Clean Energy, opportunities for the installation of a CNG fueling facility internal to ART operations.

DEPLOYMENT OF NEW BUS FLEET

The nine (9) LPG StartCraft buses were received by the ATN in mid-2011. Upon completion of the acceptance test, these buses were deployed in service for the summer peak operating season. The ATN did not experience any mechanical/technical issues with the new fleet.

The remaining eight (8) CNG buses were delivered to the ATN in November through December of 2012. All new CNG buses have been already deployed in service. With exception of minor body and esthetic corrections/repairs, the ATN did not experience any significant mechanical/technical issues.

PROJECT COSTS

ATN completed MSRC Contract # AB2766/ML08024 on time and within budget. Total project costs are presented below:

	AB2766 Request	Local Co-Funding	Total Funding
Buses	\$425,000	\$1,980,000	\$2,405,000

TABLE 1 -- ANAHEIM RESORT TRANSPORTATION PERFORMANCE INDICATORS				
Category/Fiscal Year	FY 2009/10	FY 2010/11	FY 2011/12	FY 2012/13
	Actual	Actual	Actual	Projected
Number of Routes	16	16	18	19
Fleet Composition				
E-Bus -- Electric	10	10	10	0
El Dorado -- Propane	8	8	17	17
NABI -- Liquefied Natural Gas	0	35	35	35
Glaval Entourage – Compressed Natural Gas	0	9	0	17
El Dorado Low-Floor Passport – Compressed Natural Gas (Delivery May 2013)	0	1	0	3
Total Current Fleet			62	72
Annual Ridership	4.13 million	7.65 million	7.63 million	7.8 million

Emissions Benefits

The Anaheim Resort Transportation (ART) system primary objective is to reduce single occupant trips within our service area. ART continues to meet this objective as depicted through the increased ridership system-wide.

System-Wide Vehicle Miles Travelled __ 72 Bus Fleet

Operating Days per Year	365
Average Daily Ridership	7.8 million annual riders or 21,369 passengers per day
Average Trip Length	2.5 miles
Average Annual Bus VMT	42,670/bus or 3,072,240 Fleet VMT

Core ART Service Vehicle Miles Travelled Routes 1-16, 18, 19 and 20 __ 47 Bus Fleet (Without Route 17 Downtown Toy Story Circulator*)

Operating Days per Year	365
Average Daily Ridership	3.4 million annual riders or 9,315 passengers per day
Average Trip Length	2.5 miles
Average Annual Bus VMT	42,670/bus or 1,792,140 Fleet VMT

** MSRC buses are not used for the Downtown Toy Story Circulator services*

California Air Resources Board methodology for calculation of new bus service emission reductions was used.

ART OPERATING CHARACTERISTICS	
Operating Days per Year	365
Annual Ridership	3,400,000
Avg. Daily Ridership	9,315
Avg. Trip Length	2.5
Avg. Annual Bus VMT	42,670
No. of buses in ATN Fleet	72
Avg Annual Fleet VMT	1,792,140
Avg. Auto Trip	2.5
# of Days * Ridership * Adjustment for Trips	1,700,000
ANNUAL VMT REDUCED	
# of Days * Ridership * Adjustment for Auto Trips) * (Auto Trip Length * Auto Adjustment * Trip Length)	7,650,000
ANNUAL EMISSION REDUCTIONS ROG	
[(Annual Trips Reduced) * (Annual Trip End Factor) + (Annual VMT Reduced) * (Auto VMT Factor) - (Bus VMT) * (Bus VMT Factor)]/454	21,031
ANNUAL EMISSION REDUCTIONS NOX	
[(Annual Trips Reduced) * (Annual Trip End Factor) + (Annual VMT Reduced) * (Auto VMT Factor) - (Bus VMT) * (Bus VMT Factor)]/454	15,837
ANNUAL EMISSION REDUCTIONS PM10	
[(Annual Trips Reduced) * (Annual Trip End Factor) + (Annual VMT Reduced) * (Auto VMT Factor) - (Bus VMT) * (Bus VMT Factor)]/454	3,776