

COVER PAGE

End-Use Sector Activity Being Applied For:

6.1 Transportation Technologies: Clean Cities/Alternative Fuels, Category 2

State Special Project Title: “Clean Green” School Buses for Tucson, Arizona

State Applying for Grant: Arizona

Other States Participating: N/A

Amount Being Applied for: \$100,000

Cost Share: \$380,534 (79% of total project costs). Sources – Arizona School Facilities Board, Pima Association of Governments, and Tucson Unified School District

Planned Completion Date: 24 months from July 2000 = June 2002

Congressional District of Project: District 5

Project Description (Abstract):

The Arizona Department of Commerce will support the Tucson Clean Cities Coalition and Tucson Unified School District (TUSD) to implement the Tucson “Clean Green” School Buses Project. The project will demonstrate improved air quality in Tucson, Arizona, over two years by completing the following objectives:

1. Add up to five (5) CNG school buses to the Tucson Unified School District fleet,
2. Promote the Tucson Clean Air Coalition’s Action Plan,
3. Collect reliability and performance data during one year of operation.

The \$380,534 local cost share will fund 5 standard 84-passenger school buses with diesel engines plus Tucson Clean Cities coordination and maintenance support. The \$100,000 DOE grant will fund the incremental costs for converting those 5 buses from diesel to dedicated CNG engines with storage tanks.

State contact for more information: Jennifer Hindman, Alternative Fuels Coordinator
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Other contacts:

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PROPOSED COST-SHARE EXPLANATION:

Name of Applicant	Title of Project
Arizona Department of Commerce Energy Office	“Clean Green” School Buses for Tucson, Arizona

PROPOSED COST SHARE (AND SOURCES)

(Put each source on a separate line; add lines as necessary if more than one source)

Cash/Source	Third Party In-Kind/Source
\$74,000 X 5 diesel buses = \$370,000 Source – Arizona Students First Renewal Funds	\$6,183 Tucson Clean Cities Coordinator/ PAG
	\$4,351 TUSD Transportation Maintenance
Total: \$370,000	Total: \$10,534

Name and Address of Contributor: Arizona School Facilities Board, 1700 W. Washington, Suite 602, Phoenix, AZ 85007

Nature of Contribution	Estimated Value of Contribution	Basis of Valuation
Personnel		
Fringe Benefits		
Travel		
Equipment	\$370,000	5 buses X \$74,000 (estimate based on recent procurement experience)
Supplies		
Contractual		
Other (Specify)		
Indirect		
TOTAL	\$370,000	

Name and Address of Contributor: Pima Association of Governments, 177 N. Church, Suite 405, Tucson, AZ 85701-1187
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Nature of Contribution	Estimated Value of Contribution	Basis of Valuation
Personnel	\$5,240	10% X \$26,200 /yr. (.6 FTE) Clean Cities Coordinator X 2 years.
Fringe Benefits	\$943	18%
Travel		
Equipment		
Supplies		
Contractual		
Other (Specify)		
Indirect		
TOTAL	\$6,183	

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Name and Address of Contributor: Tucson Unified School District, P.O. Box 40400, Tucson, AZ 85717-0400

Nature of Contribution	Estimated Value of Contribution	Basis of Valuation
Personnel	\$3,688	50 hrs./bus/year X 5 buses x \$14.75/hr.
Fringe Benefits	\$663	18%
Travel		
Equipment		
Supplies		
Contractual		
Other (Specify)		
Indirect		
TOTAL	\$4,351	

Problem Statement:

Tucson Unified School District (TUSD) is the oldest and second largest public school district in Arizona. TUSD educates approximately 63,000 students in 107 schools (K-12) spread over 285 square miles in Tucson and Pima County. An aging fleet of 300 TUSD school buses transport students approximately 4.7 million miles each year, using primarily gas and diesel fuel.

In 1994 the Arizona Department of Commerce Energy Office and the U.S. Department of Energy helped TUSD purchase the first three (3) compressed natural gas (CNG) school buses in Arizona. After experiencing numerous problems with the original Hercules CNG engines, TUSD paid to repower all three school buses with Cummins CNG engines. TUSD helped organize the Tucson Clean Cities Coalition and contributed to the Action Plan approved by DOE in 1999.

State funding and procurement rules, however, don't encourage school districts outside of Phoenix and Maricopa County to buy alternative fuel school buses. Although Tucson and Pima County have growing transportation and air quality problems, they have not yet violated EPA compliance minimums and have little support for funding alternative fuel vehicles. The Arizona School Facilities Board has authorized TUSD to replace 61 school buses through the Students First Renewal Program, but only provides funding for gas or diesel powered school buses. Other support is critical to offset the incremental purchase price of alternative fuel school buses.

Goal: Demonstrate improved air quality in Tucson, Arizona

Objectives:

1. Add up to five (5) CNG school buses to the Tucson Unified School District fleet,
2. Promote the Tucson Clean Air Coalition's Action Plan,
3. Collect reliability and performance data during one year of operation.

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Workplan:

The Arizona School Facilities Board is expected to confirm in April or May the number of replacement school buses that TUSD can purchase with Students First Renewal Funds. Once the DOE grant is confirmed, Ron Stacy of TUSD will complete a bid package to procure the five (5) alternative fuel school buses. The TUSD Governing Board will approve that bid award about one month later. The buses will take approximately eight (8) months for delivery to Tucson.

The Tucson Clean Cities Coordinator will prepare publicity and arrange for the Clean Cities decals to be available for the new school buses. After the 5 CNG school buses arrive in Tucson, TUSD will complete preliminary maintenance inspections, conduct driver training and schedule the new routes. Monthly logs for each alternative fuel bus will track the amount of fuel used, miles traveled and maintenance completed. The final report will compare the reliability and performance of the five CNG buses to other TUSD gas and diesel school buses.

Implementation Schedule	Activities	Deliverable
Month 1	Confirm grant award Complete bid package for buses	Bid package
Month 2	Award bid & order buses	Bid award & bus order
Month 10	Buses arrive, schedule routes	5 CNG school buses
Month 11-23	Collecting and reporting reliability and performance data	Monthly reliability & performance data
Month 24	Complete final report	Final report

Appendices:

- A. Standard Form 424, Application for Federal Assistance
- B. Federal Assistance Budget Information Form, DOE F 4600.4 (Draft attached)
- C. Budget Explanation Form, GO-PF20
- D. Pre-Award Information Sheet, GO-PF19
- E. US DOE Assurance of Compliance, DOE 1600.5
- F. Certifications Regarding Lobbying; Disbarment; Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements; FA-Certs; and
- G. Disclosure of Lobbying Activities, SF-LLL