

One-Time Non-Base Investment Proposal: Step 2

(Please limit the proposal narrative and attachments to 10 pages)

Proposal Name: Renewable Energy – Hybrid State Passenger Fleet Vehicles Funding

1. Provide a description of the project being proposed. (5 points)

For each year, FY'12 and FY'13, we would like to purchase four hybrid Toyota Prius sedans (or similar) from the State of Minnesota approved contract vendor listing. These units would replace four passenger fleet sedans purchased in 2005 which have 110,000 or more miles. Each year the passenger fleet account would fund one of the four sedans (\$27,000 x 2 years), with three being paid for from central funds (\$81,000 x 2 years).

In a cooperative effort between Vehicle Operations and Automotive and Manufacturing Engineering Technology Department, these hybrid vehicles would serve as sources of research and study by AMET students.

Typically, over a year's time, hundreds of faculty and staff would be driving these vehicles to state-wide meetings, teach off-campus classes offered in other Minnesota communities, attend conferences, and University approved functions. Students can compare the performance of these hybrids with regular fueled sedans in use by our passenger fleet customers.

2. Describe how the project will drive positive transformational change. (5 points)

One objective will be to reduce our fuel consumption on our passenger fleet vehicles allowing financial savings.

The first fiscal year 4 sedans would be purchased replacing one-fourth of our sedans in our passenger fleet with hybrid vehicles. Utilizing the average of \$2,000 of fuel cost per year x 4 sedans = \$8,000 yearly fuel cost. A 41% reduction in fuel cost equals \$3,280 for the first year of savings for fuel.

A trip to the cities would be approximately 180 round trip miles:

Hybrid Toyota Prius = 180 miles at 50 mpg = 3.6 gallons x \$3.26 = \$11.74
Dodge Stratus = 180 miles at 20.47 mpg = 8.79 gallons x \$3.26 = \$28.66

Approximately, \$17 savings per trip to the cities utilizing a hybrid vehicle, which averages out to a 41% reduction in fuel cost.

Our present passenger fleet consists of 16 sedans offered within our daily scheduling log for meetings, classes and events. A passenger fleet sedan averages 23,000 miles with approximately \$2,000 in fuel expense per year. 16 sedans x \$2,000 = \$32,000 average fuel cost.

The second year, 4 sedans would be purchased, increasing our fleet to 8 hybrid sedans, allowing half of our sedans in our passenger fleet to be hybrid vehicles. Our savings would double to approximately \$6,560 per year.

In FY'11, \$124,911 was spent on fuel for our entire 36 unit fleet, this includes our minivans and large vans. An estimated annual savings of \$6,560 minimum for our sedans. Seven passenger minivans are not a part of this program nor are they available at this time on the state contract.

The second objective will be the partnership with AMET and its students. This will allow educational research and testing to be completed within our Automotive & Manufacturing Engineering and Technology Department on campus.

3. Explain how the project addresses student recruitment, retention, persistence, and/or completion or one or more of the 12 Challenges. (10 points)

Our hybrid vehicles will further enhance the research that the CORE (Center of Renewable Energy) is undergoing with AMET. The state contracted hybrid vehicle "Toyota Prius" will offer the opportunity for our students to research additional energy sources at our University.

This would enhance the present and future programs that are offered for the students within this technology coursework.

4. Describe the impact this project will have on students and/or others whom we serve. (10 points)

Fuel reduction will be a great cost savings for our fleet budget.

The University's usage of hybrid vehicles would offer advance recognition, enticing recruitment and retention of our student body in the fast growing scientific/engineering programs offered.

The community will continue to take notice of our usage of hybrid vehicles and multiple other renewable energy ventures of this University. This action will allow them to perhaps follow our lead and challenge the community action and personal household commitment to energy efficient options.

5. Identify the "SMART" outcomes for the project (specific, measurable, achievable, relevant, and time-bound). (5 points)

The University will continue to have travel needs to maintain our connection with other Universities, state department offices, recruitment, conventions, public relations, classes and student organizations. Utilizing these hybrid vehicles during our travel will offer a strong visualization that we are pursuing energy efficient options and effectively managing our budget during a stressed economical time. The passenger fleet operation has a large number of data points including mileage by vehicle, fuel consumption, repair costs, etc. These data points will be made available to AMET and their students for analysis.

The Department of Energy requires annual reports to be completed on our University fleet. The State has requested that 20% of our fleet be energy efficient vehicles for the State of Minnesota. We have been able to establish and maintain this percentage with the help of our department assigned, maintenance and AMET fleet. The Department of Energy would like to see a consistent to increased usage of energy efficient vehicles.

This increase of hybrid vehicles in our fleet would allow our University to maintain this present guideline and be prepared for possible increased percentage requests.

6. Discuss what this project will do for the university that warrants the investment. (5 points)

Reviewing our passenger fleet averages over the past three years shows the average yearly usage of our fleet to be 563,000 miles traveled, with 2,250 reservations within the system. Our present passenger fleet consists of 16 sedans, 12 minivans and 1 twelve passenger van. Due to budget constraints the last couple of years, has left approximately a third of our passenger fleet sedans ready for auction with an average of 125,000 miles with an age of at least 5 years of usage.

The new Toyota Prius, offers a 8 year 100,000 mile warranty on their vehicles at this time, with anticipated mileage up to around 200,000 miles. The hybrid vehicles will have a longer life expectancy with less cost for fuel and maintenance needs.

7. Describe how the activities generated by this project would be sustained after one-time funding has ended, or if applicable, explain why the project does not need to be sustained. (5 points)

This one time funding for the state vehicles will improve the present status of our passenger fleet for University faculty, staff and students, and allow us to forego an in-house rate hike for FY'13. The budget hit fuel takes will be less with hybrids. This department has operated on a self sustaining budget to maintain the fleet. The income generated within the fleet allows us to upgrade the state vehicles on a regular basis, continues to offer our customers safe transportation for their University travel.

8. Budget (5 points):

Outline the funding requested using the categories listed below. Please identify any additional or matching funds that may available to support the project. Please note, budget revisions beyond 10% total change from the initial proposal require approval. Budget revisions of more than 20%, constitutes a major change in the project scope and will not be approved.

	FY12	FY 12 Matching Funds	FY13	FY 13 Matching Funds	FY14	FY13 Matching Funds
Personnel						
Unclassified Salary (in-load, overload)						
Classified Salary						
Fringe ^a (Classified and Unclassified)						
Graduate Assistant Salary						
Graduate Assistant Tuition Reduction/Waiver ^b						
Non-Salary						
Student Help						
Purchased Services/Travel Expenses						
Supplies and Materials						
Building Improvement/Construction Costs						
Equipment	\$81,000	\$27,000	\$81,000	\$27,000	-0-	-0-
Total Budget Requested	\$81,000	\$27,000	\$81,000	\$27,000	-0-	-0-

^a Note: All current employees must be paid fringe benefits. Fringe should be estimated based on salary and position classification: Unclassified 30%, Classified 37%, Adjunct 7.65%.

^b Estimated Tuition Reduction/Waiver for full-year enrollment: Masters \$5,858, Doctoral \$10,000.

Our present staff would continue to maintain the passenger fleet records, maintenance and services needs of the hybrid vehicles.

9. Identify any special considerations or needs required for this project (e.g. physical space, contractual obligations, IT support, or collaborations with/implications for other units). (5 points)

The new hybrid state vehicles would be parked in Lot 17 in back of Wiecking Center near the other state passenger vehicles.

The University's passenger fleet customers will also be a important factor on how the future of our hybrid vehicle fleet will be maintained. The increased fuel savings, reliability of the type of vehicle, safety concerns and the maneuverability on Minnesota roadways are all important factors that will be reviewed.

The present equipment in our office and service area will be able to manage the daily maintenance of this new hybrid vehicles.

10. Provide a project timeline outlining key tasks, milestones and dates for completion. (5 points)

The request of our four state hybrid passenger vehicles are able to be purchased from the state contract immediately, upon approval. Delivery date for the hybrid vehicles are 90-120 days with the present state contracted period lasting through October 31, 2012 or end of model year. Upon arrival of the vehicles, they will be added to the passenger fleet for immediate usage for faculty, staff, administration and students at the University, perhaps as early as September 2012.

Four of our present sedans during both the first and second fiscal year, depending upon the mileage accumulation, year of vehicle and maintenance costs, will be removed from our passenger fleet and reviewed for fleet rotation within the maintenance fleet. Approved used vehicles will be processed for a state auction.

Documentation will be maintained on actual day usage, location and mileage of each vehicle. A regular in-house maintenance program will be followed for these vehicles which will assist the renewable energy program with needed research materials.

The vehicle parking space will remain basically the same due to the rotation of auction and purchased vehicles.