



**U.S. Department of Transportation  
Federal Transit Administration**

**Alternative Transportation in the Parks and Public Lands Program  
Project Proposal for Fiscal Year 2007 Funds – Implementation Project**

**BASIC PROJECT INFORMATION**

Project Name (Please provide a 1-2 sentence description of the project):

**Roaring Fork Alternative Public Transportation in Demand (RAPID)**

The Roaring Fork Transportation Authority (RFTA) is applying for funds to purchase two hybrid electric buses and an array of Intelligent Transportation Systems (ITS) technologies to make existing services more efficient and user-friendly. These improvements will jumpstart the implementation of a larger Bus Rapid Transit (BRT) system in our region.

Proposed Funding Recipient: **USDA Forest Service, Rocky Mountain Region, White River National Forest, Aspen/Sopris Ranger District and the Roaring Fork Transportation Authority (RFTA)**

Public land unit(s) involved:

**The Maroon Bells - Snowmass Wilderness Area, White River National Forest, Colorado**

Location of Project

City: Aspen  
County: Pitkin  
State: Colorado  
Congressional District: 3

Federal Land Management Agency managing the above unit(s):

- Bureau of Land Management
- Bureau of Reclamation
- Fish and Wildlife Service
- Forest Service
- National Park Service

Type of Implementation Project:

(Planning projects, please use the alternate form)

- Bus
- Vehicle replacement
- Tram/Trolley
- Boat/Ferry/Dock
- Rail
- Non-motorized (e.g., bicycling/pedestrian trail)
- Other (e.g., Intermodal facility, ITS)

Describe:

**ITS technologies as part of a larger BRT system**

- Proposal is for a new alternative transportation system where none currently exists.
- Proposal is for an expansion or enhancement of an existing alternative transportation system.
- Proposal is for rehabilitation of or replacement of vehicles or facilities for an existing alternative transportation system.

ATPPL Funding Requested during FY 2007

**\$ 3,064,200**

**Total Project Capital Cost at Completion (All sources)**

**\$ 3,830,250**

Were you awarded FY 2006 ATPPL funds?  Yes  No

If answer "Yes," please provide amount awarded: **\$ 1.6 million**

Do you plan to request additional ATPPL funds in future years?  Yes  No

**(Note: If you wish to compete for future ATPPL fiscal year funding you must reapply).**

If answer "Yes," please specify ATPPL proposed funding levels for out years below:

FY 2008 **depends on amount awarded in 2007**

FY 2009 \$

FY 2010 \$

FY 2007 Funding Amounts from sources other than ATPPL funds?  Yes  No  
 If answer "Yes," please specify funding levels per source below:

State \$	Local (RFTA) \$ <b>766,050</b>	Federal (other than ATPPL) \$	Private sources \$
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**CONTACT PERSON**

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Position: <b>Chief Executive Officer</b>	E-mail: <b>dblankenship@rfta.com</b>
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**OTHER PROJECT SPONSORS (in addition to funding recipient)**

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**REQUIREMENTS**

- If a State, Tribal, or local government entity is proposing the project, the applicant has contacted the manager of the federal land unit(s) and has the consent of the Federal land management agency or agencies affected.
- The project is consistent with the metropolitan and statewide planning process.
- The project is consistent with agency plans.
- If this is an implementation project, all reasonable alternatives, including a non-construction option, were analyzed before proposing this project.

**BASIC PROJECT DATA**

Number of Visitors (Annual): <b>140,000</b> (estimated 2006 Maroon Bells Scenic Area)  <b>1.4 million</b> (estimated 2006/07 ASC skier visits)	Daily Number of Visitors (Peak season): <b>900</b> (Maroon Bells daily usage from June - Oct. 06) <b>10,000</b> (ASC daily usage from 11/25/05- 4/15/06)
Average Number of Vehicles per Day at Peak Visitation: <b>SH 82 between Aspen and Buttermilk Ski Area = 25,000 - 28,000</b> <b>SH 82 between Buttermilk Ski Area and Brush Creek Park-n-Ride = 11,000 - 13,000</b>	
Current Road Level of Service at Peak Visitation: <b>LOS F for SH 82 in vicinity of Buttermilk Ski Area and Aspen Mt. Ski Area. LOS E for Brush Creek Rd. up to Snowmass Village</b> (Please consult guidance where available on determining this variable. You may also use observational accounts or pictures to provide an assessment of this datum for FY 2007 proposals).	
What time of the year does your land unit experience Peak Visitation? <input type="checkbox"/> Spring <input checked="" type="checkbox"/> Summer (Maroon Bells) <input type="checkbox"/> Fall <input checked="" type="checkbox"/> Winter (ASC)	
Current Carrying Capacity of Existing Roads: <b>Approximately 2,000 vehicles per hour on SH 82 and approximately 1,000 vehicles per hour on Brush Creek Rd.</b>	
Current parking shortages during peak visitation: <b>Only limited parking allowed from a \$15-\$20 fee adjacent to ski areas.</b>	

<p>Current <i>Average</i> Number of Persons who use the alternative transportation system (if one already exists) at Peak Visitation:  <b>367</b> (average # daily users at peak June-August 2006 for Maroon Bells Wilderness shuttles)  <b>2,238</b> (average # daily users at peak Jan-March and December 2006 for ASC ski shuttles)</p>
<p>Current <i>Annual</i> Number of Persons who use the alternative transportation system (if one already exists):  <b>34,202</b> (2006 ridership for RFTA limited access shuttles to/from Maroon Bells Scenic Area)  <b>287,888</b> (2006 ridership for RFTA ski shuttles to/from four ASC ski areas)</p>
<p>Estimated <i>Annual</i> Number of Persons who will use the alternative transportation system at project completion: <b>350,000</b> (based on regional growth, visitor statistics and bus popularity)</p>
<p>Is there an anticipated reduction in auto collisions with large animals with this project?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> <b>No</b>          If "Yes," please provide anticipated reduction:                      collisions/year</p>

<p><b>BASIC PROJECT DATA (CONTINUED)</b></p>
<p>Is there an anticipated increase in porous surface with this project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> <b>No</b>          If "Yes," please provide anticipated area of increase:                      square feet</p>
<p>Is there an anticipated increase in wildlife habitat connectivity? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> <b>No</b>          If "Yes," how many acres would be connected by the project?                      acres</p>
<p>Is there an anticipated increase in air clarity measures (e.g., visitors' visual experience) for the land unit as a result of this project? <input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No          If "Yes," please explain: <b>Studies of hybrid buses have shown reductions in exhaust emissions by up to 90% in PM, HC, and CO; and up to 50% in NOx. The stereotypical plume of black diesel smoke behind buses is greatly reduced.</b></p>
<p>Is there an anticipated reduction of visual impact of parking and roads on visitor experience?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> <b>No</b>          If "Yes," please explain:</p>
<p>Is there an anticipated reduction of visual or <b>noise</b> impacts of transportation facilities on visitor experience?  <input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No          If yes, please explain: <b>The sound pressure of hybrid vehicles is one-tenth that of a conventional diesel bus operating under similar conditions.</b></p>

## Executive Summary

**Please provide an executive summary of your proposal that is no more than one page in length.**

The Roaring Fork Transportation Authority (RFTA) and our Federal land agency partner, the USDA Forest Service, White River National Forest, Aspen/Sopris Ranger District are requesting \$3,064,200 from the FY 2007 ATPPL Program. RFTA is willing to provide a voluntary 20% local match of \$766,050 to offset the total capital completion cost of \$3,830,250. Awarded funds will be used to purchase two desperately needed, hybrid-electric diesel buses and an array of Intelligent Transportation Systems (ITS) components that will improve existing transit services by making them more efficient and user-friendly. RFTA and the USFS Aspen/Sopris District graciously accepted \$1.6 million from the FY 2006 ATPPL Program, allowing for the purchase of

four hybrid-electric diesel buses that will be used as free Aspen Snowmass Skiing Company (ASC) ski shuttles during the winter months, as well as being used as USFS shuttles to access the Maroon Bells-Snowmass Wilderness Area in the summer months as part of a successful visitor-restricted access program.

With system-wide ridership in 2006 up to 4.1 million and the growing popularity of ASC ski resorts, the Maroon Bells Wilderness Area and the annual ESPN X-Games all occurring on USFS White River National Forest land, RFTA is struggling to balance growing operational demands with future planning initiatives designed to preserve the Valley's unique scenic beauty, world-class recreation and an overall high quality of life. To address the region's existing and forecasted mobility challenges, RFTA is currently attempting to advance its Bus Rapid Transit (BRT) project for the system overall through FTA's "Small Starts" Alternatives Analysis (AA) process, while concurrently partnering with other organizations and local funding sources to jumpstart the elements of BRT such as additional buses and ITS technologies. The addition of ITS components such as CAD/AVL devices on the buses and electronic bus announcement signs with real-time passenger information at stations and park-n-rides will help alleviate general confusion that visitors of the White River National Forest encounter when using mass transit. RFTA is practicing environmental stewardship by offering quiet and ADA-accessible hybrid buses as an alternative to increasing personal vehicle traffic congestion on rural highways and by using 10% bio-diesel in all of its diesel fleet. RFTA is a truly multi-jurisdictional organization with solid local, state and federal coordination that is being increasingly engaged in regional planning efforts that balance smart economic growth with natural resource preservation.

## Project Description

**What activities would be funded by the requested ATPL financial assistance? Please provide a project description that is no more than one page in length. You may attach up to two pages of maps or other illustrations that do not count towards the page limit.**

Awarded funds from the FY 2007 ATPL Program cycle will be used to purchase two additional hybrid-electric diesel buses that were not able to be purchased with FY 2006 awarded funds. RFTA used the \$1.68 million from FY 2006, along with \$520,000 in local funds to purchase four hybrid buses, however increased ridership and popularity of the quiet, roomy buses requires two additional buses to meet user demand. A low-floor hybrid bus now costs \$590,000 (2007 dollars) so we are asking for \$1.18 million for two buses.

Additionally, awarded funds will be used to purchase and implement several Intelligent Transportation Systems (ITS) components, such as AVL/CAD systems, real-time passenger information, automatic annunciation and variable message signs that will greatly enhance existing services by improving operational efficiency and offering user incentives to choose transit for trips instead of the personal vehicle. Even more important, the real time passenger information and automatic annunciation components will make the transit experience more user-friendly for the large number of visitors to the White River National Forest. We are anticipating necessary ITS components to cost \$ 2.65 million (2007 dollars). Please see the table titled "RAPID Project Budget" in the accompanying report for more detailed information.

## **Alternative Transportation in the Parks and Public Lands Implementation Evaluation Criteria**

(There are separate evaluation factors for planning projects. Use the planning project proposal template for planning projects.)

Criteria	Points	Weight
<b>1. Demonstration of Need</b>		25%
a. Visitor mobility & experience	(1-5)	
b. Environmental condition as result of existing transportation system	(1-5)	
<b>2. Visitor Mobility &amp; Experience Benefits of Project</b>		25%
a. Reduced traffic congestion	(1-5)	
b. Enhanced visitor mobility, accessibility, and safety	(1-5)	
c. Visitor education, recreation, and health benefits	(1-5)	
<b>3. Environmental Benefits of Project</b>		25%
a. Protection of sensitive natural, cultural, and historical resources	(1-5)	
b. Reduced pollution (air, noise, visual)	(1-5)	
<b>4. Operational Efficiency and Financial Sustainability</b>		25%
a. Effectiveness in meeting management goals	(1-5)	
b. Feasibility of proposed budget	(1-5)	
c. Cost effectiveness	(1-5)	
d. Partnering, funding from other sources	(1-5)	

**Your responses to these questions must total no more than eight pages.  
Please see accompanying grant package for these answers, along with  
supporting photos and graphics. The question regarding cost  
effectiveness (4c) is answered below.**

### **Implementation Evaluation Factors:**

#### **1. Demonstration of Need**

- a. Visitor mobility and experience:** Describe the site's current and/or anticipated transportation problem or opportunity for improvement. Please cite documentation in agency plans and other reports to support your description. You should include information on issues such as traffic congestion, traffic delays, parking shortages, difficulty in accessing destinations, safety issues related to traffic, lack of access for persons with disabilities, lower incomes, or without cars, and visitor frustration.
  
- b. Environmental condition as a result existing transportation system:** Describe the site's current or anticipated problem or opportunity for improvement of the environment in this area. Please cite documentation in agency plans and other reports to support your description. You should include information on current or anticipated problems such as air pollution, noise pollution, run-off, water quality, harm to vegetation and wildlife, and other impacts or stressors on natural, cultural and/or historic resources caused by the existing transportation system.

## 2. Visitor Mobility and Experience Benefits

- a. Reduced traffic congestion:** Describe *how* this project will mitigate the impact of traffic congestion or enhance current visitor travel conditions. In order to respond to this question, please include (where applicable) a description of how this project will:
- Reduce the average number of daily motorized vehicle trips during peak visitation with project implementation. (This is estimated based on anticipated alternative transportation system usage at completion and the typical number of passengers per vehicle); *and*
  - Decrease or mitigate time lost to traffic delays.
- b. Enhanced visitor mobility, accessibility, and safety:** Describe *how* the implementation of this project will improve or maintain visitor mobility, access and safety. In order to respond to this question, please include (where applicable) a description of:
- Benefits that the project would have in easing visitor travel to destinations and decreasing visitor inconvenience;
  - Improved access for persons with disabilities;
  - Improved access for individuals with lower incomes or without cars;
  - Anticipated impacts on vehicle accident rates or property loss;
  - Anticipated impacts on visitor safety in cases of catastrophic events, such as forest fires; *and*
  - The number of visitors per year that will benefit.
- c. Visitor education, recreation and health benefits:** Describe *how* the project will enhance or maintain visitor experience related to educational benefits, recreational benefits, public health benefits, and social benefits. How many visitors per year will experience these benefits?

## 3. Environmental Benefits

- a. Protection of natural, cultural, and historic resources:** Describe *how* this project will improve or maintain the protection of natural, cultural, historic, and/or scenic resources. Please provide as much information as possible about *anticipated outcomes of the project*, such as:
- Ensuring that visitation does not exceed an area's ability to handle increased levels of visitation or the "carrying capacity" of the land unit;
  - Maintaining ecosystem function, ecosystem restoration, disturbed land restoration, or re-vegetation efforts;
  - Improving habitat connectivity;
  - Preserving an archeological resources, historical resources, viewshed or watershed; *and*
  - Reducing auto-large animal collision rates or other protection benefits where applicable.
- b. Reduced pollution:** Describe *how* this project would reduce and/or prevent pollution – including air pollution, water pollution, noise pollution, and visual pollution. In order to respond to this question, please include (where applicable):
- Estimated reduction in *average vehicle miles traveled at peak visitation* (a measure that is an estimate of a reduction in pollutant emissions as a result of the proposed project); *and*
  - Estimated number of riders *switching from auto to transit or to non-motorized transportation (including bike, pedestrian, and/or waterborne craft)* as a result of the project (a measure of estimated reduction in fuel consumption for site patrons and improved energy efficiency aspects of transportation, including non-motorized transportation).

**4. Operational Efficiency and Financial Sustainability**

- a. **Operational Efficiency:** Describe how the proposed project is the most effective solution for meeting identified management goals and objectives for this site. Please cite documentation in agency plans and other reports to support your description.
- b. **Feasibility of Proposed Budget:** Fill in the budget template below *or* attach a project budget that *at a minimum contains the items in the budget template* and extends at least 5 years. Include a narrative to elaborate on the financial plan. See 5-year forecasted attached to the project narrative.

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
<b>Revenue</b>					
ATTPL funding (requested)					
Funds from public land budget					
Other federal funds					
State funding					
Local funding					
Passenger Fares and/or transportation fees					
All other dedicated sources of funding <sup>1, 2</sup>					
<i>Total Revenue</i>					
<b>Capital Costs</b>					
Purchase of rolling stock (vehicles)					
Lease of rolling stock (vehicles)					
Construction (e.g., bus shelters, sidewalks, trails, etc.)					
Rehabilitation					
Other: _____					
<i>Total Capital Costs</i>					
<b>Operating Costs</b>					
Salaries					
Routine Maintenance					
Insurance					
Fuel					
Contracted services					
Other: _____					
<i>Total Operating Costs</i>					
<sup>1</sup> Documentation to support all other dedicated sources of funding (e.g., letters of confirmation of financial contribution, or letters of in-kind contribution) or innovative financing must be provided with this application.					
<sup>2</sup> For example, funding from partnerships, private commitments, donations, etc.					

**Proposed budget narrative:** In this narrative, include details such as size and number of vehicles, fuel type, terms of lease, description of facilities to be constructed, types of ITS, etc. The narrative should also describe the maintenance plan, include information on how the project will impact total operating and maintenance costs and schedule at the site, as well as information on the project's impact on the unit's ability to maintain other assets. Finally, for vehicle replacement projects, please list the age, mileage, and vehicle type of each vehicle that you are requesting funding to replace.

- c. **Cost Effectiveness:** Fill in all information for items 1-4 below in order to calculate the cost per person using the alternative transportation system. FTA will calculate annualized cost per passenger trip and annual fare box recovery – common transit cost effectiveness measures – based on the information that you provide. **You must provide all information in order to fulfill these required criteria.**

1. Annual cost for vehicle operations and maintenance (including salaries, fuel, maintenance, administrative expenses related to system, and all other operating costs):  
**\$18.750 million (2007 Transit Ops. Exp.) & \$8.05 million (2007 Trails Ops. Exp.)**
  2. Average annual number of riders:  
**4.251 million/year estimated in 2007**
  3. Transportation fee or fares recovered (average):  
**\$11.138 million/year (Fares = \$3.85 million & service contracts = \$7.288 million.**
  4. Useful life of transportation assets:  
**Buses = 12 years, ITS components = 7–12 years, as best RFTA knows.**
- Annual cost per passenger trip: [This will be automatically calculated by FTA.](#)
- Annual fare box recovery [This will be automatically calculated by FTA.](#) %

- d. **Partnering, funding from other sources:** Describe any partnerships the project has with federal, state, tribal and local government agencies, gateway communities and the private sector. Please cite agreements or documentation (*including letters of dedicated financial support or confirmation of financial or in-kind contribution*) that show a high level of coordination and partnering activities. If applicable, describe any economic, mobility, or other benefits to the gateway community.