



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

**Paul S. Sarbanes Transit in Parks Program (Transit in the Parks Program)  
Project Proposal for Fiscal Year 2009 Funds – Implementation Project**

BASIC PROJECT INFORMATION			
Project Name (Please provide a 1-2 sentence description of the project): Purchase six specially equipped canyon service buses and four passenger waiting shelters for Big and Little Cottonwood Canyons in the Wasatch-Cache National Forest			
Proposed Funding Recipient: Utah Transit Authority			
Public land unit(s) involved: Wasatch-Cache National Forest		Location of Project City: Salt Lake City County: Salt Lake County State: Utah Congressional District: UT 2 and 3	
Federal Land Management Agency managing the above unit(s): <input type="checkbox"/> Bureau of Land Management <input type="checkbox"/> Bureau of Reclamation <input type="checkbox"/> Fish and Wildlife Service <input checked="" type="checkbox"/> Forest Service <input type="checkbox"/> National Park Service <input type="checkbox"/> Other (e.g. Federal Trust) Describe:		Type of Implementation Project: (Planning projects, please use the alternate form) <input checked="" type="checkbox"/> Bus <input checked="" type="checkbox"/> Vehicle replacement <input type="checkbox"/> Tram/Trolley <input type="checkbox"/> Boat/Ferry/Dock <input type="checkbox"/> Rail <input type="checkbox"/> Non-motorized (e.g., bicycling/pedestrian trail) <input checked="" type="checkbox"/> Other (e.g., Intermodal facility, ITS) Describe: Passenger Waiting Shelters	
<input type="checkbox"/> Proposal is for a new alternative transportation system where none currently exists. <input checked="" type="checkbox"/> Proposal is for an expansion or enhancement of an existing alternative transportation system. <input checked="" type="checkbox"/> Proposal is for rehabilitation of or replacement of vehicles or facilities for an existing alternative transportation system.			
Transit in Parks Program Funding Requested during FY 2009 \$1,978,832		Total Project Capital Cost at Completion (All sources) \$2,473,540	
Were you awarded Transit in Parks Program funds for this project in the past? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If answer "Yes," please provide amount awarded: \$			
Do you plan to request additional Transit in Parks Program funds in future years? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>(Note: If you wish to compete for future Transit in Parks Program fiscal year funding you must reapply).</b> If answer "Yes," please specify Transit in Parks Program proposed funding levels for out years below:			
FY 2010 \$1,360,000	FY 2011 \$1,500,000	FY 2012 \$1,750,000	
FY 2009 Funding Amounts from sources other than Transit in Parks Program funds? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If answer "Yes," please specify funding levels per source below:			
State \$	Local \$872,000	Federal (other than Transit in Parks Program)	Private sources \$50,000

		\$0	
<b>CONTACT PERSON</b>			
Name: Lorin Simpson		Phone: (801) 287-3225	
Position: General Manager, Salt Lake Business Unit		E-mail: lsimpson@rideuta.com	
Address: 3600 South 700 West, Salt Lake City, Utah 84119			

<b>OTHER PROJECT SPONSORS (in addition to funding recipient)</b>
   <b>Forest Service</b>

<b>REQUIREMENTS</b>
<input checked="" type="checkbox"/> 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. <input checked="" type="checkbox"/> The project is consistent with the metropolitan and statewide planning process. <input checked="" type="checkbox"/> The project is consistent with agency plans. <input checked="" type="checkbox"/> If this is an implementation project, all reasonable alternatives, including a non-construction option, were analyzed before proposing this project.

<b>BASIC PROJECT DATA</b>	
Number of Visitors (Annual): 2,180,000	Daily Number of Visitors (Peak season): 12,000
Average Number of Vehicles per Day at Peak Visitation: 9,000	
Current Road Level of Service at Peak Visitation D F for parking lots and spur roads  (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 2009 proposals).	
What time of the year does your land unit experience Peak Visitation? <input type="checkbox"/> Spring <input checked="" type="checkbox"/> Summer <input type="checkbox"/> Fall <input checked="" type="checkbox"/> Winter	
Current Carrying Capacity of Existing Roads: 500 vehicles per hour/6,250 (vehicles/day)	
Current parking shortages during peak visitation: 750+	
Current Average Number of Persons who use the alternative transportation system (if one already exists) at Peak Visitation: 2,373 (average number of visitors/daily at peak)	
Current Annual Number of Persons who use the alternative transportation system (if one already exists): 432,000 (anticipated number of riders or users/annually)	
Estimated Annual Number of Persons who will use the alternative transportation system at project completion: 475,000 (anticipated ridership/usage)	

Is there an anticipated reduction in auto collisions with large animals with this project?

Yes  No

If "Yes," please provide anticipated reduction: 2 collisions/year

### BASIC PROJECT DATA (CONTINUED)

Is there an anticipated increase in porous surface with this project?  Yes  No

If "Yes," please provide anticipated area of increase: square feet

Is there an anticipated increase in wildlife habitat connectivity?  Yes  No

If "Yes," how many acres would be connected by the project? acres

Is there an anticipated increase in air clarity measures (e.g., visitors' visual experience) for the land unit as a result of this project?  Yes  No

If "Yes," please explain: Anticipate another 43,000 people on buses; reduction of fine particulates from new buses and 200 fewer vehicle trips per day.

Is there an anticipated reduction of visual impact of parking and roads on visitor experience?  Yes  No

If "Yes," please explain:

Is there an anticipated reduction of visual or noise impacts of transportation facilities on visitor experience?  Yes  No

If yes, please explain:

## Executive Summary

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

Little Cottonwood Canyon is considered a world-class rock climbing, ice climbing, and bouldering destination as well as hiking, biking and snow skiing. Numerous recreation points are accessed directly from State Road 210. Also, Big Cottonwood Canyon provides hiking, biking, rock climbing, snow skiing and is accessed from State Road 152. The canyon is accessed by a scenic byway which runs to the top of the canyon. The supply of parking is insufficient in meeting the demand and parking can occur where it is legally prohibited along these two-lane roads. On-street parking is a safety hazard for all who travel in the canyons. The Forest Service will not permit expansion of parking beyond current levels and the majority of the canyons is within Forest Service jurisdiction. Spectacular scenery is the trademark of both Little and Big Cottonwood Canyons. Hiking leads to several lakes. The Cottonwood Canyons are major venues for outdoor recreation and an economic boon for Salt Lake City. A cooperative transportation study completed in 2007 identified the Utah Department of Transportation concern of too much traffic on the canyon roads and the most immediate solution to reduce the number of cars that go up the canyons would be to promote transit use. Little Cottonwood Canyon is close in proximity to avalanche paths and avalanche danger is greater as traffic increases, speeds and distances between cars decrease and traffic slows. The goal is to encourage more people to use transit service and park and ride lots at the mouths of both canyons. This project would purchase 6 buses and 4 passenger waiting shelters.

## Project Description

**What activities would be funded by the requested Transit in Parks Program 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.**

This project would purchase six new canyon service buses that emit fewer environmental pollutants. These buses are specially equipped to travel mountain roads. In the winter, because of the resorts located in the canyons, the buses would be equipped with ski racks for taking gear up the canyons. Bike racks on buses would allow bicyclists to access the many bike trails in the canyons. The buses would be accessible for disabled passengers.

The second part of this project would be to purchase and install four large ADA accessible passenger waiting shelters at areas that qualify in 23CFR Part 771 as environmental categorical exclusions. The shelters in inclement weather and because of their convenient locations would encourage people to ride transit in the canyons. The shelters would also improve safety by centralizing the waiting location away from busy roadways.

The bus project will improve the environment of the canyon and provide 6 cleaner operating buses as they will be purchased under the new 2010 Emissions standards. Utah Transit Authority, in conjunction with the Forest Service and canyon resorts have seen the canyon service ridership expand every year the service has operated. Many environmental restraints limit the transportation activity in Big and Little Cottonwood Canyons. Two Wilderness Areas, Lone Peak and Twin Peaks, have been designated within the boundaries of Little Cottonwood Canyon. Albion Basin, with the lure of extensive fields of wild flowers, is among the most photographed scenic attractions in the nation.

Utah Transit Authority canyon buses can take 1,200 single occupant cars off the canyon roads daily during traffic volume peaks of the year. In the winter season alone, 245,000 passenger trips can be eliminated with the highest peak trips on Saturdays.

# Transit in Parks Program Implementation Evaluation Criteria

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

Criteria	Points	Weight
1. Demonstration of Need		25%
a. Visitor mobility & experience	(1-5)	
b. Environmental condition as result of existing transportation system	(1-5)	
2. Visitor Mobility & Experience Benefits of Project		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)	
3. Environmental Benefits of Project		25%
a. Protection of sensitive natural, cultural, and historical resources	(1-5)	
b. Reduced pollution (air, noise, visual)	(1-5)	
4. Operational Efficiency and Financial Sustainability		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.**

## 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.**

SR-210 Transportation Study: A joint study by Utah Department of Transportation, canyon resorts (Snowbird/Alta), Town of Alta, Utah Transit Authority with participation of US Forest Service; Salt Lake Public Utilities; Salt Lake Planning and Public Safety; Save Our Canyons; and Wasatch Front Regional Council. Average weekday traffic reaches nearly 6,000 vehicles, with weekend daily traffic in February and March ranging between 9,000 and 12,300 vehicles. Forty vehicle accidents occurred in 2002-2003. Traffic conditions in Little Cottonwood Canyon are greatly influenced by seasonal and environmental factors. The predominant traffic destinations for Little Cottonwood Canyon are the natural recreational and resort attractions of the canyon. Weekends and holidays are the highest traffic days.

On days with inclement weather and high traffic volumes, choke points could contribute to accidents, which in turn could slow traffic to impact avalanche danger. The actual accident and severity rates for SR-210 are slightly higher than UDOT's expected rates for similar facilities. This higher rate indicates potential safety deficiencies along this corridor. Nine fatal accidents resulted in sixteen total fatalities between 1994 and 2003. Five of these were single vehicle accidents. Eighteen severity 4 (broken bones/bleeding wounds) occurred between 2002 and 2003. Forty vehicle accidents occurred between 2002 and 2003.

**Environmental condition as a result of the 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.

To environmentally protect the canyons will ensure their continued existence. Many environmental and natural habitat features could be at risk. A number of rare plant species are found in the area as well as Bigtooth maples, Quaking Aspens and Pines abounding in the canyon. Fall foliage is breathtaking. Cottonwood trees, oak, mahogany, dogwood scrubs, and sagebrush add to the diversity of the canyons. Among the greenery, a visitor may see several kinds of wildlife, including mule deer, elk, moose, mountain goat, mountain lion and bear. Smaller mammals include coyote, fox, beaver, badger, and others. Hawks, eagles, owls and migratory birds are seen often in the canyons.

These canyons are approximately 25 miles from Salt Lake City and produce 60% of the water for the Salt Lake Valley. Protecting the watershed is a primary concern for agencies responsible for managing activities in the canyons.

Enhanced avalanche danger is present when cars are moving too slowly or stopped due to canyon road congestion. Road dust involving emission particulates affect the environment and can be a danger to the watershed preservation effort. (UDOT SR-210 Study).

**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.

Reduce Traffic Congestion: Canyon buses reduce the number of single occupant vehicles by approximately 1,200 per day during peak periods. There would be reduced vehicle travel in the canyons; air quality would be improved with new emission standards for buses; congestion and parking demand would decrease. Because of the reduction in vehicle miles, accidents should decrease.

- 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.

#### Shelters

Shelter design and location will improve visual safety and visitor accessibility by including improvements per ADA guidelines and proven standards for shelter placement and design. The current landscape will be considered so the natural environment will not be disturbed when placing the shelters. The addition of shelters creates a higher visibility of pedestrian traffic to auto drivers which increases the awareness and safety of pedestrians.

#### Buses

UTA has a significant number of recreationalists who are under 16 years old who are transit dependent. Visitors on ski or other recreational vacations fly into Salt Lake International Airport and take the canyon buses as a matter of convenience. Eight park and ride lots near the mouths of the canyons help alleviate some of the canyon traffic and buses serve all the park and ride lots. 2,180,000 visitors per year could benefit from reduction in congestion, fewer environmental pollutants, safety in canyons, and convenience of travel.

- 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?

2,180,000 visitors annually would have benefits with less pollutants, less congestion and road traffic. The recreational benefits could be enhanced by the addition of ski racks on buses; bike racks; accessible features on buses and in passenger waiting shelters. UTA's website, Rideuta.com, explains how to ride canyon service, shows convenient schedules and costs of trips. A person from out of town or state could easily check the Rideuta website to gain their trip information before arriving, so an itinerary could be developed for convenience.

### **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.

There would be no impact on land restoration, the ecosystem or re-vegetation efforts, habitat connectivity, archaeological or historic resources. The watershed is protected by jurisdictional agencies as 60% of the water into Salt Lake County comes from these canyons. There would be a small improvement in auto-large animal collision rates due to less vehicle miles traveled by autos.

**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).

It is UTA’s goal to reduce emissions of air pollutants that lead to ozone along the Wasatch front. A detailed pollution reduction and emissions information for the six buses is attached for information purposes.

Affiliations: Member of the Utah Pollution Prevention Association  
 Partner Level Member of Clean Utah  
 Founding Member of the Climate Registry  
 Full Signatory Member of the UITP Charter on Sustainable Development

Certifications: ISO 14001:2004 Environmental Management Systems  
 ISO 9001:2000 Quality Management Systems

& Awards “Outstanding Achievement Award for Pollution Prevention” from the Utah Pollution Prevention Association (2007)

**Justification**

- 1) UTA currently operates 44 transit buses that provide service in the canyons that offer alternative means for visitors and removes vehicles from the roads.
- 2) UTA’s ISO 14001:2004 Environmental Management System certification, Clean Utah Partnership and Founding Member of The Climate Registry commits UTA to the highest level of environmental standards.
- 3) Replacing 6 canyon service buses manufactured in 1996 with buses that meet the 2010 emission standards would result in the combined reduced annual emissions for the 6 bus replacements as shown below.

Model Year	PM (lbs)	PM (lbs) saved	NOx (lbs)	NOx (lbs) saved
1996	52	-	4818	-
2010	10	42	192	4626

- 4) Based on a conservative ridership number of 8.9 passengers per bus, emissions of CO2 are reduced by 915 tons annually from providing service in the canyons. UTA’s canyon service improves energy efficiency through the reduction in the use of fuel from fewer vehicle miles being operated.

**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.

**Operational Efficiencies:** The UTA has many interlined services for operating efficiencies. By accessing strategically located park and ride lots at or near the mouth of Little and Big Cottonwood Canyons, service is integrated and transfers are convenient. UTA began services in 1970 under the Public Transit District Act and certifies annually to its financial capability to implement and operate projects funded with federal grants.

	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
<b>Revenue</b>				
Transit in Parks Program funding (requested)	1,978,832	1,360,000	1,500,000	1,750,000
Funds from public land budget				
Other federal funds				
State funding				
Local funding	494,708	340,000	375,000	437,500
Passenger Fares and/or transportation fees	250,000	275,000	288,063	301,745
All other dedicated sources of funding				
<i>Total Revenue</i>	2,723,540	1,975,000	2,163,063	2,489,245
<b>Capital Costs</b>				
Purchase of rolling stock (vehicles)	1,848,000	1,210,000	1,500,000	1,608,768
Lease of rolling stock (vehicles)				
Construction (e.g., bus shelters, sidewalks, trails, etc.)	130,832	0	0	141,232
Rehabilitation				
Other: P& R Needs		150,000		
<i>Total Capital Costs</i>	1,978,832	1,360,000	1,500,000	1,750,000
<b>Operating Costs</b>				
Salaries	813,000	845,520	879,341	914,514
Routine Maintenance	351,000	365,040	379,642	394,827
Insurance	34,000	35,360	36,774	38,245
Fuel	198,000	205,920	214,157	222,723
Contracted services	0	0	0	0
Other: Gen Adm./Utilities	328,000	341,120	354,765	368,955
<i>Total Operating Costs</i>	1,724,000	1,792,960	1,864,679	1,939,264

**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.

UTA has a Preventive Maintenance Plan that has been accepted by FTA and is reviewed triennially. Service levels will remain virtually the same, but will be operated with new, less polluting buses with more options available for passengers. The operating and maintenance costs will be similar to current costs; however, new buses will decrease the maintenance costs as the current buses are 13 years old. The buses to be replaced would be UTA Numbers 9651-9656; these are 1996 Gillig Model 3596TB with mileages ranging from 217,520 to 227,588 and are rated by maintenance as poor condition.

- 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): \$1,724,000
2. Average annual number of riders: 475,000 /year
3. Transportation fee or fares recovered (average): \$250,000/year
4. Useful life of transportation assets: 12 years

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.

The resorts in Little and Big Cottonwood Canyons will contribute the local match for the purchase of four passenger waiting shelters; UTA will provide in-kind match for project management and installation. Support letters were received from the Forest Service and resorts. The canyons and resorts are an economic engine for Salt Lake City.