# Financial Analysis, Action Plan, and Potential Funding Sources and Opportunities

9

## Section Overview

This section of the report provides a summary of financial analysis of projected annual maintenance and operations costs for the Zion Canyon shuttle system. Estimated costs related to shuttle vehicle replacement and transportation system capital improvements have been analyzed. Service planning scenarios related to potential adjustments in service to reduce long term costs also are presented. This report section also provides an action plan for immediate next steps (within the next year), as well as recommended strategies and projects to be implemented within the next 1 to 3 years and beyond 3 years. Potential funding sources and opportunities to support implementation of these actions are also presented.

*Visitors leaving the park to return to Springdale*

This section of the report closely relates to discussion of partnerships and partner roles and responsibilities in Section 8 of the report.

## Financial Analysis and Related Service Planning Scenarios

The project team analyzed a number of financial scenarios related to potential annual costs for ongoing operation and maintenance of the Zion Canyon shuttle system and potential annual revenue. This analysis will help the park and its partners proactively plan for the future of the shuttle system. This information will aide the decision-making process related to seeking additional funding for the system and areas of service adjustments that may be required to keep the costs of ongoing annual operation and maintenance in check with revenue to support the system.

Revenue to support ongoing operation and maintenance of the shuttle system (including the park route and the town route) is tied to park visitation levels. As park visitation levels increase, revenue for the shuttle increases proportionately. As park visitation levels decrease, revenue for the shuttle decreases. Any surplus that might occur in revenue annually can be placed back into investments in the system (new vehicles, upgraded facilities, etc.). However, surplus revenues are not expected in the future, because the costs for operating and maintaining the shuttle system through a service contract are expected to increase on an annual basis due to inflation.

### Results of Scenarios Analysis

The results of three of the financial scenarios analyzed are highlighted in this report – Scenario A, Scenario B, and Scenario C. All three scenarios assume that current service levels and schedules are maintained. The

*Existing Pa' rus Trail*

analysis assumes that service would continue to be provided from Easter through October with an option of running buses on weekends through November at the park's discretion. The three scenarios also include weekend bus service in November.

- Scenario A – assumes that the annual visitation/revenue would be capped at the current 2008 level ($3,335,000), and costs of annual operations and maintenance would increase annually by three percent (compounded) due to inflation.
- Scenario B – assumes a one percent annual increase in annual visitation/revenue would occur each year, and costs of annual operations and maintenance would increase by three percent (compounded) due to inflation.
- Scenario C – assumes a one percent annual decrease in annual visitation/revenue, and costs of annual operations and maintenance would increase by three percent (compounded) due to inflation.

These three scenarios are illustrated the charts on page 9-3.

## Operational and Maintenance Challenges Ahead

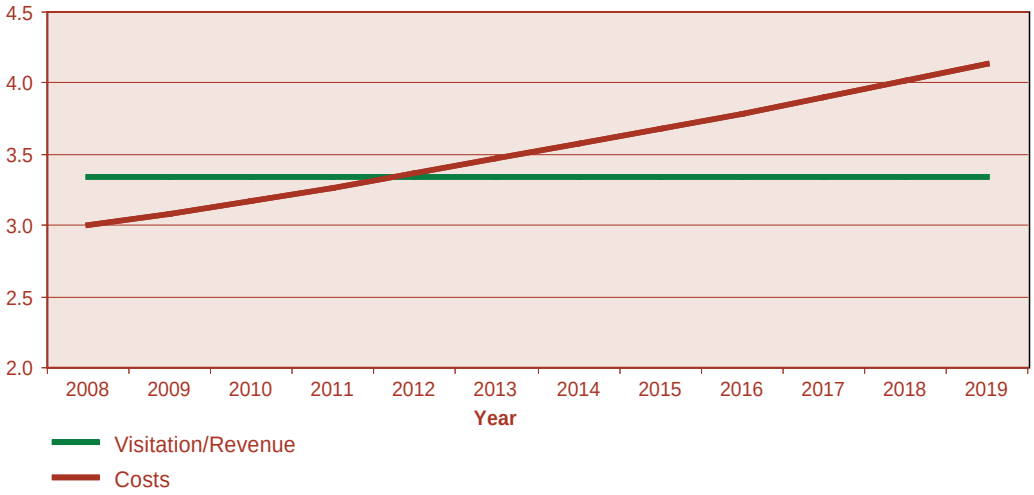
The results of the financial analysis, which assessed various potential revenue and cost scenarios, indicate that there will likely be potential challenges related to ongoing operation and maintenance of the Zion Canyon shuttle system in the coming years.

A lot of factors affect cost of operation and maintenance, and visitation/revenue levels fluctuate annually. It is difficult to predict the course of the future, but from review of these scenarios, the park may need to seek additional funding to support the shuttle system or reduce the level of service provided by the 2011 or 2012 season as shown under Scenarios A and C.

If visitation levels and thus revenue levels increase annually (as shown in Scenario B), the need for either additional funding or for implementing service reductions would occur later, by the 2014 season. It is important to note that these are planning scenarios. Actual conditions in the future could vary. For example, visitation/revenue may increase by more than one percent annually in some years, or it may decrease by more than one percent. If propane prices experienced a sharp escalation, the costs of service may increase more than the three percent inflation rate assumed.

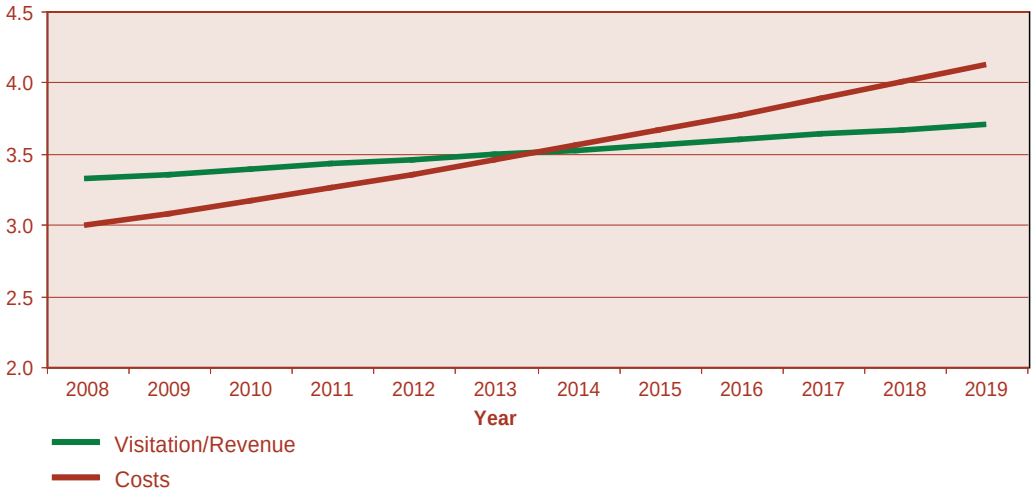
Generally though, it is safe to assume that if conditions in the future continue to be similar as

*Temple of Sinawava Shuttle Stop*



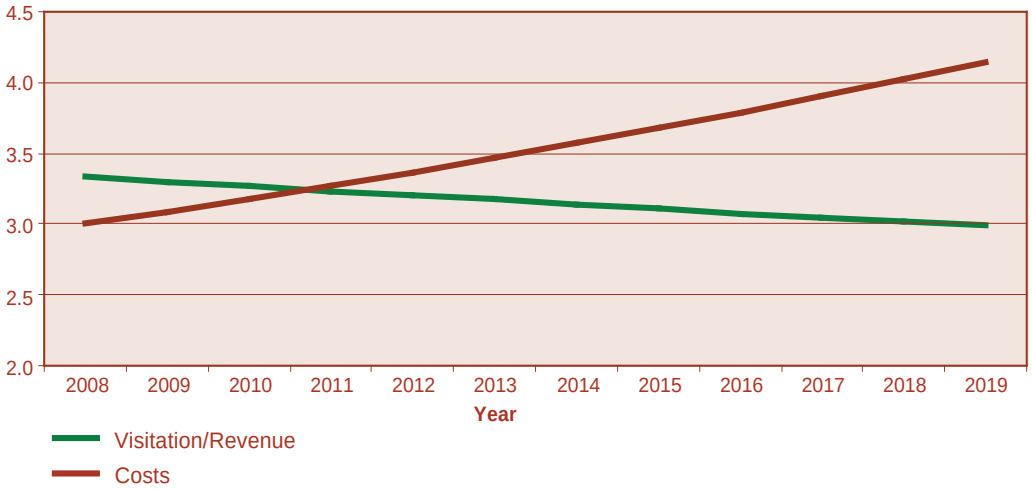

*Assumes service Easter through November (weekends only in November), three percent annual inflation in costs; and annual revenue capped at $3,335,000.*

***Figure 9-1. Scenario A***




*Assumes service Easter through November (weekends only in November), three percent annual inflation in costs; and one percent increase in visitation/ revenue from 2008 level.*

***Figure 9-2. Scenario B***




*Assumes service Easter through November (weekends only in November), three percent annual inflation in costs; and one percent annual decrease in visitation/ revenue from 2008 level.*

***Figure 9-3. Scenario C***

***Busy summer day at Zion National Park***

those of today and if costs continue to increase, a time will come within the next few years that the shuttle system will need additional financial support or service reductions will be needed to avoid a deficit. The time to start planning for this potential future condition is now.

## Expanded Service Opportunities are Limited

Some participants in public meetings and stakeholders have suggested that shuttle service should be expanded. Requests to extend the seasonal operation of the system, expand operating hours, and provide service further down canyon have come forward. Given the financial challenges that the park may be facing to operate and maintain the existing service (and to replace vehicles and make other improvements – see discussion later in this section), it is not anticipated that any service expansions would be possible.

However, if additional financial support could be obtained from partners or other sources, potential service expansions could be considered. As one example, if the community of Rockville wanted the shuttle service to extend south to pick up and drop off people there, funding would have to be found to either support expansion of the existing system that is confined to Springdale, or to support a new shuttle system that would connect to the park/ Springdale system.

## Service Cutbacks – What are the Possibilities

Potential service cutbacks if needed in the future to reduce operating and maintenance costs could include one or more options, such as:

- Reduced hours of service during the peak season (such as reduced length of service each day or more limited morning and evening service for example);
- Shortening the season of service (the current service from Easter through end of October and November weekends, could be reduced to May through September service, for example);
- Increasing "headways" – extending the time between shuttle service pick ups and drop offs (going from the current 6 to 10 minute periods between pick ups and drop offs at stops to 10 to 15 minute periods for example); and/or
- Reducing the length of the routes of service (such as eliminating a portion of the Springdale service route for example).

## Costs and Benefits of the Springdale Portion of the System

Eliminating shuttle service in Springdale in its entirety is not really considered to be a viable option. Most of the shuttle riders are overnight visitors who are based in town, and most of the parking for day use and overnight visitors also is based in town. The shuttle system was originally designed to include the town route for the specific purpose of picking up visitors in town on the town shuttle and bringing them to the park to transfer to the park shuttle. This important operational dynamic would need to continue, or the system would not function properly. (Without the town connection, people would have to park inside the park, and even with parking expansion inside the park, there would not be enough space to accommodate all visitors. Without sufficient parking capacity, visitation would have to be limited and shuttle service would not operate at an efficient level.)

An interesting outcome of the park route/town route system is the use of the town route by

visitors for other trips (not just to and from the park), such as for meals in Springdale and visiting shops, galleries, and other destinations. Citizens of Springdale also often use the system for transportation purposes not related to visiting the park – such as to go to the post office and run errands in town. These uses of the system are important because they help to reduce congestion on Zion Park Boulevard in Springdale. The more people ride the shuttle instead of driving, the less traffic there is on the road – reducing congestion, noise, pollution, and creating a better environment for visitors as well as residents of the area.

However, there is a cost associated with the transportation and community benefits of the town route. The town route segment of the system requires 20.5 percent of the total hours of service and associated costs of the system (so roughly $600,000 in annual operation and maintenance costs). The town route operates less efficiently than the park route with only 14 percent of the total boardings of the system and an average of 48.43 passengers per hour compared to the system-wide average of 70.94 passengers per hour.

As planning for the Zion Canyon transportation system moves forward in the future, additional funding sources to support the shuttle service should be investigated. Refer to the discussion related to potential funding sources and opportunities later in this section.

## Shuttle Vehicle Replacement

The shuttle system fleet has an expected operating life of ten to twelve years, and the shuttle system is now in its tenth year of operation. The park is looking at a range of options that include either rehabilitating the existing fleet or replacing the fleet with new vehicles. The estimated cost of these options ranges from $6,000,000 (rehabilitation) to $12,000,000 (total fleet replacement). This is in addition to the annual operation and maintenance cost of the shuttle system.

Shuttle vehicle replacement/rehabilitation options are discussed in more detail in Section 6 of this report. The recommended option is to proceed with a rehabilitation program that might extend the life of the shuttle fleet for another cycle of use. The park will be seeking funding through federal transportation grants and other sources to support the vehicle rehabilitation/ replacement program.

## Cost Estimates for Potential Capital Projects

Various project recommendations were described in the previous sections of this report. The table on page 9-6 provides planning level cost estimates for many of the major capital improvement projects that have been discussed. The park, town, and other partners may or may not decide to move forward with these projects in the near term, but these estimates help provide perspective on the potential costs related to implementation. Acknowledgement of these additional potential projects and their related costs underscores the need to seek a range of funding options. Funding is needed to support not only ongoing operation of the shuttle system and shuttle vehicle replacement, but also for repair and enhancement of the
*(Continue on page 9-7)*

***Historic "Floor of the Valley Road" and pull off area***

*Table 9.1 Estimated Capital Project Costs*

| Project/Action: | Preliminary Cost Estimate (Planning Level) | Notes: |
|---|---|---|
| Bus stop signs, parking, no parking, and pedestrian wayfinding signs package | $150,000 | Assumes signs at all stop locations in Springdale and the park; parking and wayfinding signs in town; signs on shelters and pedestrian signs/maps; includes graphic design, fabrication, and installation |
| Communications and marketing package | $40,000 to 50,000 | Could be more or less - depends on number of pieces developed and quantities printed |
| Contextually designed electronic variable message signs at three locations | $35,000 to $40,000 | Assumes one large sign at entrance to town and two smaller signs – one in advance of the Desert Pearl vacant lot, and one in advance of Lion Blvd. (or other locations); assumes red rock sign base/ housing |
| Information kiosks at five locations in Springdale | $125,000 | Assumes pre-fabricated kiosks from NPS approved vendor and graphic design and fabrication of displays, maps and information on kiosks |
| Springdale streetscape maintenance and missing gap sidewalk improvements, including sidewalk repair/expansion, historic ditch repairs, additional pedestrian lighting at selected locations, street trees, landscaping, rebuild driveways to meet ADA, and other elements | $600,000 to $750,000 | Based on 2006 SAFETEA-LU Enhancement Grant application, the cost estimate has been updated to current year (2008) dollar value, and the estimate has been increased to include additional work |
| Zion Park Boulevard maintenance and striping (roadway maintenance, crosswalk striping at seven locations, rebuilding/installation of bus pads at fourteen locations, pedestrian signs, and various other needed maintenance work) | $200,000 | UDOT maintenance responsibility – may need to increase region's maintenance budget assumptions to cover this as a special improvement effort and not just as typical cyclical maintenance |
| Relocation of the Bumbleberry/Zions Bank shuttle stop further to the north | $25,000 to $30,000 | This cost assumes that the current shelter and furnishings can be saved and relocated in the new location. |
| Installation of new shuttle stops (could occur at the Desert Pearl/Canyon Ranch and Cliffrose stops, which are currently flag stops,.and/or in the vicinity of the South Campground) | $175,000 to $200,000 per Location (covers two stops/one on each side of the street) | Assumes construction of two shelters (northbound and southbound), furnishings, landscaping, pedestrian lighting, and sidewalk extensions |
| Extension of portions of the Pa' rus multi-use path/trail | $65 to 70 per linear foot for pervious concrete<br>$30 to $35 per linear foot for bituminous/ asphalt<br>$10 to $15 per linear foot for stabilized crushed fines | Apply to segment lengths to determine total estimated costs; assumes 8-foot wide path/ trail surface; costs assume grading and sub-base installation |
| Parking areas/parking improvements – for parking areas, this assumes clearing, earthwork, paving, curbing, striping, landscaping or landscape restoration around the edges and within the parking area (landscape islands), pedestrian scale lighting, and signing. | $8,000 to $10,000 per stall for surface parking areas<br>(Note: cost for structured parking is typically $20,000 to $25,000 per stall) | 200 car parking area in the park – approximately $2,000,000<br>Expanding 1000 linear feet of the shoulder of Lion Boulevard and restriping to angled parking to increase capacity – approximately $200,000 |

supporting infrastructure of the overall Zion Canyon transportation system.

These cost estimates are preliminary and provided for the intent of aiding future planning and decision-making efforts. Once projects move forward into design and engineering, design-level estimates of the probable costs of construction should be prepared. Estimated costs are in 2008 dollars and include design and preparation of construction drawings/ documents, environmental permitting, and construction related services, but do not include any land or right-of-way acquisition that may be needed to implement some of these projects. Estimated costs shown also include mobilization, contingencies, and management costs, and assume each element listed would be constructed as a separate project. Some savings in cost could occur if projects are combined and through more detailed design and project definition.

## Looking Ahead – An Action Plan for the Next Few Years

Ongoing operation of the Zion Canyon transportation system will require significant resources. While Zion National Park will continue to have the primary responsibility for annual operations and maintenance of the shuttle system and vehicle replacement, other partners may be able to help with some of the projects listed above. Partners also may be able to assist in pursuing and obtaining additional funding to support the shuttle system over the long term so that service cutbacks won't have to occur.

Implementation of the major projects listed above and other recommendations in this report can be staged over the next few years. The action plan shown in Table 9.2 organizes the recommended actions in this report under three timeframe categories:

- Stage I – Immediate Actions – To be Completed within the Next Year

  (Note: These actions reflect notes and discussions from the March 2009 stakeholders workshop in Springdale.)
- Stage II – Near Term Actions – To be Completed within the Next One to Three Years
- Stage III – Actions Beyond Three Years – To be Completed beyond Three Years; and Ongoing Actions – To continue on an ongoing basis

*(Continued on Page 9-18)*

***Pedestrians in Zion National Park***

*Table 9.2 Action Plan*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| Websites - Update websites with more detailed information about where to park and how to ride the shuttle. Make shuttle information and shuttle link more prominent on home pages.<br>• NPS should be primary source of "Park & Ride" information, and information needs to be kept up to date.<br>• Other websites should be encouraged to link to the NPS website to keep information consistent and up to date.<br>• Other websites should provide a direct link to the NPS website through the use of a consistent graphic/logo.<br>• Keep the message and instructions clear, simple, and consistent.<br>• Provide clear links to printable maps and informational brochures.<br>• The Town of Springdale should provide the proper information/links to "rogue" websites.<br>• The graphic used on the website could be used on wayfinding signs (e.g., NPS logo). | Springdale, Springdale Visitor Bureau, NPS |
| Radio and Technology - Explore the most available and practical technology for getting the message out about parking and riding the shuttle.<br>• Messages could be added to GPS; look into seeing if could include a message that this part of the highway is a fee area.<br>• Google Earth<br>• Links to podcasts/audio on websites<br>• Note: There are many messages that the NPS communicates to the public. The "Park & Ride" cannot be the only message, there must be a balance. | Parking Committee, NPS, Springdale Visitor Bureau |
| 511 Traveler Advisory - Research 511 potential and determine if a message related to Zion National Park can be included on the system.<br>• Provide "Park & Ride" information.<br>• Install signs instructing visitors to call 511 for park information.<br>• Goes through TOC in Salt Lake City.<br>• It is a UDOT maintained system. | UDOT, Springdale |

*Table 9.2 Action Plan, Continued*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| ITS Pilot Project - Explore ITS pilot project by placing sign(s) at various locations to see what locations/ messages might be most valuable/effective. Determine if ITS signs are programmable by computer and/ or cell phone.<br>• Possible locations for pilot:<br>- Virgin pull-off (see below)<br>- Rockville / Springdale boundary<br>- Near southern entrance gate<br>- Visitor center<br>- East entrance locations<br>• Explore if low profile ITS signs in Springdale are a possibility – counter to town's regulations, but could alleviate congestion.<br>• For long-term signs explore signs designed with local rock. | NPS |
| Virgin Pull-Off Area - Determine short-term and long-term (Stage II actions) utilization of the Virgin pull-off site.<br>• Experiment with ITS sign here for a weekend and other strategic times (as noted above).<br>• Pull-off area does not look official.<br>• Repair existing signs.<br>• The sign south of the pull off area only keys large vehicles to stop.<br>• It would be nice to have an entrance/welcome station here, people could get map and digest information well before reaching Springdale.<br>• There were original NPS plans for a staff person to be located here with a kiosk, stone furnishings, and trees. There are drawings of this concept.<br>• This location could be a fee station – the idea of a larger entry experience south of town has been floated around for many years and the idea continues to come up.<br>• Minimizing effects from vandalism is very important – there are new and more durable materials for signs on the market, need thick steel or wood, they are currently thin steel with porcelain.<br>• The NPS sign team at Harpers Ferry Center is up on different technologies, and they have designed a new standard fee warning sign.<br>• Add new "Park & Ride" sign/information.<br>• The tunnel message is very important, this should not get lost.<br>• Size of the road would need to be increased considerably.<br>• Scenic Byway Corridor Designation could be an avenue for gaining funds for improving this area. | Springdale, NPS |

*Table 9.2 Action Plan, Continued*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| Hang "Parking is Full" signs below existing wooden signs south of Springdale as pilot project this summer.<br>• Someone needs to commit to driving out and installing signs in real time 7 days/week.<br>• Bring attention to signs by attaching NPS flag and/or painting them blue.<br>• Could be modified to flip up and down so it remains on location.<br>• "Flip" at 10:00 a.m. and 2 p.m. daily.<br>• Coordinate with NPS. | Springdale, NPS |
| Vegetation maintenance at 3 wooden NPS signs - Trim vegetation around the sign where overgrowth is occurring. | Springdale, NPS |
| Springdale Parking Signs - Create two types of signs, customer parking and shuttle "Park & Ride". Get designs approved for MUTCD standards.<br>• Use consistent design and graphics throughout town and match with maps/website to draw attention and recognition through branding. | NPS, UDOT |
| Seasonal Removal of all Shuttle Signs - Develop system for removing/covering all shuttle signage when shuttle stops running for the season.<br>• Cover/remove Springdale parking signs.<br>• Include signs at shuttle stops describing shuttle operations season.<br>• Identify partners in town who could assist park with additional signs in town. | Springdale, NPS |
| Parking Space Striping - Define parallel parking spaces<br>• Supplement parking signs (above) by painting crosses/lines to define parallel parking and encourage people to use on street parking. | Springdale, UDOT |
| Investigate funding sources/cost for shuttle stop number signs for pilot project.<br>• Shuttle stops number signs should be installed on both sides of the street and keyed on the parking map.<br>• Add a number (temporary) to pole/shelter for pilot test. | Springdale, NPS |

*Table 9.2 Action Plan, Continued*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| Funding for Springdale Streetscape, Signs, and Trails - Seek funds by repackaging transportation enhancement grant application for streetscape improvements and seek other funding sources.<br>• Springdale has submitted safe routes to school grant, which included sidewalk improvements.<br>• Springdale could submit grant applications to the Transit in the Parks Program – formerly ATPPL. The technical analysis report was funded through this program. Could apply for funds to study/ implement streetscape and transportation system improvements, including multi-modal and trail. Pays for capital planning, not operations – not sure about signs. The deadline has passed this year, but it is available next year. http://www.fta.dot.gov/funding/grants/grants_financing_6106.html<br>• Stimulus funds? | Springdale |
| Crosswalks - Improve pedestrian safety at shuttle stops & crosswalks<br>• Look into the use of flags.<br>• Bus drivers could request that people use crosswalks – make announcement.<br>• UDOT will not allow pedestrian signs in non-crosswalk locations.<br>• Pursue installing crosswalks at every shuttle stop and at the base of Lion Boulevard and other key locations in Springdale.<br>• Crosswalks are typically installed at intersections.<br>• The practice of scoring roads before crosswalks is dedicated for school zones only.<br>• Crosswalks can create dangerous situations – pedestrians have a perceived sense of safety.<br>• All permanent shuttle stops currently have bulb out curbs, with the exception of the Majestic View. | Springdale, UDOT |
| Connection Between Hwy 9 and Pedestrian Park Entrance - Determine how to visually strengthen the connection between where people are parking above and the pedestrian travel way to the Visitor Center Plaza.<br>• There is need for a safe accessible paths study.<br>• There is currently a trail there that goes between cars and footbridge, but it is a social trail. Need to direct people to river entrance.<br>• There is an existing sidewalk on the driveway, but it is on the wrong side.<br>• Add signs and provide a map hand-out to better guide visitors.<br>• Lines of cars parked and line of traffic waiting adds to congestion.<br>• Theater could maybe develop some of their property.<br>• Town allows directional signage – can talk with theater.<br>• The NPS has drafted a plan for restoring the sense of arrival into park so people are not driving into traffic and congestion. | NPS, Zion Giant Screen Theater |

*Table 9.2 Action Plan, Continued*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| Lion Blvd Kiosk - Pursue installing information kiosk on Lion Blvd at Zion Adventure.<br>• Continue discussions with property owners.<br>• There is value to having a shuttle stop near parking and across from the Watchman shuttle stop.<br>• Information signing is needed in this area as it experiences much congestion. | Springdale, NPS |
| Visitor Information Outreach Packet - Develop printed materials, including a detailed "where to park" map, visitor information/outreach packets for hotels and businesses, detailed maps, placemats, and other tools to educate visitors about where to park and ride the shuttle and park stewardship.<br>• Packet information is dependent on development of parking map & parking agreements being formalized (see Parking & Parking Management section).<br>• Create a holistic system – parking, map, packet, etc.<br>• Use park service insignia so people recognize it easily and create a standard for everyone to use – more official use.<br>• Some information could be included with hotel room confirmation letter.<br>• Create an electronic file as well – could dovetail with parking map link on websites.<br>• Possibly display big maps of shuttle route and how to "Park & Ride" in hotels.<br>• Encourage hotel patrons to remain parked at hotel parking lots.<br>• Research funding opportunities with St. George Visitor Bureau. | Springdale Visitor Bureau, Springdale, NPS, Parking Committee |
| Multi-lingual Card - Develop a multi-lingual card to orient visitors to parking, shuttle, & driving through park only information.<br>• Develop an English version first with four or five key sentences that convey the information quickly.<br>• Newspaper is in four languages. Could we excerpt what is in the newspaper? The entire shuttle page in Spanish, German, Italian, French.<br>• Money for printing and translation, professional translation is required.<br>• Phase the printing with drafts. Do not mass produce the 1st draft. Develop a few generations to be reviewed and officially translated before printing the final iteration.<br>• Develop a distribution system for the card | NPS , Zion Giant Screen Theater |
| Shuttle Bus Maps - Update maps on display inside shuttle buses.<br>• Can tie in with other map updating. Could be same map as on website.<br>• There is funding for the printing of these maps. | NPS |
| East Entrance - Take steps to improve information/messaging about where to park and ride the shuttle for visitors coming in from the East Entrance.<br>• Provide "where to park maps" at east entrance with verbal message from ranger.<br>• Provide informational/directional blue signs near Canyon Junction and/or near visitor center parking. Message could either direct visitors to proceed through park and park in Springdale or provide directions on where to park in the park. | NPS |

*Table 9.2 Action Plan, Continued*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| Parking Availability Research - Determine which parking spaces are available for "Park & Ride" through discussions with Springdale businesses.<br>• Draft a map documenting discussion results.<br>• Seek agreements from businesses about available "Park & Ride" parking spaces.<br>• This will be an evolving situation as parking is made available/unavailable. | Springdale, NPS, Parking Committee |
| Formal Parking Agreements - Draft and obtain formal agreements with property owners related to shared parking for park visitors who park and ride the shuttle. | To the extent possible and with support from business owners, Springdale will take the lead with NPS support. |
| Detailed Parking Map - Produce detailed parking map based on above research.<br>• Use official NPS standards and create an official park map. This option is more sustainable for maintaining graphics.<br>• Build upon existing maps in this Technical Analysis report.<br>• This will be an evolving situation as parking is made available/unavailable.<br>• Could provide this map to people at Virgin pull-off area. | NPS, in coordination with Springdale |
| Parking Ambassador Program - Use a flagger to orient visitors to parking before reaching gate<br>• 11-2 is prime time for flaggers from May – Sept.<br>• Parking sequence/strategies/system need to be developed prior to pilot project and will evolve over time to a more effective system.<br>• PTI & possibly some business owners need to be involved in developing the evolving parking strategies.<br>• The flaggers need to be mobile and be in communication with PTI.<br>• The flaggers need to work as a team – it cannot be one person.<br>• One possible message - "Look for the signs and park there."<br>• Long-term flaggers may not be park employees; could be staffed & paid for by another entity.<br>• Parking ambassadors and easy-to-find parking will help businesses in the over the long-term (non-frustrated business patrons). | NPS, Parking Committee eventually |
| Stripe Entrance to Theater/Visitor Center Plaza - Stripe area near entrance to Giant Screen Theater/ Visitor Center Plaza as "No Parking" and "Shuttle Lane Only" so shuttles can get through.<br>• Town needs to request & coordinate with UDOT.<br>• Would eliminate spaces.<br>• This works toward restoring sense of arrival into the park. Eliminates some congestion. | Springdale, Adjacent businesses, PTI, NPS, Zion Giant Screen Theater |

*Table 9.2 Action Plan, Continued*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| Springdale Shuttle Stops - Conduct discussions to determine number, location, and type of shuttle stops in Springdale (also see topics below).<br>• Need to keep future growth in mind, which will create more congestion and the need for ingress/egress. Could consider striping entire front of Canyon Offerings. Ingress/egress is needed in front of candy shop. There will be more development on the street by the Laundromat… this area could become very busy. Ingress/egress by the Pizza & Noodle will be happening as well.<br>• Discussion about moving the shuttle stop has been tabled with Town Council.<br>• Establish a community discussion for moving the Zion Bank shuttle stop. | Springdale, PTI, Adjacent Businesses, NPS, UDOT |
| Bumbleberry/Zions Bank Shuttle Stop - Determine if Bumbleberry stop can be made more accessible and/or determine if shuttle stop should be moved.<br>• For passengers with wheelchairs, the shuttles stop beyond the stop on asphalt. Could include additional boards within slats to fill gaps.<br>• Shuttle stops work better (for wayfinding) when they are opposite from each other.<br>• Some shuttle operators have brought up that this is a bad traffic location and that visibility is challenged at this location.<br>• The ditch could be fully enclosed. | Springdale, PTI, Adjacent Businesses, NPS, UDOT |
| Flag Stops - Make a decision about converting flag stops to permanent stops.<br>• Consider converting the Cliffrose stops, Desert Pearl/Canyon Ranch stops to permanent stops.<br>• Consider status of the Silver Bear stop. The Town is moving forward with the construction of a multi-use path – 1st phase near Silver Bear – if walking path has connection to shuttle stop – could see increased ridership at this stop.<br>• Seek funds for stop improvements, potentially adding a new stop at the South Campground.<br>• Benches and waste receptacles could be added at flag stops that receive a lot of foot traffic to save costs. Canyon Ranch is a key candidate.<br>• Develop a team for discussion and decision making about this topic.<br>• Simply making all shuttle stops "regular" would alleviate confusion for many visitors – it would simplify the map graphics and instructions. | NPS, Springdale, PTI, UDOT, Adjacent Businesses |
| Springdale Shuttle Stop Improvements - Seek funds for shuttle stop improvements in town<br>• The Town is applying for funding for streetscape improvements, but not for additional shuttle stops and furnishings and improvements.<br>• If in the future, the Town applies for funding for shuttle stop improvements, the project could include other amenities for shuttle stops. | Springdale, NPS |
| Seek funding for Pa'rus Trail design feasibility.<br>• There are compliance issues with historical and natural systems.<br>• Complete ADA accessibility of existing trail.<br>• Draft funding proposal for feasibility, environmental compliance, and design/construction. | NPS |

*Table 9.2 Action Plan, Continued*

| Stage I - Immediate Actions– To be Completed within the Next Year | |
|---|---|
| **Action/Project:** | **Responsibilities:** |
| Shuttle Vehicle Replacement/Rehabilitation - Make a decision about vehicle replacement/rehabilitation and seek funding. Implement procurement contract for vehicle rehabilitation/replacement.<br>• The park is in the process of doing this.<br>• Consultants are looking at alternative buses and alternative fuel systems. Problem on the horizon – propane use in the future is questionable.<br>• NPS is committed currently to purchasing buses – but operation and maintenance funding is an issue. | NPS |
| Bicycle Capacity on Shuttles - Consider replacing two capacity bicycle racks with three capacity bicycle racks on shuttle vehicles<br>• This could be staged and may only include a few buses in the first phase. | NPS, PTI |
| Regional Transportation Groups - Expand Springdale involvement in regional transportation discussions through ZC3, the RPO, NPO, and other entities. | Springdale, UDOT, NPS |
| Rural Transit Funding - Research supplemental funding from UDOT Rural Transit Funds<br>• Continue discussions with UDOT.<br>• Draft letter with stakeholders about needs, proposal, and local support. | PTI, Springdale |
| Shuttle System Funding - Develop a strategy to generate revenue for the shuttle system and keep it in the black. Top three ideas to pursue in 2009 – donation box pilot on shuttles, $1.00 room fee, and parking fees.<br>• Develop a wish list for funding, taking cost increases into mind. | Springdale Visitor Bureau, NPS, PTI, Springdale Businesses |
| Seek funding for Stage II Actions/Project. | NPS, Springdale, Others |
| Advertising on Shuttles - Confirm requirements/laws related to advertising on shuttle vehicles and at stops and related to donation boxes as potential additional sources of revenue to support the system.<br>• Implement pilot advertising and donations programs as allowable<br>• Business advertising<br>• Check authorities | Springdale, NPS |

| Stage II -Near Term Actions– To be Completed within the Next One to Three Years | |
|---|---|
| **Action/Project:** | **Responsibilities (if known):** |
| Carry over actions from Stage I that still need to be completed. | NPS and Partners |
| Springdale Parking Committee/Zion Canyon Transportation Committee should continue to meet and coordinate on a regular basis. | NPS, Springdale, UDOT, Visitor Bureau, and others |
| Continue to expand NPS involvement in regional transportation discussions through ZC3, the RPO, and other entities. | NPS |
| Implement special projects as funding becomes available:<br>• Visitor information kiosks<br>• Electronic variable message signs<br>• Design and install new sign package for shuttle stops, parking/no parking areas in Springdale, and pedestrian wayfinding; as part of this work, repair and/or replace existing signs and maps at shuttle stops.<br>• New shuttle stops/shuttle stop relocations (make flag stops permanent, relocate Bumbleberry/Zions Bank, add new stop at campground)<br>• Improve/formalize Desert Pearl vacant lot for parking; reconfigure for better efficiency, if private property owner agrees and supports the project.<br>• Restripe Lion Blvd. parking for diagonal parking along south shoulder (and potentially north shoulder) to improve efficiency. | NPS, Springdale, and Visitor Bureau |
| Work with UDOT on roadway improvements needed along Zion Park Boulevard (SR 9), such as bus pad replacements, pavement patching, shoulder repair, and striping of additional crosswalks and on-street parking/no parking areas, drainage/gutter repair, clean up of debris, utility box repairs, etc. | UDOT lead, NPS and Springdale support |
| Coordinate with UDOT to consider the need for additional accommodations for bicyclists on SR 9 in Springdale, such as bike lanes and symbols, or in areas where space is limited, "sharrow markings" and "share the road" signs could be installed notifying vehicles to share the road with cyclists. | UDOT lead, NPS and Springdale support |
| Participate in regional discussions to advocate for regional transit and connections between communities, which will facilitate better commuting options for employees down canyon who travel to Springdale and the park to work. This would also provide options for visitors to leave their cars in down canyon communities and travel to the park, or to fly into St. George and travel to the park via private or public transit. | NPS, Springdale, and Other Partners |
| Continue to consider and pursue funding options for long term operation and maintenance of the shuttle system. | NPS, Springdale, Visitor Bureau and others |
| Design and environmental permitting of the Pa' rus Trail extension up canyon if the park decides to pursue construction of certain segments (phased); contingent upon available funding. | NPS |
| Continue to coordinate with Zion Canyon Trail project proponents on development of trail and support facilities and connection to the Pa' rus Trail at the park. Coordinate on the development of the roadside pull off area just south of the Majestic View Lodge and park shuttle stop. | NPS, Springdale, UDOT and others |

| Stage II -Near Term Actions– To be Completed within the Next One to Three Years | |
|---|---|
| **Action/Project:** | **Responsibilities (if known):** |
| Continue to move forward with parking improvement project(s); could move through design, environmental permitting, and construction during this timeframe if funding becomes available. | NPS likely in lead |
| Implement shuttle stop improvements in the park. | NPS |
| Continue to seek funding/allocate funding to support a transportation director position at the park. | NPS |
| Seek funding to make more substantial improvements to the Virgin pull off area, with more displays and information related to park and ride (where to park in town); a vault restroom, and other improvements to make this a more inviting place to stop and obtain information. | NPS, UDOT, Springdale, and others |

| Stage III – Actions Beyond Three Years and Ongoing Actions | |
|---|---|
| **Action/Project:** | **Responsibilities (if known):** |
| Carry over actions from Stage I and II that still need to be completed. | NPS and Partners |
| Springdale Parking Committee/Zion Canyon Transportation Committee should continue to meet and coordinate on a regular basis. (Ongoing partner coordination and communication will be critical in order to implement this action plan.) | NPS, Springdale, UDOT, Visitor Bureau, and others |
| Continue to expand NPS involvement in regional transportation discussions through ZC3, the RPO, and other entities. | NPS |
| Continue to monitor effectiveness of ongoing shuttle service and make adjustments in service as necessary to match annual revenues. | NPS |
| Continue to monitor gate area congestion and implement additional strategies/actions to improve entrance process, such as alternate ticketing (fast passes; visitors buy passes at hotels, etc.). | NPS |
| Intensively manage visitor parking and direct visitors to north end areas in town with excess capacity (Lion Blvd., Desert Pearl vacant lot, Pizza and Noodle, etc.). Continue to monitor the effectiveness and efficiency of parking both in town and in the park and move forward with other actions above, as well as parking improvements as necessary to manage parking. | NPS/Springdale |

***Waiting for the Shuttle***

***Custom-built shuttle vehicles***

Various actions and projects are shown in the table, and when known, responsibilities for carrying out the action are listed. This action plan should be considered as a dynamic document that can be reviewed and updated on a regular basis, adding in responsible parties and new projects as they are identified and rearranging priorities if needed. For example, many of the Immediate Actions have already proceeded this year, and the action plan should be updated to reflect the results of the current year. As discussions with stakeholders continue, lead responsibilities for each action should be identified.

## Funding Sources and Opportunities

A variety of public and private funding sources and opportunities can be pursued to help support the Zion Canyon transportation system and supporting visitor improvements, streetscape enhancements, signing and wayfinding elements, marketing, outreach, and other elements. The list below has been adapted from multiple reference sources. There may be sources and opportunities other than those listed that partners will identify as coordination efforts continue.

### Federal – Transit in the Parks

The Transit in the Parks program, administered through the Federal Transit Administration through authorization of the Safe, Accountable Flexible, Efficient Transportation Equity Act (SAFETEA-LU), provides grant funding on a year to year basis to the National Park Service and other federal land management agencies. The Transit in the Parks program is very competitive – in 2007 about 100 project proposals were submitted totaling more than $65,000,000 in planning, capital, and vehicle procurement requests, competing for approximately $20,000,000 available. The 2008 year was just as challenging. 2009 is the final cycle authorized under SAFETEA-LU, which will be up for either an extension or re-authorization for funding beyond 2009. Zion National Park applied for funding for vehicle replacement in 2008; however, the application was not successful. The park should continue to follow this funding source and re-apply for funding at the next opportunity.

***Existing pull off area just south of Majestic View Lodge***

### Federal – Federal Lands Highway Program for Park Roads and Parkways Program (PRP)

The PRP Program is the main source of funding for improvement of transportation infrastructure in national park system units, including the resurfacing, rehabilitation, and reconstruction of park roads, bridges, parking areas, and development and maintenance of NPS-owned alternative transportation systems. There are three PRP Program categories:

- Category I – Road Rehabilitation (3R) and Road Reconstruction/Realignment (4R)
- Category II – Congressionally Mandated Parkways (not applicable to Zion NP)
- Category III – Transportation Management Program

Category III, the Transportation Management Program (formerly the Alternative Transportation Program) integrates all modes of travel in national park system units and supports transportation planning studies. This funding is reserved for special needs not being met by the Transit in the Parks program.

Although the PRP Program is the primary source of transportation funding for the National Park Service, PRP projects can be supplemented with funds from other federal, NPS, or private sources.

### Federal – National Park Service Repair/ Rehabilitation Program

This program provides funding for minor repairs to roads and bridges. Repair/Rehabilitation funds are approved through the NPS operating budget that is appropriated each fiscal year. R/R funds are two-year funds that expire at the end of the second fiscal year, and there is a $500,000 funding cap per project.

### Federal – NPS Line Item Construction Program

Funds to develop new parks and areas within parks are budgeted through the Line-Item Construction program. Funds from this program are appropriated by line item in the yearly Department of Interior appropriation act, and these funds do not normally expire.

### Federal – Federal Lands Recreation Enhancement Act (FLREA) Program

The FLREA Program (formerly the Fee-Demonstration Program) allows park units to charge fees for access to specific areas/ attractions. The park units are allowed to use a portion of these funds for certain purposes within the park unit, including transportation projects.

### Federal – Congressional "Earmark" Projects

Projects that are "earmarked" or selected by Congress as part of a reauthorization of the highway and transit laws or the annual appropriations process have become common. In the SAFETEA-LU authorization there were 46 projects valued at more than $170,000,000, including many projects in national parks – transit, highway, and other high priority projects.

### Federal – Public Lands Highway Program Discretionary Funds (PLHD)

NPS projects may be eligible for PLHD funds, which can be used for a wide variety of facilities, including:

- Transportation planning for tourism and recreational travel
- Parking areas
- Interpretive signs
- Pedestrian and bicycle facilities
- Construction/reconstruction of roadside rest areas and related utilities
- Visitor centers that relate to road facilities as determined by the Secretary of the Department of Transportation

It should be noted that the National Park Service has no legal authority to transfer any NPS funds to a state or local government for road projects. There are special procedures for how multiple fund source projects are to be implemented.

### Federal - Land and Water Conservation Fund (LWFC)

LWCF provides money to acquire new federal recreation land or develop new recreation projects on property owned by the applicant. Eligible projects must be included in a statewide recreation plan and ranked compared to other projects on that plan. Funds are distributed to states using a formula, which is based on factors like state population. LWCF grants require at least 50 percent local match. In 2007, Utah received $357,000 for eligible projects. LWCF applications are due October 15 annually. Local and state agencies are the typical applicants for these funds.

### Federal - FHWA National Recreational Trails Program (RTP)

The National Recreational Trails Program provides funds for developing trails, acquiring easements or property for trails, and building trail-related facilities such as trailheads, bridges, and restrooms. Both motorized and non-motorized trail facilities are eligible. Applicants are required to provide a 50 percent match for this program, administered by the Utah State Parks Board, which consist of cash, volunteer labor, donated equipment and materials, or donated real estate. Applications for National Recreational Trails funding are due annually on May 1st, with proposals reviewed during the summer months and grantees notified in the fall.

### Federal – FHWA National Scenic Byways Program

State Route 9 is a designated state scenic byway in Utah and as such it is eligible for scenic byway funding, which must be applied for through local communities tied to byway representatives and the state byway division. State scenic byways are eligible for National Scenic Byway (NSB) program funds. The ZC3 is in the process of preparing a Corridor Management Plan as a first step toward nominating SR-9 as a National Scenic Byway. This will increase the corridor's eligibility for grant funding under the program. Projects such as interpretive facilities, visitor facilities, and parking areas are eligible for funding. Another program under the umbrella SAFETEA-LU, the NSB program is currently only funded through 2009 and will be up for reauthorization.

### Federal – Administered through State – Surface Transportation Program (STP) and Transportation Enhancements Program

STP funds are distributed to states based on a weighted formula. Ten percent of Utah's federal Surface Transportation Program funds (authorized through the federal SAFETEA-LU) are designated for transportation enhancements such as bicycle and pedestrian facilities. Funding is discretionary and provides 80 percent federal share, for projects with construction costs of $50,000 to $500,000. Projects are selected by the Enhancements Advisory Committee, which reviews applications and makes recommendations to the State Transportation Commission related to which projects to approve. Transportation Enhancement grants in Utah are already obligated until 2009, and the program will then be subject to reauthorization (note: it has been reauthorized for three six year cycles since 1993). The Transportation Enhancement program requires applicants to register their intent for funding in December annually, with the final application due in February. Springdale applied for an Enhancements grant in 2007 for streetscape improvements and was unsuccessful, but the town, supported by the NPS, UDOT, and other partners, should continue to follow the availability of Transportation Enhancement funding in the coming years and reapply at the next opportunity.

### Federal – Administered through State - Safe Routes to School Program

The Safe Routes to School program was initiated with the federal re-authorization of the transportation spending bill, SAFETEA-LU, in 2005. The purpose of Safe Routes to School is to encourage walking and bicycling to school. Eligible projects include sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure

bike parking, and traffic diversion improvements in the vicinity of schools (within approximately 2 miles). Safe Routes to School projects must already be identified in a school's Student Neighborhood Access Program (SNAP). Funding is discretionary, and state guidelines cap funds at $150,000 per infrastructure project and $75,000 for non-infrastructure projects. No local match is required for Safe Routes to School funds. This program also will be subject to reauthorization to fund projects beyond 2009.

### State - UDOT Highway Safety Improvement Program

The Highway Safety Improvement Program funds are intended to significantly reduce traffic fatalities and serious injuries. They can be used on bicycle and pedestrian safety improvements, pavement or shoulder widening, signage improvements, and many other potential projects. The funds are distributed on a discretionary basis, and eligibility will depend on collision data and whether the project meets UDOT's Roadway Safety Improvements Criteria. Submittals of potential safety spot locations are due to UDOT by October 1st annually, for inclusion in the Statewide Transportation Improvement Program in January.

### State - Utah Riverway Enhancement Program

The Utah Riverway Enhancement Program began in 1986, providing funds to develop recreation areas along rivers or streams that are prone to flooding. Eligible activities under the program include property acquisition, trail development, and flood control. The Utah Riverway Enhancement Program is also administered by the Utah State Parks Board, and applications are due May 1st annually. Applicants are required to provide 50 percent matching funds. Projects submitted for Utah Riverway Enhancement funding should demonstrate innovative or unique design features; links to areas of statewide significance; minimal adverse effects on wildlife, adjacent property owners, and natural areas; and complement existing and planned land uses.

### State - Utah Trails and Pathways Non-motorized Trails Program

The Utah Trails and Pathways Non-motorized Trail Program is also administered by the Utah State Parks Board. Trails and Pathways funds can be used for planning, acquisition, and development of recreational trails (including construction of trailhead facilities and bridges). Applications are due to the Utah State Parks Board on May 1st annually. As with the Recreational Trails Program, Springdale can include donations of cash, labor, equipment and materials as part of the 50 percent match required by the Trails and Pathways program. Projects submitted for Trails and Pathways funding should demonstrate innovative or unique design features; links to areas of statewide significance; minimal adverse effects on wildlife, adjacent property owners, and natural areas; and complement existing and planned land uses.

### Local Funding

Springdale and Washington County have limited funds for capital projects, and typically look for funding through federal and state sources. Although municipal funding through the general budget may be limited, local jurisdictions could pursue bonding for projects, such as a local voter-approved initiative that might help fund needed streetscape and parking improvements.

Also there is a local hotel/motel tax (also called a "bed tax" or "pillow tax"), and this could be reviewed as an opportunity to direct more funding to the Zion Canyon transportation system. It may be possible to increase the tax to support the Zion Canyon transportation system and special projects.

The Springdale community is actively interested in supporting the Zion Canyon transportation system and assisting however possible. Volunteers and donations from the community may be able to provide resources and address some of the streetscape needs (landscaping, sidewalk repairs, stop relocation, etc.).

## Private Funding Opportunities, Grants, and Creative Funding Strategies

There are a number of private sector funding opportunities, non-profit/foundations, grant programs, and creative funding strategies that should be considered to address the financial needs of the Zion Canyon transportation system. The list below provides some initial information about some of these sources – websites are provided for additional research.

- National Park Foundation – The foundation's mission is to connect all Americans to their 391 national parks by making strategic grants, creating innovative partnerships, and establishing special funds that enhance the national parks. http://www.nationalparks.org/who-we-help/

- Private Corporations – Private corporations provide grants and gifting for special projects and national, regional, and local businesses and corporations may be willing to donate materials and supplies in exchange for recognition of their involvement. Two possible examples: a recreational equipment company could be approached to donate the 3-capacity bicycle carriers for the shuttle in exchange for recognition on the carriers of their name "generously donated by ____" and perhaps a Utah company would be willing to donate funds for the visitor information kiosks in Springdale (such as Zions Bank or another corporation).

- Donations - Donation boxes could be placed on the shuttle buses; a local "dollar check off" program could be established at local businesses and hotels – "check here if you want a dollar to go to the Zion Canyon transportation system." Local businesses could be approached for donations as well to support improvements to the streetscape, bus stops and shelters, and other elements. Special interest organizations and groups in Utah such as members of the park's Friends group, Utah Bicycle Coalition, Southwestern Utah Bicycle Touring Association, and others could be approached for donations and or to provide volunteer resources for special projects.

- Advertising – Zion National Park should confirm and clarify requirements related to advertising. It may be possible to allow a certain level of advertising inside the shuttle buses or in discrete locations (such as on visitor information kiosks or at the bottom of maps, etc.) in exchange for revenue that could go to support the transportation system. The Washington State Ferries System has recently implemented an advertising program on the ferries to support the system. Advertisements from companies such as Recreational Equipment Inc. (REI), Eddie Bauer, and others are very tastefully presented inside the hull of the ferry.

- Other Grants/Resources – There are a number of private foundation and non-profit grant sources available for special projects. For more information on potential sources, visit: www.nps.gov/partnerships/funding_sources.htm