Parking Utilization Analysis and Recommendations

Section Overview

This section of the report addresses the estimated available parking capacity for park visitors and parking utilization patterns in Springdale. The analysis and recommendations in the other sections of this report are closely tied to those in this section, including visitor orientation and wayfinding to and from parking (Section 2), and pedestrian access to and from parking (Section 4).

Objective of Analysis

The primary objectives of this analysis have been to clearly understand and analyze parking capacity and utilization patterns during peak periods and to identify the full range of issues affecting parking use in Springdale.

Analysis Approach

The consultant team analyzed parking utilization data collected by the Springdale Parking Committee in 2007, supplemented by the team's field observations in August 2008. A National Park Service transportation scholar, Jeff De Bellis, initially analyzed the 2007 data and prepared a report of findings. The transportation scholar's report can be obtained separately from the NPS. The consultant team reviewed the previous analysis and conducted an independent review of parking conditions for this section of the technical analysis report. Members of the consultant team monitored areas that had been identified as available for shared use by the community and park visitors. This monitoring occurred concurrently to the other field work conducted as part of the technical analysis.

Although it was originally thought that the team would be monitoring twelve high use parking areas, monitoring was extended to cover all known shared parking areas throughout the town. The field work focused on the following observations:

- Was the parking area identified or signed for public use?
- Were "no parking" signs posted there that would deter visitor parking?

New upper parking area, recently paved and improved near entrance to Giant Screen Theater

"No parking" signs are posted in several locations throughout Springdale.

- Was the availability of the parking area for visitor use readily apparent and was the location for parking clearly perceptible?
- Were visitors able to find their way to the location?
- For areas being actively used, how full were these areas throughout the two-day monitoring period?
- What was the condition of the pedestrian route to and from the parking area?

Results of these field observations are summarized on the Streetscape, Shuttle Stops, and Parking Inventory Sheets provided in Appendix A.

After the field work, the consultant team further analyzed the data and information collected in 2007 and 2008 and then prepared this report of observations, findings, and recommendations.

Observations and Findings

The following summary of observations and findings was developed from field review of existing conditions, meetings with Springdale Parking Committee representatives, and review of parking use data collected in 2007 and the technical report entitled *Assessment of Parking in Zion Canyon*, completed in 2007 by Jeff De Bellis, Zion National Park Transportation Scholar.

There has always been a general understanding that Zion National Park visitors can leave their cars at hotels and parking areas in Springdale and ride the town shuttle to the visitor center plaza to then transfer to the park shuttle. This informal shared parking arrangement has been in effect since the shuttle system was implemented in 2000. Town representatives have recognized the benefits and opportunities of visitors parking, walking, and riding the shuttle in proximity to businesses. They have also recognized that visitors riding the shuttle from town to the park results in less traffic in the park and on the town's limited road network. These benefits have been realized and continue to occur. Various parking areas throughout the town continue to be available for customers and park visitors. However, in recent years, the level of available parking in Springdale for park

visitors and public use has been decreasing, while visitation continues to increase.

Analysis of parking data collected in May and July 2007 (see "Parking Survey Results" discussion) and field observations in August 2008 indicate that there currently is sufficient parking capacity in Springdale to serve park visitors. However, the level of available parking is changing constantly, and some private business owners have started to prohibit public parking and park visitor parking (allowing parking only for their customers). While a sufficient shared parking supply currently exists in Springdale for use by park visitors and shuttle riders, this may not be the case over the long term. It is also important to note that the current parking supply in Springdale is not being fully utilized. The following problems and issues are interfering with efficient use of the shared parking supply.

- As discussed in Section 2, visitors are having difficulty understanding where to park in Springdale to access the shuttle. Many of the parking areas available for public and park visitor use are not well identified, marked, mapped, or otherwise made known to people. Incoming visitors simply do not have a clear understanding of where to park in Springdale (particularly first time visitors). Many of the available parking areas are "invisible" to northbound travelers coming into town. Parking needs to be made more visible and identifiable to visitors upon entry to Springdale and throughout town.

- There is a lack of clear and consistent indication of what to look for when seeking to park and ride the shuttle. There is some advance information that encourages people to park in town and ride the shuttle (including displays at the roadside pull off near Virgin, small signs upon entry to town, information posted on the Internet, and the 1610 radio message). However, many visitors still aren't getting the message that the preference is for them to park in town and ride the shuttle. This message needs to be made more strongly, clearly, consistently and repetitively through various means. People need to be told and shown very specifically where they can park in Springdale. (See Section 2 for more information.)

"Shuttle parking" sign

On-street parking for park visitors on Lion Boulevard

NPS staff directing visitors to parking area

Parking lot behind Pizza & Noodle

Park gateway sign

- Many property and business owners are starting to display "No Shuttle Parking," "Customer Parking Only," or other similar types of signs. Additionally, several locations where business owners allow park visitors to park are not clearly visible or understood. For example, the Pizza & Noodle allows parking for park visitors/shuttle riders, but the parking area is set back from the highway and is only identified with one park and ride sign along the highway. From this sign it is not clear where visitors are supposed to park.

- Visitors seem to want to drive all the way to the park gate without stopping to park and ride the shuttle. There is a lack of a sense of arrival for visitors entering Springdale, and they do not feel they have reached the experience of Zion National Park until they can see the actual gateway sign and entrance station to the park. They do not feel they are "there" yet as they arrive in Springdale. There is a lack of information prompting visitors to pull over and find a place to park and ride the shuttle as they enter town. Also, visitors should get more of a sense that they have reached the experience of the park upon entry to Springdale, so they are less likely to feel the need to drive all the way to the park gate.

- The level of confusion about where to park and the amount of congestion at the south gate and in the northern part of Springdale increases substantially during times of peak visitation (summer months). By around 10:00 am on busy days, the parking lot in the park becomes full and visitors are turned back from the gate to find parking in town. There is extensive overflow parking surrounding the park entrance. These conditions degrade the park experience. Ideally, visitors should be able to avoid getting trapped in a line of traffic as they set out to enjoy their experience of Zion National Park. The congestion also creates problems for the local community, making it difficult to get to destinations in town, particularly on busy weekends.

- On busy days, when park rangers and staff assist in parking cars along Lion Boulevard and at the overflow lot adjacent to the Desert Pearl, a high percentage of the parking in the north part of town is utilized. But many shared parking areas in the central and southern parts of town are underutilized. This is because a lot of visitors are still in the habit of driving to the park rather than riding the shuttle from town. As such, many of the north town parking areas are filled with cars of visitors who have been turned back from the gate, or who wanted to get as close to the park as possible. Some parking areas in the other parts of town that are open for visitor use are not conveniently located near shuttle stops. Others are just simply unknown to visitors.

- Visitors need to be made more aware and more comfortable that they can leave their cars at parking areas in Springdale and conveniently

A motorist turns back at the "parking lot full" sign near the park entrance.

The Desert Pearl vacant lot is sometimes designated for shuttle parking with a temporary sign.

and efficiently ride the shuttle to the park. This awareness needs to occur much earlier than upon their arrival at the south gate - either through intensified pre-trip, en-route, and on site (in Springdale) communications.

- Because shared parking areas in town are becoming less available to park visitors, there is a need to formalize shared parking agreements with property and business owners in Springdale. This will help to ensure that the level of parking available for visitors becomes more dependable. There has been a lack of clarity about which property and business owners have agreed to allow public parking and which have not. Also, the informal use arrangements and agreements are subject to change when properties and businesses turn over. Formal use agreements (memorandums of agreement) for set periods need to be established so that the available parking capacity can be more clearly known and better managed.

- Funding sources to develop new parking areas in the town and/or the park are limited and extremely competitive.

Parking Survey Results

The Springdale Parking Committee surveyed the usage of all existing private and public off-street parking areas in the town on April 7, May 22, May 26 (the Saturday of Memorial Day weekend), July 3, and July 25, 2007. See Figures 3-1 and 3-2 for parking area locations. Table 3-1 lists the amount of parking available at each parking area, including the estimated number of spaces available for shuttle riders (park visitors and public use).

Parking areas were checked at 10:00 am, 1:00 pm, 4:00 pm and 7:00 pm. This survey showed that even during one of the busiest times of the year (Memorial Day weekend), Springdale parking areas still had capacity:

10:00 am	Parking areas were 48.1 % full
1:00 pm	Parking areas were 49.6 % full
4:00 pm	Parking areas were 61.5 % full
7:00 pm	Parking areas were 63.5 % full

Figure 3-3 shows the parking area usage on Saturday, May 26, 2007 (Memorial Day weekend). Figure 3-4 shows the parking area usage on Wednesday July 25, 2007.

On the other days surveyed, overall parking utilization in town ranged from 24 to 47 percent depending on the time of the survey. During field observations August 6-9, 2008, it appeared that the on-street parking on Zion Park Boulevard was less than 20 percent utilized. On Lion Boulevard less than 50 percent of available parking was utilized during the peak period of visitation.

Informal conversations were held with visitors approaching the gate for entry into the park and being turned around and directed to nearby parking areas, such as Lion Boulevard, during the August 2008 field work. Many of these

visitors have stated they were unaware of where they should park to ride the shuttle.

Springdale Parking Committee Activities

The Springdale Parking Committee is made up of representatives from the planning commission, town council, town staff, and Zion National Park staff, who are tasked with working on parking issues in town. The town adopted a general plan update in December 2005 with the key theme being to preserve and promote a village atmosphere in town. Thus, there is a focus in Springdale on promoting a pedestrian oriented and walkable town.

The parking committee is interested in resolving the parking issues that occur in Springdale in the busy months of the tourism season, particularly during busy weekends. There are many issues, described in this section, that are contributing to congestion creating problems for visitors, residents, customers, and business operations.

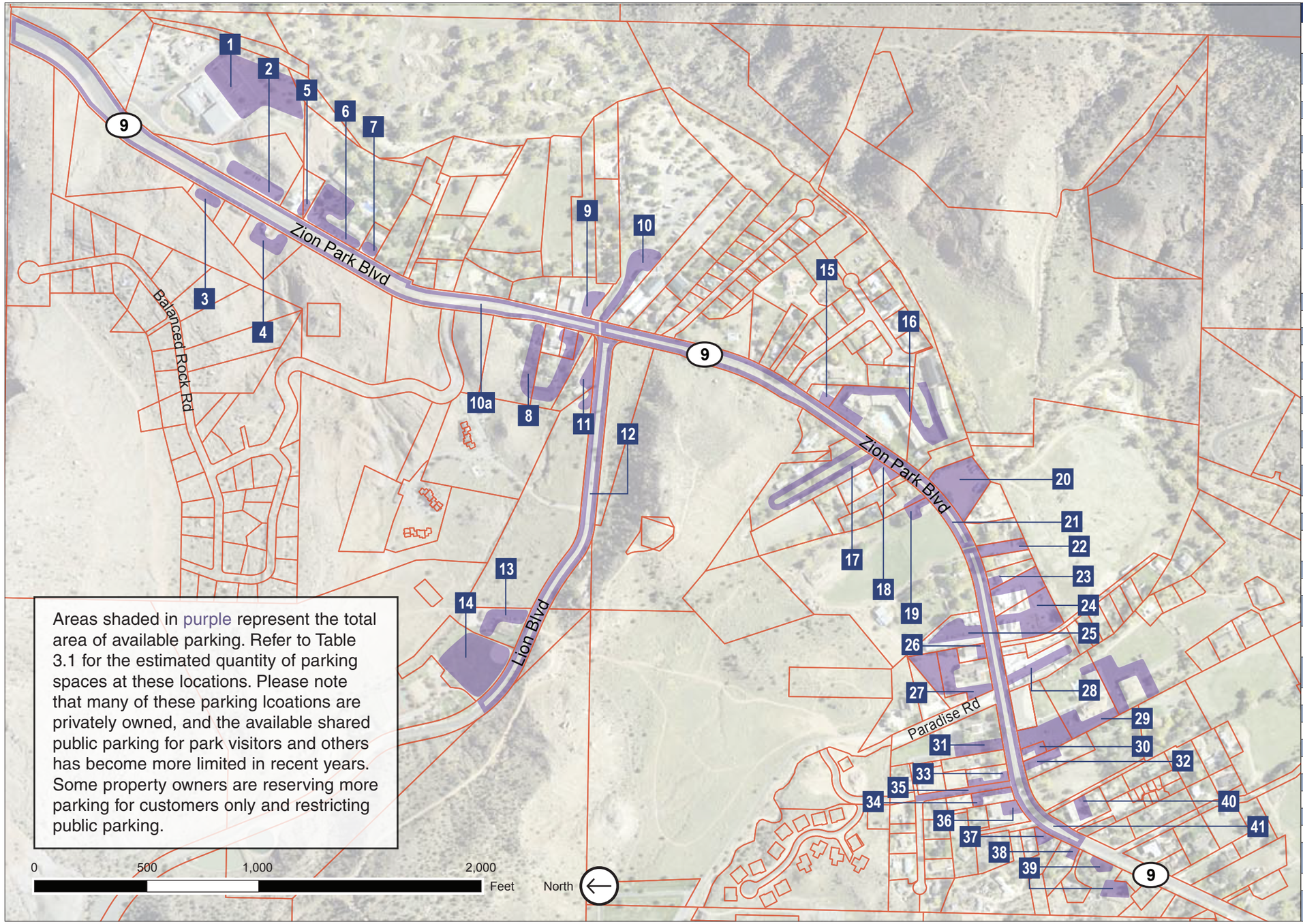
Due to a lack of available funding , the parking committee is challenged to develop additional parking areas in town. A few property owners have expressed interest in providing parking for the shuttle in their proposed developments. However, these agreements are informal, and may not be lasting, as previously discussed. Ideally, the committee would prefer to make use of existing parking by providing clear direction to parking areas and shuttle stops. They have also considered the possibility of one large park and ride lot with a comfort station, but have concerns regarding the visual impact this would create.

Other action items the parking committee is considering include promoting Zion National Park as a "car free" vacation opportunity and increasing public relations with business owners.

In addition to parking, the committee is interested in increasing connections for other types of mobility, such as biking and walking. A multi-use trail is currently in the planning stage to connect Rockville to the Zion National Park main gate. Bike lanes and sidewalk improvements would contribute much value to a car free experience in Springdale. See Section 4 for the multi-modal connectivity analysis and recommendations.

One of the main issues compromising the village atmosphere and walkability is the congestion and confusion in town created by cars backing up at the park gate. This congestion could be reduced if visitors were informed beforehand about where to park in town. The parking committee has implemented a number of temporary and permanent actions to help reduce this congestion and confusion and to improve conditions related to parking in general. These measures, which include enhanced signing to clearly communicate where visitors are to park in Springdale, are described in more detail in Section 2. The parking committee is committed to continuing to work toward resolving parking problems in town and would be a good committee around which to form a broader "Zion Canyon Transportation Committee" to address the full range of issues and needs related to the Zion Canyon transportation system in addition to parking.

If improved, the Desert Pearl parking lot could hold approximately 85 vehicles.



ID #	Zion Canyon Shuttle Parking Location
1	Giant Screen Theater Complex (lower lot)
2	Giant Screen Theater Complex (upper lot)
3	Tsunami Juice
4	Narrow Escapes
5	Takach Building
6	Cliffrose (including lower back lot)
7	Tribal Arts
8	Flanigans
9	Zion Canyon Clothing and Gift
10	Koritas / Quality Inn (including parking behind building, but NOT in campground)
10a	On street parking – SR-9 Park Entrance to Lion Boulevard (including parking area at Park Entrance Station)
11	Zion Adventures
12	Lion Boulevard on street parking
13	Town Hall
14	Community Center
15	Post Office
16	Desert Pearl Inn (including back lot)
17	Canyon Ranch
18	Big Chief
19	Blondie's Diner
20	Desert Pearl Vacant Lot
21	SR-9 on street parking - Lion Blvd to Worthington
22	Worthington Gallery
23	Asia to Zion
24	Indian Village / Panda Garden / Westwind Traders (including back lot)
25	Pioneer Lodge
26	Zion Park Deli
27	Pizza Noodle Complex (including back gravel area)
28	Zion Park Market, Motel - Canyon Outfitters
29	Bumbleberry (including back lot behind motel buildings)
30	Zion's Bank
31	Springdale Elementary School
32	Canyon Offerings
33	Mean Bean
34	Lazy Lizard / Oscar's
35	On street parking - Winderland Lane
36	Shell Station
37	Under the Eaves
38	Red Rock Jewelry / B&B
39	Terrace Brook (both upper and lower lots)
40	El Rio
41	SR-9 on street parking - Worthington to Sol Town

Figure 3-1. Town of Springdale Shuttle Parking Locations (North)

ID #	Zion Canyon Shuttle Parking Location
42	Bit and Spur
43	Zion Park Inn
44	Zion Rock and Gem
45	Bike Zion
46	Quality Inn and Suites
47	Driftwood (including back and side lots)
48	Chevron
49	LDS Church
50	River Park
51	Majestic View (both sides of SR-9)

Areas shaded in purple represent the total area of available parking. Refer to Table 3.1 for the estimated quantity of parking spaces at these locations. Please note that many of these parking lcoations are privately owned, and the available shared public parking for park visitors and others has become more limited in recent years. Some property owners are reserving more parking for customers only and restricting public parking.

0 500 1,000 2,000 Feet

North

Figure 3-2. Town of Springdale Shuttle Parking Locations (South)

Table 3-1 Springdale Parking Availability Estimation

This chart has been developed to provide a tool for assessing the amount of actual available spaces available for shuttle riders. This chart can be adjusted as agreements with business and property owners change.

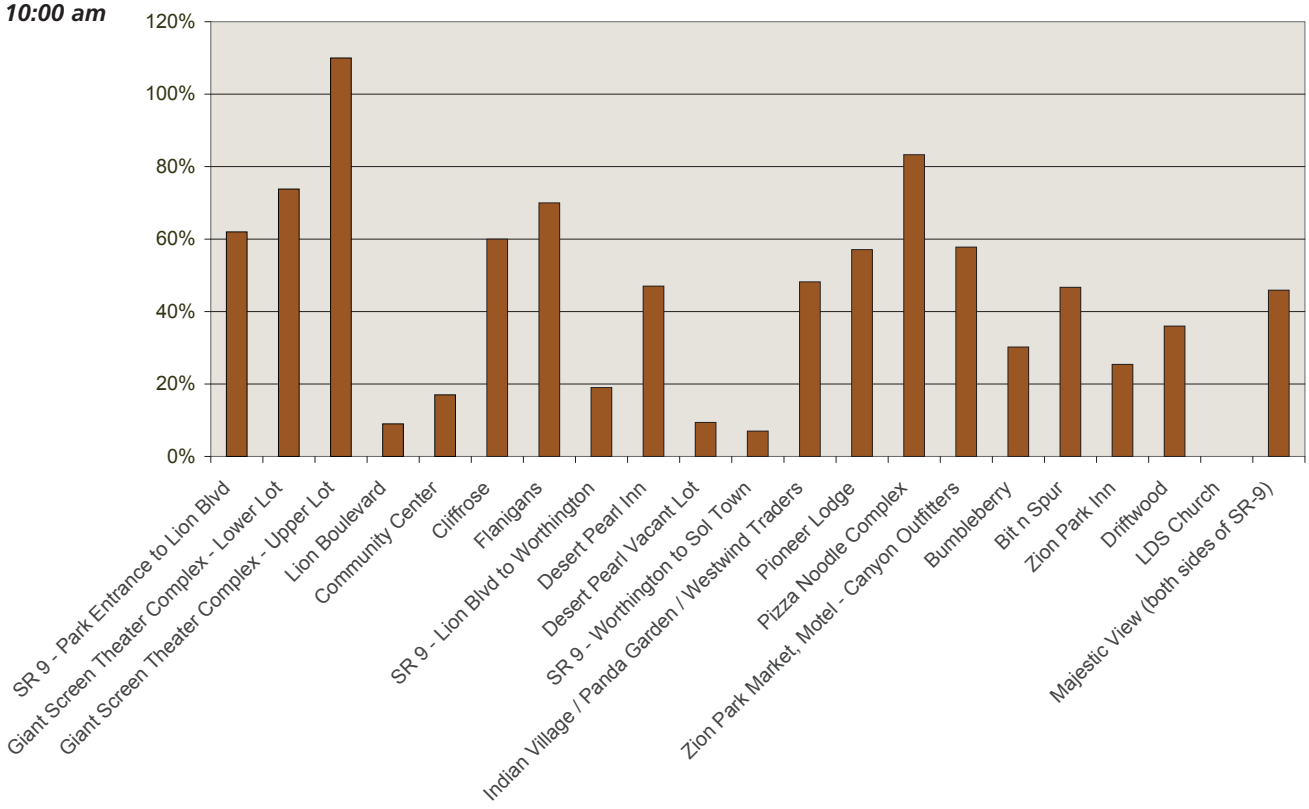
Location	# Total Spaces Currently Available	# Spaces Currently Available for Shuttle Riders (Estimated)
SR 9 - Park Entrance to Lion Blvd	135 *	135 *
Giant Screen Theater Complex - Lower Lot	160	80
Giant Screen Theater Complex - Upper Lot	40	40
Lion Boulevard	95 *	95 *
Community Center	53	33
Cliffrose	40	0
Flanigans	50	0 **
SR 9 - Lion Blvd to Worthington	52 *	52 *
Desert Pearl Inn	93	0 **
Desert Pearl Vacant Lot	70 *	70 *
SR 9 - Worthington to Sol Town	68 *	68 *
Indian Village / Panda Garden / Westwind Traders	56	0
Pioneer Lodge	49	0 **
Pizza Noodle Complex	60	40
Zion Park Market, Motel - Canyon Outfitters	45	0 **
Bumbleberry	106	0
Bit n Spur	30	10
Zion Park Inn	197	0 **
Driftwood	89	20
LDS Church	117	0
Majestic View (both sides of SR-9)	133	38
TOTAL ESTIMATED SPACES	**1,738**	**681**
ESTIMATED PERCENTAGE OF SPACES AVAILABLE FOR SHUTTLE RIDERS		**39% *** **

Amount of total parking spaces available for this location are approximate because parking spaces are not marked. The estimate is derived by measuring the length of the parking area and dividing by the dimensions needed for parking spaces.

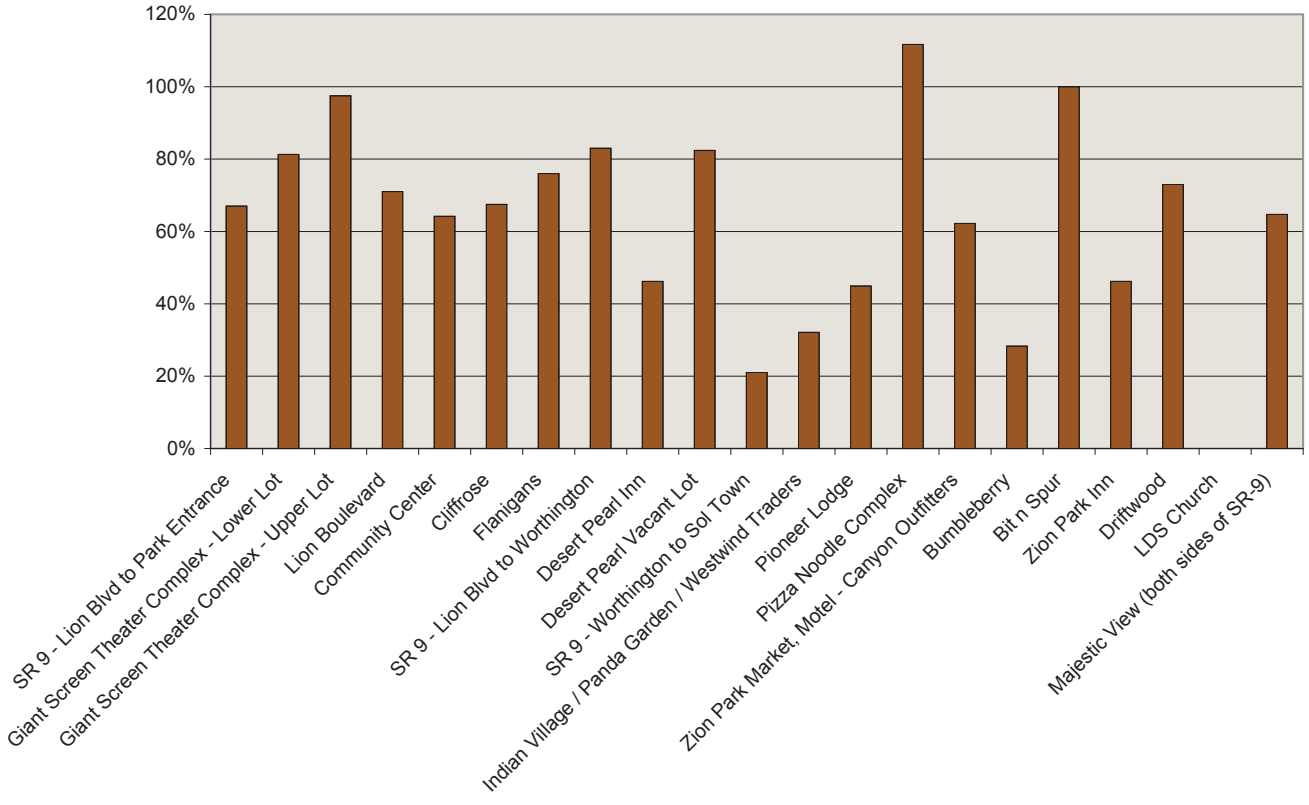
****Does not include business and motel/hotel patrons who may be parking their vehicles and riding the shuttle.***

***** Approximately 39 percent of the parking in Springdale is open to use by park visitors/shuttle riders. This is a rough estimate given that most parking areas do not clearly distinguish the number of spaces available for private vs. public use. Only parking areas in Springdale are shown, not areas in Zion National Park.***

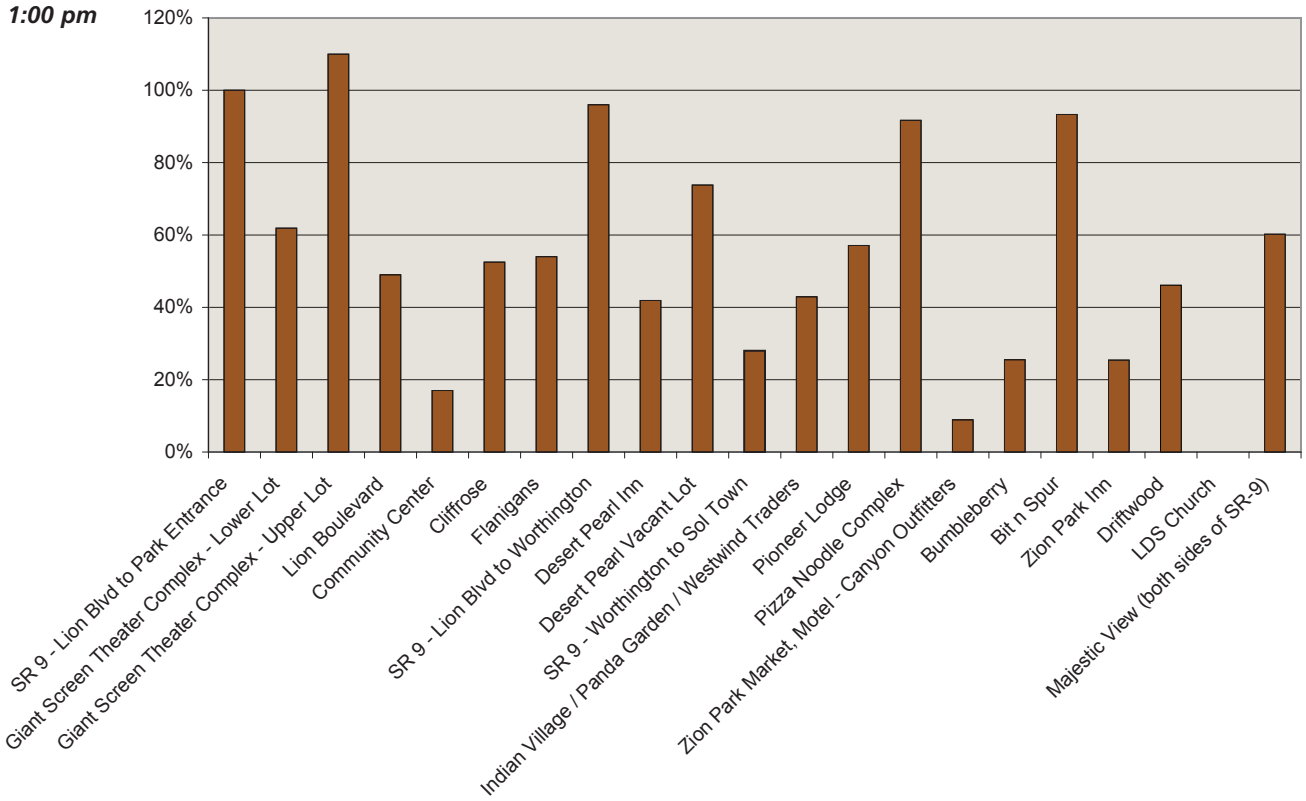
10:00 am



4:00 pm



1:00 pm



7:00 pm

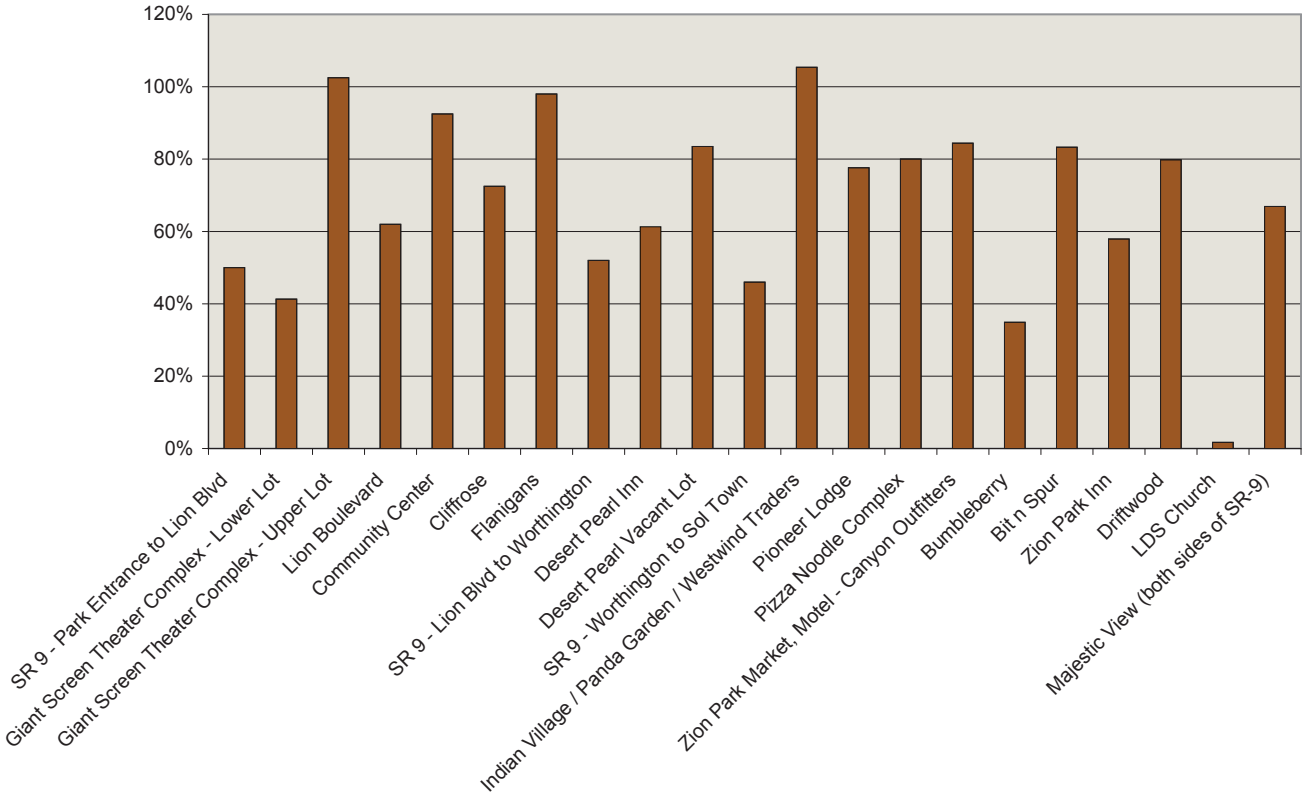
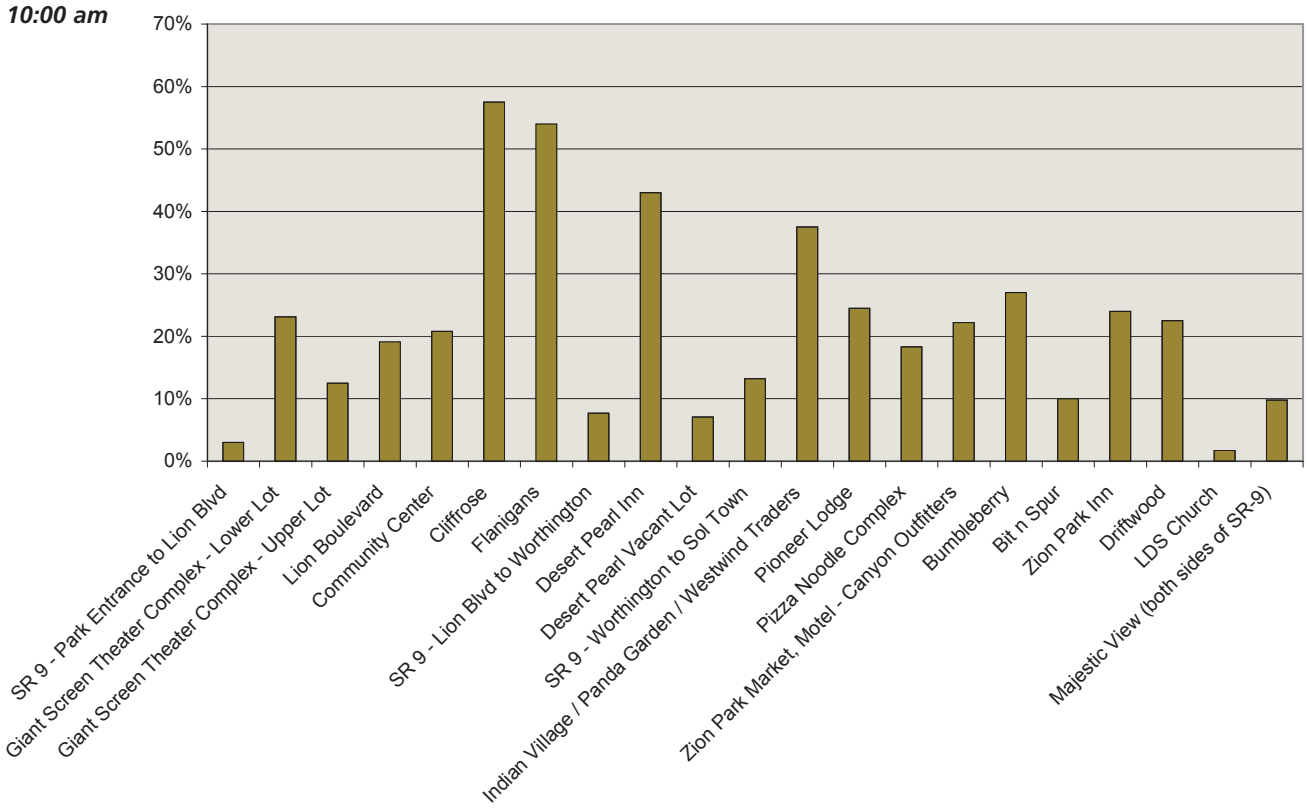
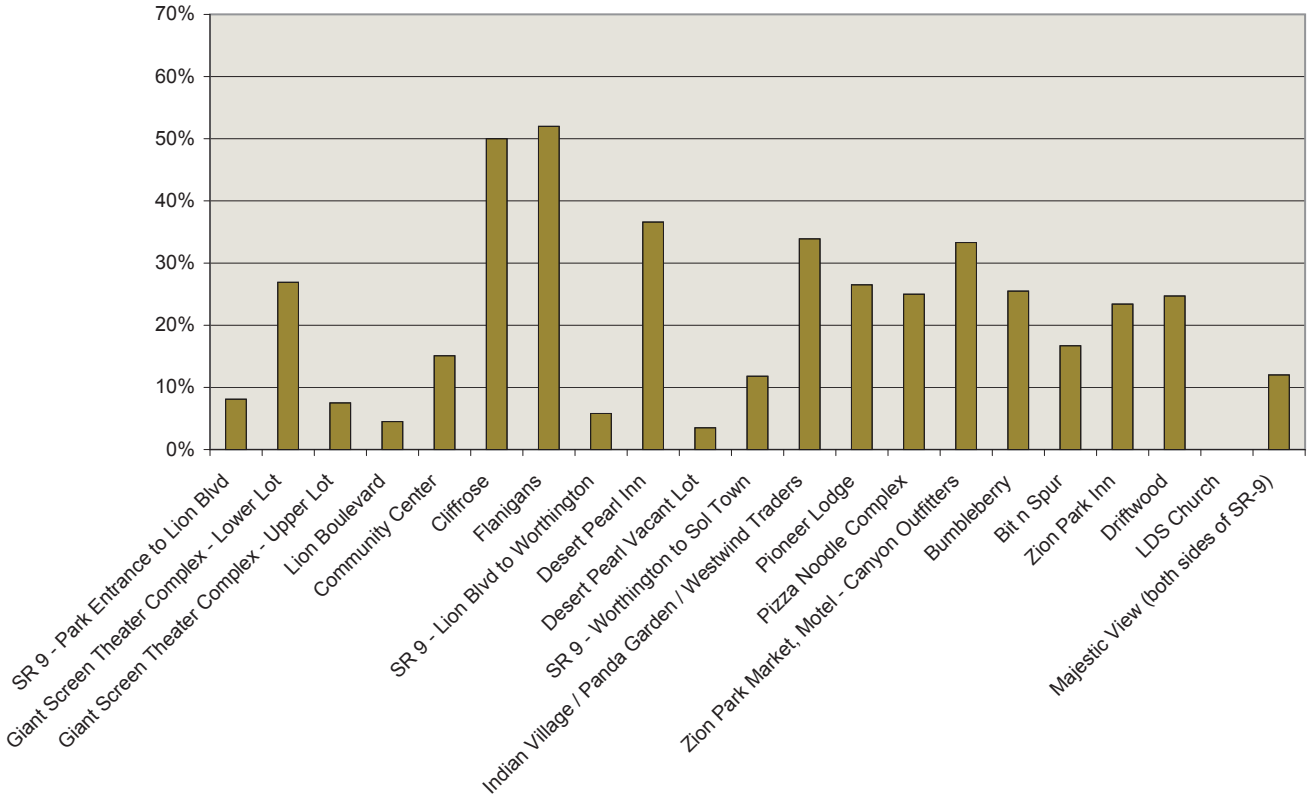


Figure 3-3. Town of Springdale Parking Area Usage - Saturday, May 26, 2007 (Memorial Day weekend)

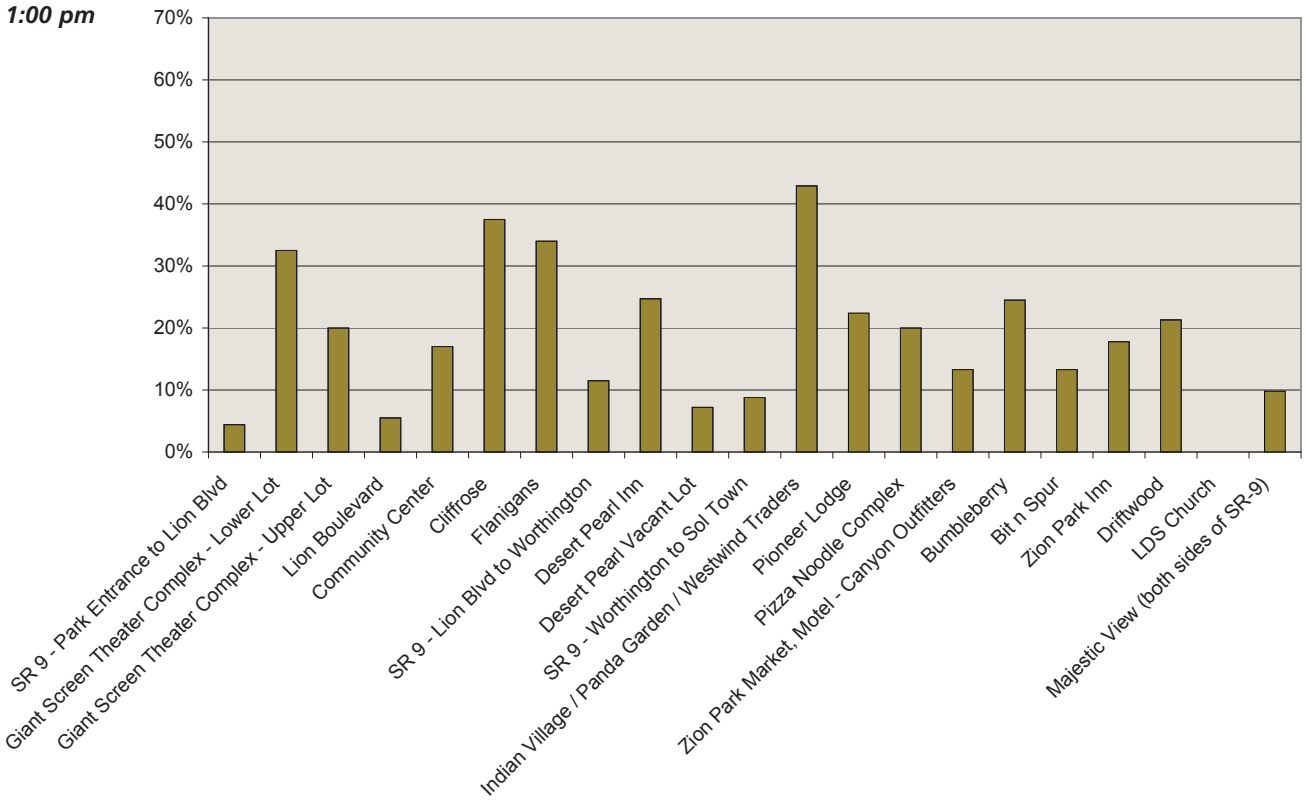
10:00 am



4:00 pm



1:00 pm



7:00 pm

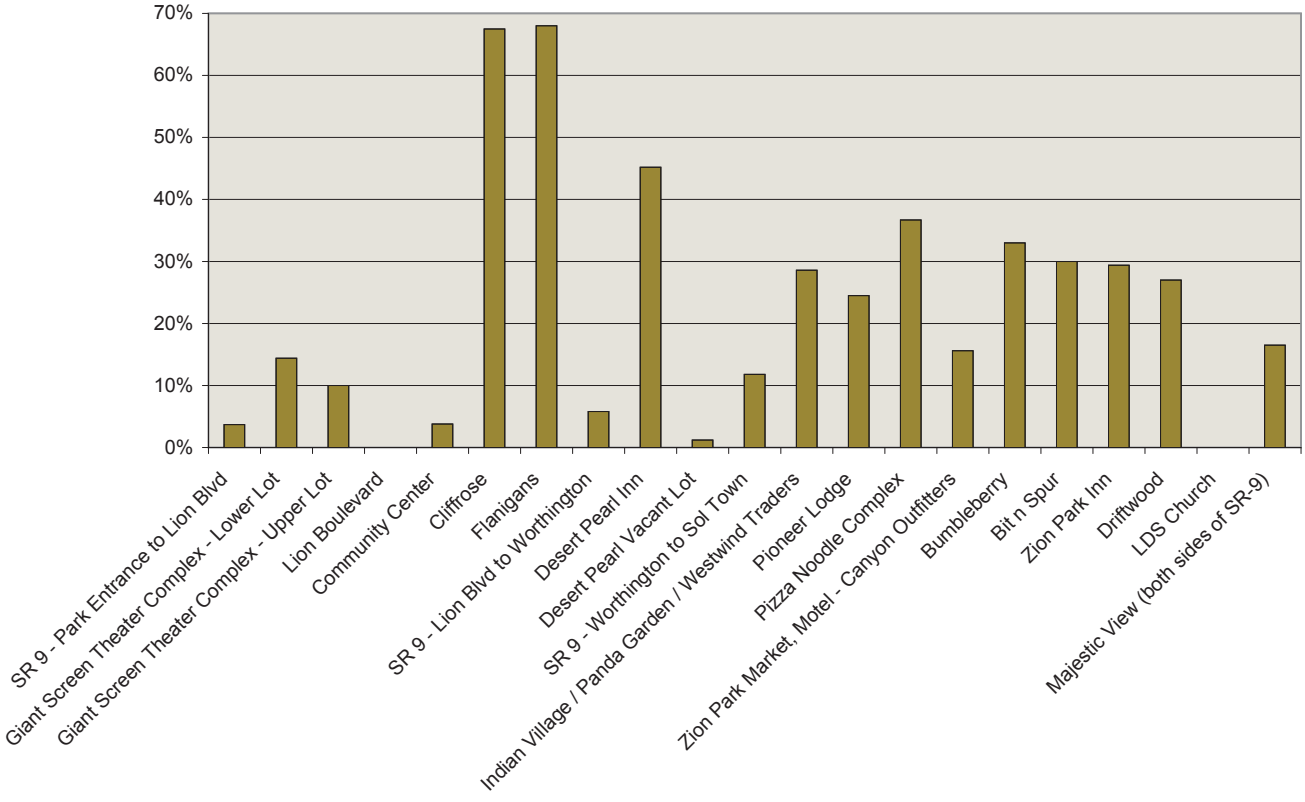


Figure 3-4. Town of Springdale Parking Area Usage - Wednesday, July 25, 2007

Visitors at the Majestic pull off

Downtown Springdale

Recommendations

A variety of solutions can be pursued to improve parking efficiency and help people understand where to park. Some lower cost solutions could be implemented right away. Other more intensive solutions, such as adding new parking areas either inside or outside the park, would take time to implement.

Lower Cost Solutions

- Consider more intensive management and focus on higher capacity parking areas available in town. Key candidates include Lion Boulevard, the Desert Pearl vacant lot, on street parking, and at Majestic View Lodge. The community should spearhead and organize a system to provide the best outcome. For example, if the existing Desert Pearl parking lot were to be improved, it could hold approximately 85 vehicles. It is important to note that the Desert Pearl and Majestic View lots are privately owned, so agreements would need to be formalized with these property owners to ensure ongoing use of these areas for public and visitor parking. Also private property owners always have the right to redevelop these areas, so public parking use may not be feasible in these locations over the long term.
- Intensify visitor wayfinding and communication efforts. This is described in further detail in Section 2.
- Formalize parking use agreements with other property owners and confirm exact locations and quantities available for visitor parking.
- Promote the shuttle system and park and ride opportunities more intensively through local businesses, hotels, and community venues. A strong campaign using a variety of communication media, tools and strategies should be implemented to encourage people to park and ride the shuttle and clarify where parking is available. Television, websites, podcasts, and radio are excellent forms of communication that could be implemented. These tools are described in detail in Section 2.
- Initiate a community-based "parking ambassadors" volunteer program. Motels, hotels, and other town representatives need to be more active in encouraging visitors to use parking in town. Analysis needs to identify potential tools and strategies to help business owners improve outreach to visitors related to parking and shuttle use. (Engage them in the new campaign.)
- Identify locations in Springdale for visitors to learn about parking and the shuttle (kiosks).
- Continue the Springdale Parking Committee efforts.
- A detailed plan for parking management and use by park visitors should be developed,

building upon the 2007 parking study completed by the park's transportation scholar and the work of this study.

- Zion National Park should consider appointing or retaining either a full time or part-time transportation director to act as the liaison with the shuttle service contractor as well as the parking coordinator with town representatives. This position with Zion National Park would have several responsibilities, one of which would be to secure memorandums of agreement from business and property owners related to visitor use of their parking areas. Other responsibilities could include implementing a formal parking management plan, conducting additional analysis to address ongoing problems and needs, and overseeing parking and transportation related projects.
- Signing and wayfinding to, from, and at parking areas and shuttle stops needs to be clarified and made more distinctive. (See Sections 2 and 6.) This will improve the efficiency and effectiveness of parking in Springdale.
- There is an existing wide pull off area just south of the Majestic shuttle stop that could serve as a pull off/orientation point for visitors. Perhaps a small kiosk or gatehouse with the NPS logo and a welcome to Zion National Park sign could be located there. This would also enhance the sense of entry to Springdale and Zion National Park.
- The use of various ITS applications, including electronic message signs (sensitively designed to fit the context of Springdale), should be considered. See Section 2.
- See Section 2 for additional recommendations related to signing, wayfinding, and visitor communications.

Zion National Park and Springdale, as well as other members of the Springdale Parking Committee, should monitor the effectiveness of these solutions as they are implemented, and make adjustments as needed.

Higher Cost Solutions - Potential New Parking Areas

Expanding Long Term Parking Capacity

As the parking utilization analysis shows, there generally appears to be sufficient existing parking capacity in Springdale to serve park visitors currently. However, it is clear from analysis of parking data and observations of conditions in Springdale, that visitors are not fully utilizing the parking that is available. In some cases, visitors are unaware of where to park. In other cases, they are following a natural inclination to drive right to the park gate without stopping in town to find a place to park.

There is a possibility that these issues can be resolved through better communication and signing (as discussed in Section 2) and the recommendations above. However, with increases in visitation in the coming years, more people driving to Springdale and Zion National Park will be needing places to park, and there will be more pressure on town businesses to provide parking for their customers. As such, now is a good time to start planning for and thinking about how to sensitively expand parking inside the park and/or in Springdale. Several suggested locations for new parking areas were offered during this process – including areas in the park (such as adjacent to the bus operations center and visitor center and areas in Springdale). Potential new parking areas are depicted in Figures 3-5, 3-6, and 3-7 at the end of this section.

Zion National Park is interested in increasing the capacity of parking inside the park near the visitor center and has identified an area where approximately 200 vehicles could be accommodated. They have also identified another smaller area in the campground where additional overflow parking could be accommodated. Park management foresees that adding this area would provide additional overflow parking for the visitor center, which typically is full by 10:00 am during the busy season. A new parking area in the park may also deter visitors from parking in prohibited areas in town, relieving concerns of several business owners.

There are also some areas in Springdale that have been identified as possible locations for

visitor parking, such as additional area along Lion Boulevard and an area off of Paradise Road on the west side of SR 9.

Another possibility for improving parking capacity in town includes formalizing the vacant lot near the Desert Pearl, which is privately owned but currently made available for use by park visitors. Parking patterns on the existing dirt lot are not very efficient. If this area were reorganized and/or paved (perhaps with a pervious paving materials) and parking spaces clearly delineated (through wheel stops and/or striping) it is estimated that 85 cars could be accommodated here. (This is approximately 25 percent more than the amount of cars parking here informally on a typical busy day at the park.)

On Lion Boulevard, more capacity could be gained with the on-street parking areas by parking cars diagonally (at a 45 degree angle) along the street, rather than horizontally, on at least one side of the street. This would increase capacity from approximately 95 spaces currently to approximately 160 spaces. There appears to be sufficient space within the existing right-of-way to accommodate the additional parking that would be needed to convert to diagonal spaces.

These opportunities will need to be further assessed and reviewed in more detail as planning continues in the coming year. A few considerations related to the ongoing assessment of where to add parking are provided below. In the near term, it is recommended that the park and town representatives focus on some of the lower cost solutions listed above to better orient visitors to available parking areas in town. The Zion Canyon Visitor Bureau has expressed interest in assisting with some of these activities.

It will take time to obtain funding and go through the design, environmental approvals, and construction process to build a new parking area. So in the interim, other parking management activities will be needed.

Considerations Related to New Parking Area Development

If it is ultimately determined that more parking is needed to serve visitor demand, potential locations both inside and outside the park should be further evaluated. The following important considerations factor into the evaluation of potential new parking improvements. See Figures 3-6, 3-7, and 3-8 for identified potential parking locations.

One of the potential parking areas in Springdale is open land on south Paradise Road

Inside the Park

- No land acquisition would be required (less costs).
- The NPS would be responsible for maintenance of the parking area.
- Parking would provide overflow for the visitor center, and potentially would reduce some problems and parking congestion in the north part of Springdale.
- With any new parking and access improvements environmental analysis will be required in compliance with the National Environmental Policy Act (NEPA) and other federal regulations.
- With more traffic moving through the gate at peak periods, the entrance area likely would need to be reorganized to allow more through capacity. Perhaps a "fast pass" lane or pre-visit pass purchase program could be implemented in the future. An additional entrance lane would be required for the fast pass program. (Even without a fast pass lane, a new lane may be needed with more visitors passing through the entrance to reduce gate back up.). Also, it will be important to resolve the issue of shuttles being stuck in the traffic queue (discussed in Section 7). These issues can be addressed through physical improvements in the south gate area.
- Adding parking inside the park may reduce interactions with town businesses and may reduce the amount of service needed for the town shuttle route.

Outside the Park

- Land acquisition through a willing seller agreement would be required (higher costs).
- Either the town or another entity would need to be responsible for maintenance of the parking area unless a cooperative agreement with the NPS is established.
- NEPA compliance may still be required given the purpose of the parking as relates to park shuttle access and/or funding sources.
- The potential for impacts to adjacent properties (visual, noise, etc.) would need to be carefully considered.
- Candidate locations should not require changes to shuttle route (should be within easy walking distance from a town shuttle stop).

Under either scenario (inside or outside the park) there are a variety of funding sources available, but given current federal economic conditions, some funding sources may be limited.

Potential Fast Pass/Pre-purchased Pass Program

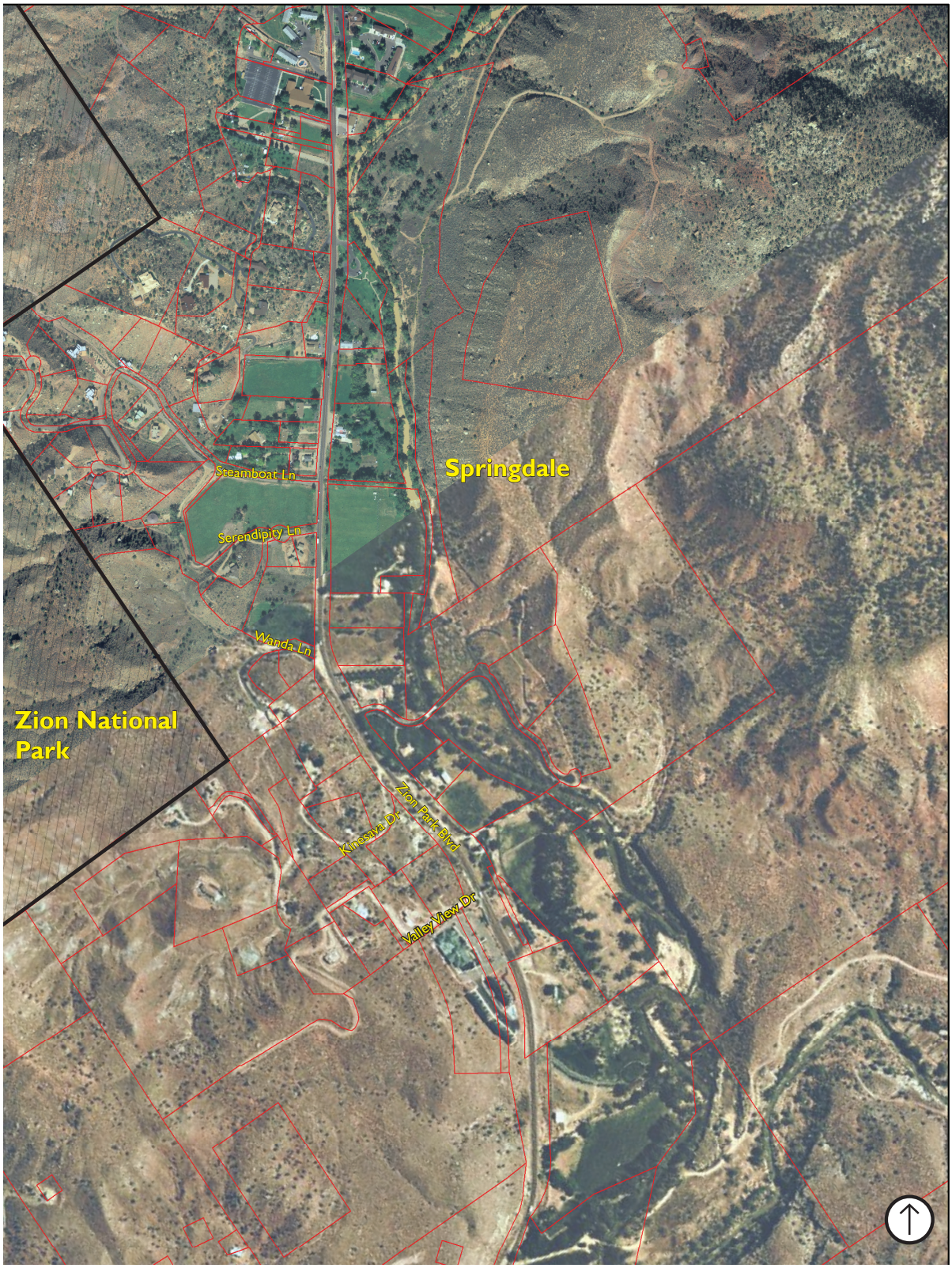
Fast pass programs are being implemented at Rocky Mountain National Park and other national park units. Typically, park access is allowed via a special card or electronic pass that is pre-purchased (either through the Internet, in gateway communities, or other sources). Visitors with passes bypass long queues at entrance stations by either flashing their pass or using an electronic code reading device. Fast pass programs need supporting infrastructure, such as additional entry lanes, card reading equipment, and other resources for operations and management. More detailed analysis is needed to confirm the feasibility of implementing such a program at Zion National Park.

Ongoing Parking Management

Zion National Park and Springdale representatives have been working together to manage parking in town since the shuttle system began operations. As the system enters into the text ten year cycle of operations, development of a formal parking management plan for use during the peak season is recommended. The plan should be reviewed and updated annually. The parking management plan could be implemented and monitored by the new Zion Canyon Transportation Committee. If a transportation director position is implemented at Zion, development of the plan and annual updating could become part of that position's responsibilities. The plan should address the following.

- A set of goals and objectives, established jointly by park and town representatives, and other participants in the plan development for parking management in Springdale. The goals and objectives should relate to how to resolve the problems and issues described in this technical analysis and the 2007 transportation scholar report.

- Confirmation of locations and capacities of available parking areas for park visitor/shuttle rider use (including shared private parking areas, confirmed on-street parking areas, and public parking areas). Written agreements with property owners should be secured if possible to formalize the available parking supply. This will help park and town representatives gain a clearer picture of the available parking supply so that they can direct their resources accordingly.
- Descriptions of communications and signing projects being implemented, consistent with the recommendations in this technical analysis. Some of these may be considered as pilot projects, implemented on a trial basis to determine effectiveness.
- Descriptions of potential parking and access improvement projects that the committee will be pursuing, which may tier from the recommendations in this report, or may include other potential projects identified on an ongoing basis. For each project, a lead responsibility should be identified, along with potential funding sources.
- Annual parking monitoring results: a section of the plan could provide a brief description of the parking management actions being implemented in the current year and a summary of their effectiveness in addressing problems.
- Description of potential additional technical assistance needed to support the transportation system, which may include:
    - More detailed analysis of the demand for parking vs. the confirmed available supply of public parking resources in town and in the park to further assess effectiveness and efficiency;
    - Further evaluation of the potential to implement a fast pass or pre-visit pass purchase program, which would allow visitors to bypass the queues (at vehicle and pedestrian entrances) and the improvements that may be necessary to facilitate such a program;
    - Detailed assessment of intelligent transportation system (ITS) opportunities; and
    - Other areas of needed technical assistance that may be identified on an ongoing basis.



Note: No areas have yet been identified in the south part of town. This map is being provided as a tool to use for future consideration of potential parking locations.

Figure 3-5. Potential Springdale Parking Locations (South)

Figure 3-6. Potential Springdale Parking Locations (Central)

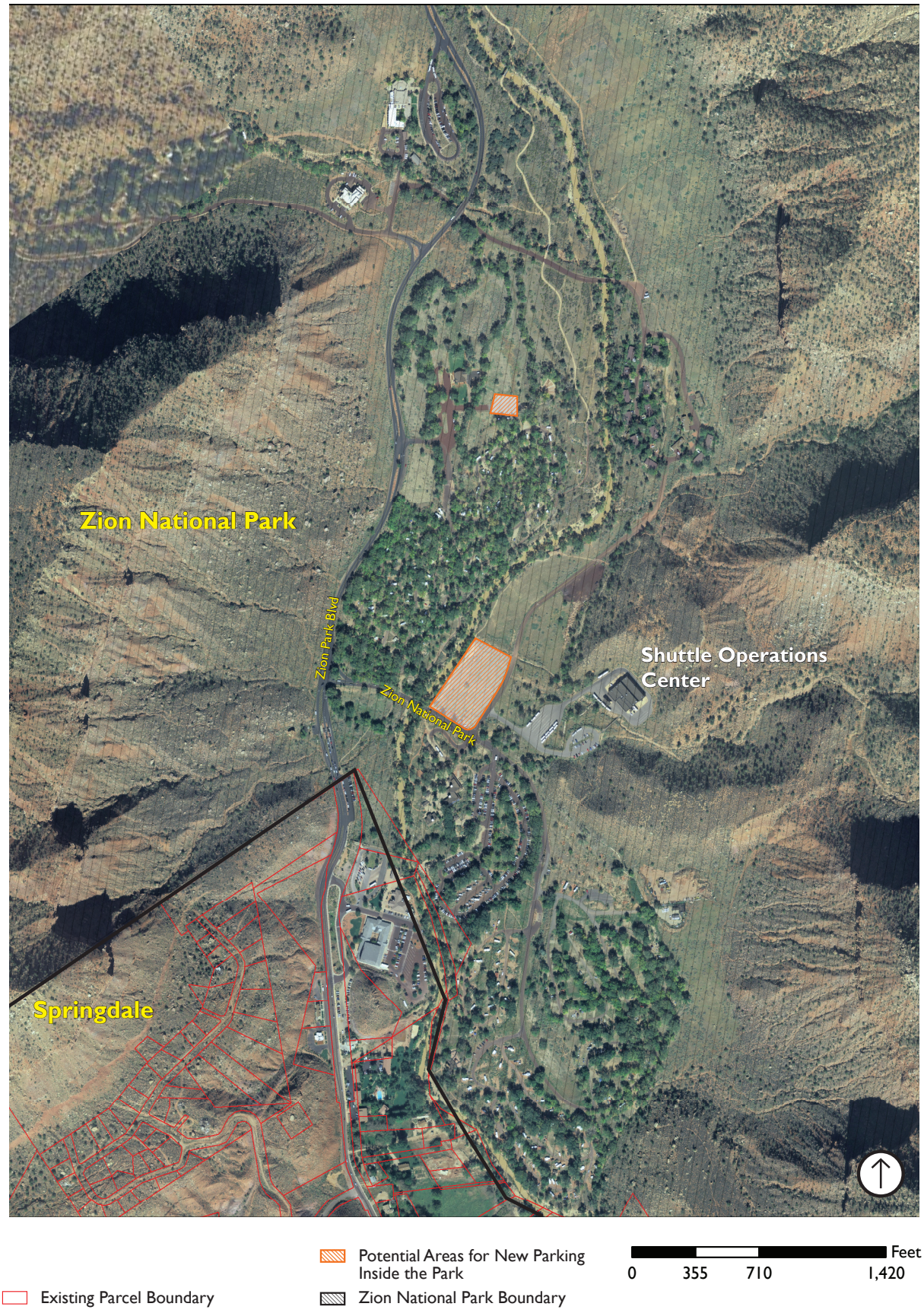


Figure 3-7. Potential Springdale Parking Locations (North)