



City of Sedona Uptown Parking Management Plan – 2012 Update

Administrative DRAFT

November 2012



Table of Contents

	Page
1 Executive Summary	1-1
Purpose of this report	1-1
What this report contains	1-1
Key Findings.....	1-1
Parking Recommendations	1-5
2 Introduction.....	2-1
3 Stakeholder Outreach	3-1
Introduction.....	3-1
Summary of Key Themes.....	3-1
4 Updated Parking Analysis	4-1
Methodology	4-1
Parking Inventory and Regulations	4-3
Parking Occupancy	4-5
Parking Turnover.....	4-11
Summary of 2012 Key Findings	4-12
5 Recommendations	5-1
6 Appendix A – Stakeholder Interview Notes.....	6-1
7 Appendix B – 2005 Parking Management Plan.....	7-1

Table of Figures

		Page
Figure 1-1	Main Street Parking Occupancy.....	1-2
Figure 1-2	On- and Off-Street Parking, Thursday	1-3
Figure 1-3	On- and Off-Street Parking, Saturday.....	1-3
Figure 1-4	Parking Turnover, Main Street	1-4
Figure 1-5	Share of Vehicles Parking 3+ Hours, Main Street	1-4
Figure 1-6	2012 Uptown Parking Recommendations.....	1-7
Figure 4-1	2012 Uptown Parking Study Area	4-2
Figure 4-2	Inventory of Uptown Parking (2012 Study Area).....	4-3
Figure 4-3	Existing Parking Signage	4-4
Figure 4-4	Main Street – Public Vehicle Spaces (No Loading, No Motorcycles).....	4-5
Figure 4-5	Main Street – All Spaces.....	4-6
Figure 4-6	Forest Road.....	4-6
Figure 4-7	Municipal Lot.....	4-7
Figure 4-8	Sinagua Plaza (Upper + Lower)	4-8
Figure 4-9	All Public Off-street (No Employee Parking)	4-8
Figure 4-10	On- and Off-street Public Spaces, Thursday	4-9
Figure 4-11	On- and Off-Street Saturday.....	4-10
Figure 4-12	Summary of Public Parking Spaces.....	4-10
Figure 4-13	Parking Turnover, Main Street	4-11
Figure 4-14	Share of Vehicles Parking 3+ Hours, Main Street	4-11
Figure 4-15	Main Street Parking Occupancies, 2005.....	4-13
Figure 4-16	Municipal Lot Parking Occupancies, 2005	4-14
Figure 4-17	Potential Public Parking, 2005	4-14
Figure 4-18	Parking Turnover, 2005	4-15
Figure 5-1	Summary of Parking Management Plan	5-2
Figure 5-2	Example Parking Facility Costs, by Location and Type	5-24

1 EXECUTIVE SUMMARY

PURPOSE OF THIS REPORT

In 2005 the City of Sedona completed the Sedona Parking Management Study with the help of Parking Research & Solutions. This study was a comprehensive parking analysis that evaluated parking demand and behavior in the Uptown and Highway 179 corridors areas of Sedona. The 2005 study ultimately concluded that parking management in Sedona, especially in the Uptown area, should undergo a comprehensive overhaul. The study resulted in a new Uptown Parking Management Plan with nine parking recommendations.

Since 2005, much has changed in the City of Sedona as it adjusts to a new regional and national economic context. In August of 2012, Nelson\Nygaard Consulting Associates was contracted by the City to provide an update to the 2005 Study (in “admin draft” format). This report represents the 2012 Update to the 2005 Uptown Parking Management Plan.

WHAT THIS REPORT CONTAINS

Chapter 2 gives a brief description of the project background and the scope of this study.

Chapter 3 provides an overview of the stakeholder feedback received in 2012.

Chapter 4 summarizes the 2012 parking study and compares the 2012 data with the 2005 findings.

Chapter 5 includes the specific 2012 recommendations for improving parking in Uptown.

Appendix A includes the detailed notes from the stakeholder interviews.

Appendix B includes the complete 2005 Parking Management Plan.

KEY FINDINGS

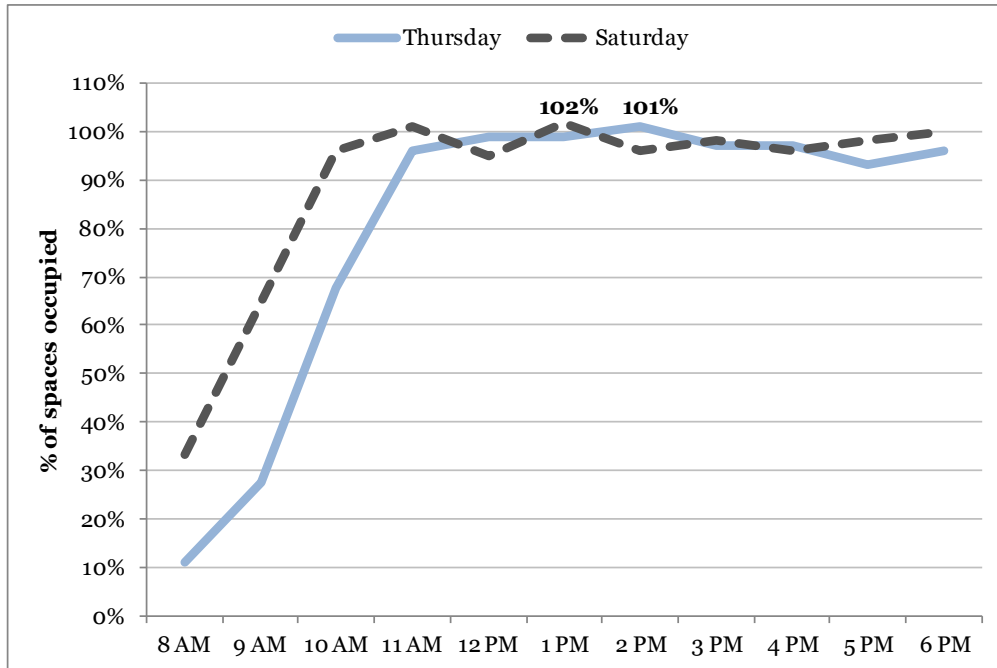
After a series of stakeholder interviews and a new detailed survey of actual parking conditions in Uptown, Nelson\Nygaard identified a number of key findings about parking trends, issues, and opportunities. The key findings are discussed in this section. The twelve recommendations (Figure 1-6) based on these findings are discussed in the next section.

1. Demand for on-street parking is very high, which impacts parking availability and traffic flow.

As shown in Figure 1-1, the publicly available vehicle parking spaces (i.e. not including loading or motorcycle parking) on Main Street were consistently at or near 100% occupancy beginning at 10 AM until the end of the count period (6 PM) for both Thursday and Saturday. Furthermore, peak occupancy along Main Street was 101% on Thursday at 2 PM and 102% on Saturday at 1 PM. This means that all legal parking spaces are occupied and some vehicles are parking illegally.

As a result of these high occupancies, the typical motorist driving down Main Street will be unable to find an on-street parking space. The cumulative effect of multiple vehicles “cruising” down Main Street searching for parking is undoubtedly contributing to traffic congestion issues. Studies have shown that a significant amount of traffic congestion – 28% on average in “main street retail / commercial” districts – is from motorists who have arrived at their destination but are searching for a parking space.¹ This number is likely higher in districts with a large number of occasional visitors who are not as familiar with the location of available parking.

Figure 1-1 Main Street Parking Occupancy



2. Demand for off-street spaces (in the Municipal Lot and Sinagua Plaza) is much lower than demand for on-street spaces.

In the Municipal Lot, peak occupancies for Thursday and Saturday were 35% and 64%, respectively. In Sinagua Plaza, peak occupancies for Thursday and Saturday were 47% and 89%, respectively. As shown in Figures 1-2 and 1-3, when only including public parking in these facilities (i.e. no employee spaces), peak occupancies for public parking were even lower on both Thursday (38%) and Saturday (76%).

3. There is a geographical imbalance between parking supply and demand.

During the on-street peak period on Thursday (101% at 2 PM), there were 98 available spaces in the Municipal Lot and 69 public spaces available in Sinagua Plaza. During the on-street peak period on Saturday (102% at 1 PM), there were 73 available spaces in the Municipal Lot and 4 public spaces available in Sinagua Plaza. That means that during peak demand periods when there is no parking available on Main Street (and occupancy is above 100%), there are nearly 200 empty parking spaces available just a few blocks away. Once again, this availability does not

¹ Donald Shoup. *The High Cost of Free Parking*. APA Planners' Press (Chicago, 2005).

include the dozens of other private lots in the Uptown area. This suggests not a lack of parking, but an imbalance between parking supply and demand.

Figure 1-2 On- and Off-Street Parking, Thursday

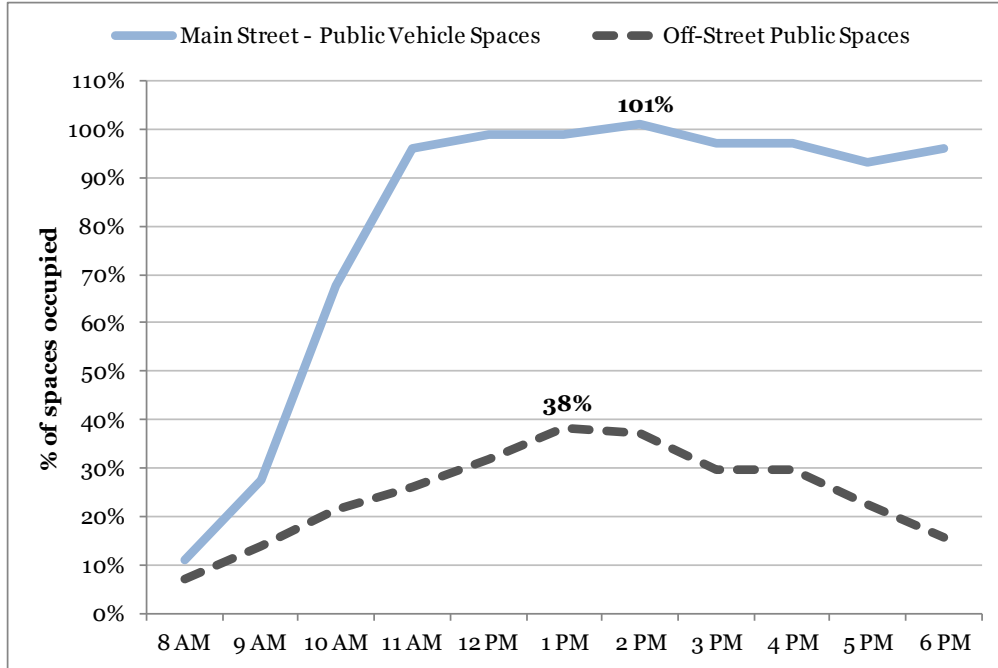
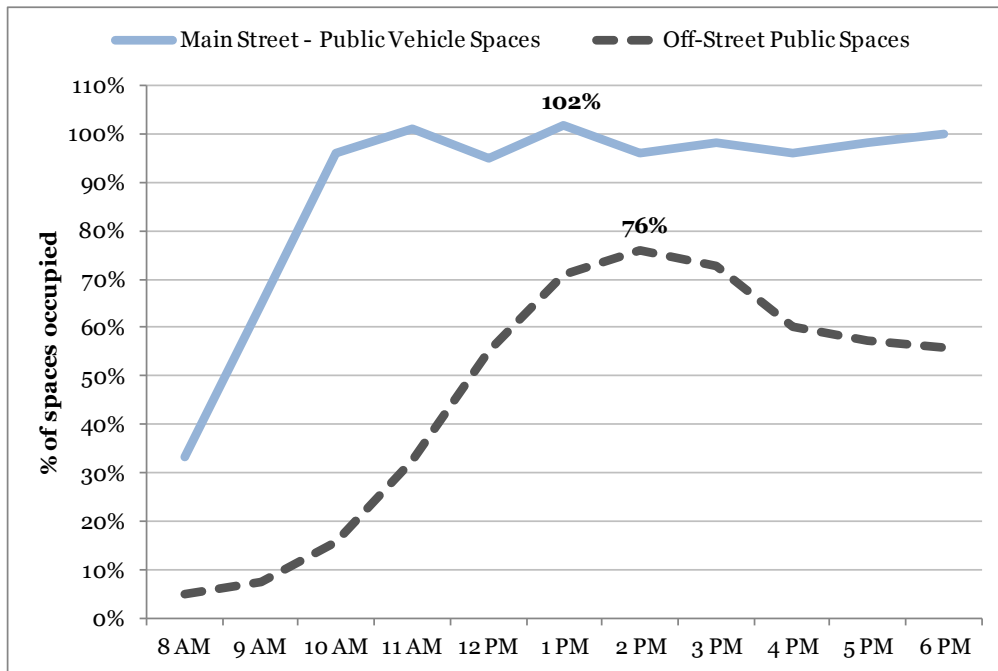


Figure 1-3 On- and Off-Street Parking, Saturday



- Part of the imbalance in parking demand can be directly attributed to inadequate and inconsistent signage, limited lighting, and poor pedestrian conditions.**

Parking signage remains a key issue in Uptown. While efforts have been made since 2005 to improve signage, the lack of consistent, user-friendly, and intuitive signs makes it difficult for drivers and visitors to easily find parking, especially in the off-street parking facilities. Furthermore, the large number of signs in private off-street facilities that announce parking restrictions and threaten vehicle towing have the effect of actively discouraging visitors. Poor lighting also contributes to employee and visitor concerns about perceived safety and security when parking in the off-street lots. Finally, pedestrian access to off-street and/or remote lots can be challenging due to the lack of lighting discussed above, steep slopes, and gaps in the sidewalk network in the vicinity of off-street parking facilities.

5. While some vehicles exceed the 3-hour parking limit, parking turnover does not appear to be a major issue in Uptown.

On Thursday, the average length of stay for a vehicle (in hours) was 1.8 hours (see Figure 1-4). Block #2 (east side of 89A from Forest Road to Jordan Road) had the longest average length of stay at 1.9 hours. On Saturday, the average length of stay for a vehicle (in hours) was 1.7 hours. Block #4 (east side of 89A from Jordan Road to the loading zone) had the longest average length of stay at 1.9 hours. In addition, only a small percentage of vehicles parked in the on-street parking spaces stay three or more hours.

Given these behaviors, recent plans for increased enforcement of existing 3-hour time limits for on-street parking in Uptown will likely be ineffective at increasing the availability of on-street parking spaces, since the majority of vehicles are not overstaying the current time limits. Even reducing the 3-hour time limits to two hours would likely be an ineffective strategy for increasing parking availability because the average length of stay for on-street parking spaces in Uptown is already less than two hours on all blocks during all survey times.

Figure 1-4 Parking Turnover, Main Street

Block ID	Average Parking Duration (Hours)	
	Thursday	Saturday
1	1.91	1.38
2	1.92	1.62
3	1.56	1.59
4	1.82	1.91
7	1.70	1.72
8	1.82	1.72
ALL	1.79	1.66

Figure 1-5 Share of Vehicles Parking 3+ Hours, Main Street

Time	Thursday	Saturday	Combined
1 PM	18%	10%	14%
2 PM	17%	8%	13%
3 PM	11%	5%	8%
4 PM	12%	5%	9%

PARKING RECOMMENDATIONS

Parking Management Goals and Objectives

Historically, a city wishing to “solve its parking problem” has almost always sought an increase in supply and more enforcement. Unfortunately, simply increasing parking supply often encourages more auto use, as people are incentivized to drive to places that offer plenty of “free parking.” Furthermore, simply increasing supply or enforcing inefficient regulations will never address the core problem of concentrated demand, in which popular on-street spaces are consistently oversubscribed while nearby off-street spaces remain underutilized.

The goal of parking demand management is to “manage” curb spaces to ensure availability while also optimizing utilization of existing off-street supply to meet a variety of parking needs. Managing parking has been shown to be one of the single most effective tools for alleviating congestion and improving operation of the street network, even when densities are relatively low and major investments in other modes have not been made. The experience of other cities (of all sizes and contexts) has shown that more effective parking management results in positive economic impacts for local businesses, as employees, residents, and visitors can all better utilize the parking supply to shop, dine, or recreate.

In recognition of these considerations, the following goals and objectives informed the development of parking management recommendations for Uptown:

- **Uptown should strive to become a “park once” district**, where the parking supply is a public resource that is convenient and easily accessible for all user groups.
- Public and private **parking should be managed as part of an integrated, district-wide system.**
- Parking management strategies should **focus on making the most efficient use of existing parking facilities *before* increasing supply.**
- Enforcement is a key tool to improve parking conditions, but **enforcement is a relatively expensive strategy that cannot compensate for inefficient parking policies.**
- **Parking regulations should be “visitor friendly”** to encourage visitors and residents to come to and stay in Uptown. Most studies suggest that the majority of visitors would rather pay a small fee to be able to quickly and conveniently find a parking space. It is clear that the current parking situation in Uptown, in which a motorist arriving on Main Street sees not a single available on-street parking space, a proliferation of “no parking” signs in privately-owned off-street lots that often have empty spaces, and few signs pointing to where parking can be found, is *not* visitor friendly.
- Parking policies should support the ability of local employees to get to work, but also **discourage employees from parking in “prime” on-street spaces all day long** or “game the system” by moving their cars from space to space to avoid time limits.
- **Parking spillover impacts should be minimized** for Uptown-adjacent residential neighborhoods.
- Time limits have their place in low-demand areas, but in high demand areas, **parking pricing is the most effective tool to correct supply and demand imbalances and generate the appropriate turnover for short-term curb parking spaces that is so critical to the success of local businesses.**

- **New parking meter revenue should be reinvested back into Uptown to fund improvements that merchants and property owners support** and enhance the business environment and visitor experience.
- **Embrace new parking technologies** to maximize customer satisfaction, as well as to foster enhanced parking data management and analysis.
- **Provide flexibility to decision makers and City staff** to adapt parking policies to seasonal and long-term changes in parking demand and travel patterns, as well as make adjustments to parking policies to improve system performance.
- **The City should continue to be proactive in community engagement** to ensure that local businesses, residents, and visitors understand any new parking policies and programs, and how those policies will improve parking in Uptown.
- Any proposed parking management strategy for Uptown should be **evaluated based on how well it will likely help achieve these goals**. Any parking management strategy that is implemented in Uptown should be monitored to ensure that it is achieving these goals.

Summary of Parking Recommendations

The recommendations summarized in the table below (and discussed in more detail in Chapter 5 of this report) are based on the key findings and parking management goals discussed above. The recommendations are phased according to an implementation timeframe of immediate (6-12 months), short-term (1-3 years), or mid-term (3-5 years).

Figure 1-6 2012 Uptown Parking Recommendations

Implementation Timeframe	No.	Recommendation
Immediate (within 6-12 months)	1	Continue with implementation of a more active parking enforcement program with the understanding that the fundamental parking challenge in Uptown is NOT related to violation of the current 3-hour limits. Conduct a study to monitor the effects of enhanced enforcement on parking turnover and availability.
	2	Improve awareness of, and access to, the underutilized off-street public parking facilities in Uptown through additional wayfinding improvements.
	3	Improve the motorist experience and perceived safety of using off-street parking through enhanced lighting and pedestrian improvements to and from existing off-street facilities.
	4	Expand the public parking supply in a cost-effective manner and improve the visitor experience by opening up privately-owned off-street lots to public parking through legally binding, public parking agreements.
	5	Lease a specific off-street lot and designate the lot for tour bus parking.
	6	Reevaluate a circulator shuttle to connect the greater Uptown area, Hillsdale area, and off-street parking facilities. Coordinate with NAIPTA on upcoming transportation study and possible shuttle service.
Short-term (within 1-3 years)	7	Designate a specific off-street facility for employee parking and implement an employee permit program.
	8	Install “smart” parking meters and use pricing to make parking more convenient and easier to find. Designate meter revenue specifically for improvements in Uptown that merchants and business owners want.
	9	Evaluate a parking validation program as a means to reward drivers who shop in Uptown.
	10	If needed to reduce parking spillover impacts in Uptown-adjacent neighborhoods, implement a residential parking program.
	11	Designate a part-time/seasonal “Uptown Parking and Transportation Manager” to serve as single point of contact for parking and transportation issues during peak season. The manager’s first task would be to establish an ongoing data collection, monitoring, and evaluation process of the City’s parking management program and regularly report back to community stakeholders and decision makers so adjustments can be made as needed.
Mid-term (within 3-5 years)	12	Identify additional opportunities to expand the public parking supply, either through a public-private partnership to create a mixed-use parking garage project in the Uptown District or the development of additional remote parking facilities connected by a shuttle circulator.

2 INTRODUCTION

Project Background

In 2005 the City of Sedona completed the Sedona Parking Management Study with the help of Parking Research & Solutions. This study was a comprehensive parking analysis that evaluated parking demand and behavior in the Uptown and Highway 179 corridors areas of Sedona. The 2005 study included original data collection for parking occupancy and turnover in Uptown, Highway 89A, and Highway 179A corridors. The 2005 study also involved extensive stakeholder outreach, including meetings and a survey. The 2005 study found that existing parking management in Sedona was non-existent and the existing regulatory framework was exacerbating the City's parking challenges. The 2005 study states:

“The City of Sedona has no current tools to manage its parking resources, other than requirements for new developers to provide adequate off-street parking. There is a general understanding that the on-street, public parking spaces in Uptown are for visitors and patrons of Uptown businesses. Similarly, most of the close-in parking at Hillside and Tlaquepaque is saved for patrons. Most private businesses have designated employee parking areas and discourage employees from parking in prime visitor parking spaces in front of businesses. Private property owners are allowed to manage their own parking without specific requirement or limitations from the City. However, in the absence of a comprehensive parking management plan, visitors to Sedona are limited to obvious public parking options, which are quite limited during peak times.”

The 2005 study ultimately concluded that parking management in Sedona, especially in the Uptown area, should undergo a comprehensive overhaul. The study includes a series of nine recommendations forming a new Parking Management Plan (see Appendix B), as outlined below.

1. Creation and management of a public parking supply through public parking agreements.
2. Designated employee parking.
3. Promotion of public parking options.
4. Comprehensive parking management, including: time restricted parking and paid parking and new meters for Main Street.
5. Development of new parking sites after implementation of parking management plan.
6. Establish residential permit parking (if needed).
7. Reorganize parking management oversight within the City of Sedona.
8. Utilize an automated ticket management system.
9. Evaluate additional funding sources.

Scope of the 2012 Update to the 2005 Plan

Since 2005, much has changed in the City of Sedona as it adjusts to a new regional and national economic context. In August of 2012, Nelson\Nygaard² was contracted by the City to provide an update to the 2005 Study and its recommendations. Unlike the larger scope of the 2005 study, the primary focus in 2012 was on just the Uptown area. In short, the City asked Nelson\Nygaard to assess parking in Uptown and do a “reality check” on the 2005 recommendations to see if they were still the best option for Uptown.

More specifically, Nelson\Nygaard was scoped for the following tasks:

1. Review 2005 parking data and key findings;
2. Conduct a new parking study and occupancy count for the spaces along Main Street, in the Municipal Lot, and in the Sinagua Plaza lot;
3. Conduct outreach to Uptown stakeholders, including four meetings; and
4. Update the Uptown parking management recommendations and develop a draft update to the 2005 Parking Management Plan.

² The Nelson\Nygaard team included Tim Ware, the primary author of the 2005 study.

3 STAKEHOLDER OUTREACH

INTRODUCTION

As part of the 2012 Uptown Parking Study, the City asked the Nelson\Nygaard consulting team to meet with Uptown merchants, property owners, and other stakeholders. These four sessions took place on August 22nd. At the beginning of each session, Nelson\Nygaard staff provided an overview of the project and the goal of these initial meetings:

- This effort is an update to 2005 study.
- The study will collect new data since the 2005 data is outdated.
- No decisions have been made regarding recommendations.
- The goal of these initial meetings is to get input and feedback from stakeholders who know the parking issues in Uptown the best.

After this introduction, NN staff facilitated a discussion around these questions:

1. What do you think are the biggest parking issues facing your neighbors, tenants, employees, or customers?
2. Referencing a map of Uptown:
 - a. Where do people (visitors, employees, residents, etc.) park? On-street? Off-street?
 - b. Where are the biggest parking challenges?
 - c. Are there any opportunities for shared off-street parking? Where?
3. What are your ideas for managing parking in Sedona?
4. How would you define a successful outcome for this project?
5. What would constitute a failure for this project?

SUMMARY OF KEY THEMES

Included below is a brief summary of the major themes from the stakeholder outreach. These findings were utilized to inform the recommendations outlined in Chapter 5. A complete summary of the stakeholder meetings are included in Appendix A.

- Common perception that parking in Uptown is not easy
 - Most would say is a capacity issue, but due to high visitation numbers this is a “structural deficit” that no amount of additional parking supply will solve completely.
 - Some felt that parking was often available, but too hard to find or access
- Municipal lot is not used for a variety of reasons (lighting, distance, topography, difficulty in locating).
- Universal agreement that wayfinding needs improvement so that people can easily find off-street parking.

- At this time, there is strong opposition among many merchants and property owners to paid parking on-street – the general consensus is that that this would harm the business environment.
- Others felt that paid parking could help the parking situation and would be supportive so long as it didn't make the customer/visitor parking experience more negative than it currently is and didn't hurt economic activity.
- Enforcement is needed to ensure employees are not parking all day.
- Project failure would be just “another study” and no action.
- Additional education and outreach is needed around parking and traffic issues and potential solutions.
 - More stakeholders need to be involved, including employees of Uptown businesses and residents of Uptown-adjacent neighborhoods.
 - There is a general lack of understanding about how new parking payment and enforcement technology can make it easier for motorists to find parking and reduce “ticket anxiety” (such as pay-by-cell to add more time on the meter, etc.)

4 UPDATED PARKING ANALYSIS

To better understand current parking demand and behaviors, Nelson\Nygaard conducted original data collection in Sedona. Unlike the 2005 study, this assessment focused specifically on parking conditions in the Uptown area. This chapter provides an overview of the 2012 parking study and highlights the key findings related to parking demand and behavior.

METHODOLOGY

As shown in Figure 4-1, the study area included the on-street parking spaces along Main Street (Highway 89A) from Forest Road north to the end of Uptown, the on-street spaces along Forest Road from 89A west to the end of Forest Road, and the off-street spaces in the Municipal Lot and Sinagua Plaza. Parking inventory and regulations were determined through field observations by Nelson\Nygaard staff members, who walked the study area, counted parking spaces, and noted regulations on each block face and in each off-street facility. Nelson\Nygaard staff also conducted an occupancy study using trained data collection surveyors. The count days and times were:

- Thursday, August 23rd, 2012 from 8 AM – 6 PM, every hour
- Saturday, August 25th, 2012 from 8 AM – 6 PM, every hour

Counts were conducted on these days in order to provide as wide a range of parking conditions as possible, as parking demand tends to fluctuate a great deal by day of week and time of day. The count periods specifically captured parking activity during a typical weekday and weekend. Each block face and off-street lot (Municipal Lot and Sinagua Plaza) was counted every hour at approximately the same time of each counting period.

In addition to analyzing parking utilization, parking duration data (for on-street spaces along Main Street only) was also collected from 10 AM to 4 PM to gauge how often each on-street space experiences “turnover.” This data was collected on the same days as the utilization data and involved surveyors noting the last four digits of each license plate, which can be used to identify vehicles without collecting any personal information.

Figure 4-1 2012 Uptown Parking Study Area



On Street Segments:

- | | |
|---|---|
| #1 - 89A from Forest to Jordan (West Side) | #9 - 89A from Arroyo Roble Road to End (East Side, Bus Bay) |
| #2 - 89A from Forest to Jordan (East Side) | #10 - 89A from Forest to PJ Driveway (East Side) |
| #3 - 89A from Jordan to Mid Block Crossing (West Side) | #11 - Forest from 89A to Wilson (North Side) |
| #4 - 89A from Jordan to Bus Bay (East Side) | #12 - Forest from 89A to Wilson (South Side) |
| #5 - 89A from Jordan to Mid Block Crossing (East Side, Bus Bay) | #13 - Forest from Wilson to Smith (North Side) |
| #6 - 89A from Mid Block Crossing to Amara Lane (East Side, Bus Bay) | #14 - Forest from Smith to End (North Side) |
| #7 - 89A from Mid Block Crossing to Arroyo Roble Road (West Side) | #15 - Forest from Smith to End (South Side) |
| #8 - 89A from Arroyo Roble Road to End (West Side) | |

Off Street Lots:

- #10 - Public Lot
- #11a - Sinagua Plaza Upper
- #11b - Sinagua Plaza Lower

PARKING INVENTORY AND REGULATIONS

Inventory

Figure 4-2 provides a summary of the number and type of parking spaces that were counted as part of the 2012 parking study. In brief, the majority of the parking in the Uptown area is located in off-street facilities. In fact, only two off-street facilities were analyzed as part of this study (the Municipal Lot and Sinagua Plaza) and they have by themselves almost three times the number of spaces that exist along Highway 89A. The 2012 study did not assess any of the numerous private off-street lots within Uptown. However, the 2005 study observed that there are several hundred other private off-street spaces within the Uptown area.

Of the 114 spaces on Highway 89A, roughly 84% of them are available for public parking. The remaining spaces are available for motorcycles, disabled, and loading.

Figure 4-2 Inventory of Uptown Parking (2012 Study Area)

Facility	Public		Motorcycle		Disabled		Reserved		Loading		TOTAL	
On-street	96	84%	2	2%	6	5%	0	0%	10	9%	114	27%
Off-street	255	85%	0	0%	11	4%	35	12%	0	0%	301	73%
TOTAL	351	85%	2	0.5%	17	4%	35	8%	10	2%	415	100%

Regulations

Parking within the Uptown area is heavily regulated. Most private off-street parking lots restrict parking for customer use or employee use through the use of “ad hoc” signage. As a result, there is a wide variety of regulatory signage throughout Uptown. Figure 4-3 includes a sample of some of this signage.

The Municipal Lot offers free parking from 7 AM – 10 PM (last entry by 7 PM). There is no time limit for vehicle parking in the Municipal Lot. Parking in Sinagua Plaza includes a mix of both public and reserved parking. Public parking is free, but restricted to a 3-hour time limit. All on-street parking in Uptown is free. Public parking along Highway 89A is restricted to three hours. Parking along Forest Road is not time-restricted.

City staff members have acknowledged that the three-hour parking restriction has not been enforced in the past. As discussed in Chapter 5, the City is working to hire dedicated enforcement staff and begin enforcement of the three-hour limit.

Figure 4-3 Existing Parking Signage



PARKING OCCUPANCY

On-Street

The 2012 study found that on-street parking in Uptown is in very high demand for a vast majority of the day. Figure 4-4 shows that beginning at 10 AM and continuing until past 6 PM, public on-street spaces (non-loading spaces) are utilized at or above capacity – there are repeated instances of vehicles double-parking to load or wait for parking availability. As a result, it is likely that a vehicle driving through Uptown Sedona after 10 AM on a weekday or weekend will not be able to readily find an on-street parking space and will be forced to “cruise” throughout Uptown in search of an open space.

Figure 4-5 shows that when loading spaces are included in the count, parking availability increases slightly, but those spaces are reserved for bus loading, jeep tour parking, or deliveries. Parking availability on Forest Road is much higher than along Highway 89A, but some of these spaces are restricted to short-term parking or are not located in the immediate vicinity of the Uptown area.

Figure 4-4 Main Street – Public Vehicle Spaces (No Loading, No Motorcycles)

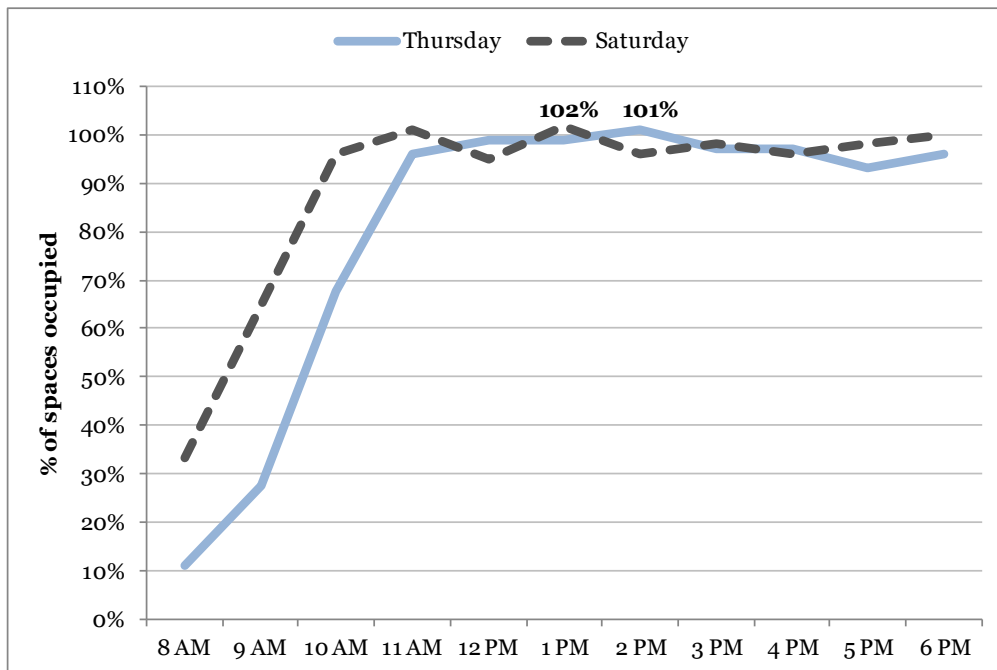


Figure 4-5 Main Street – All Spaces

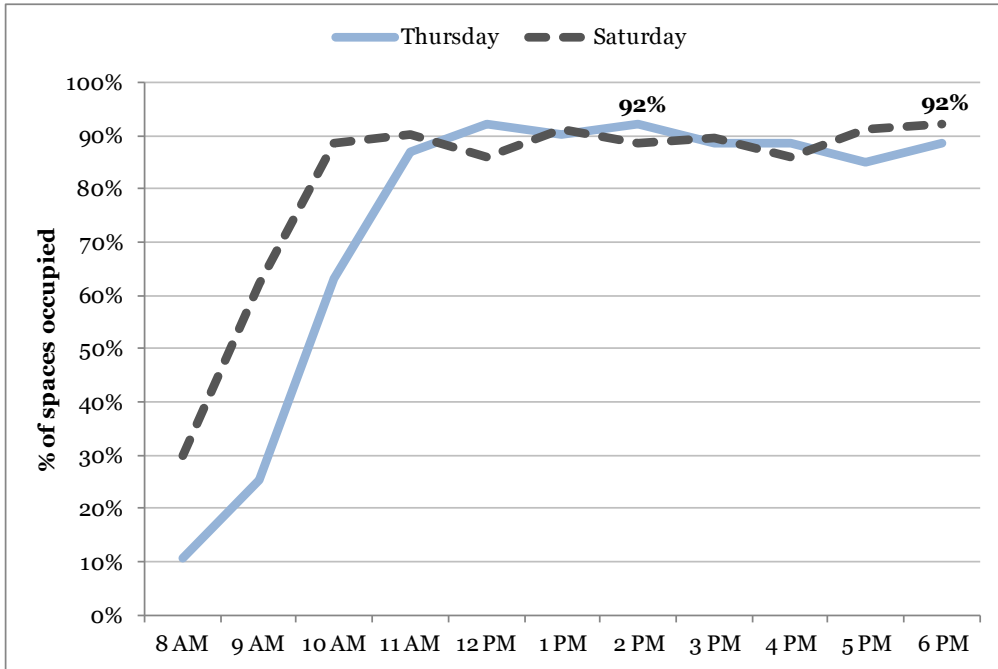
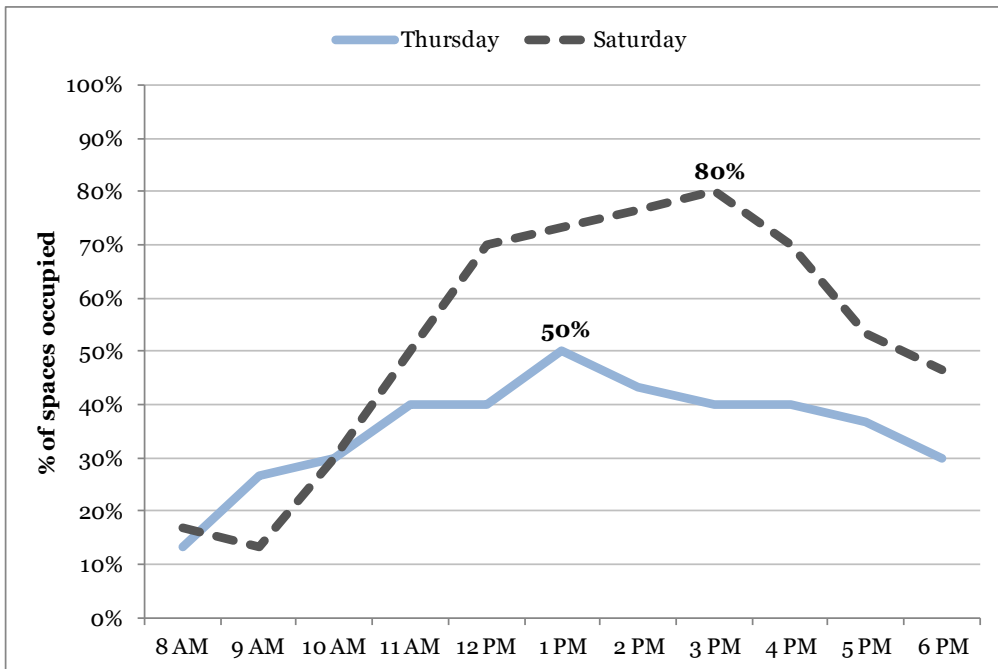


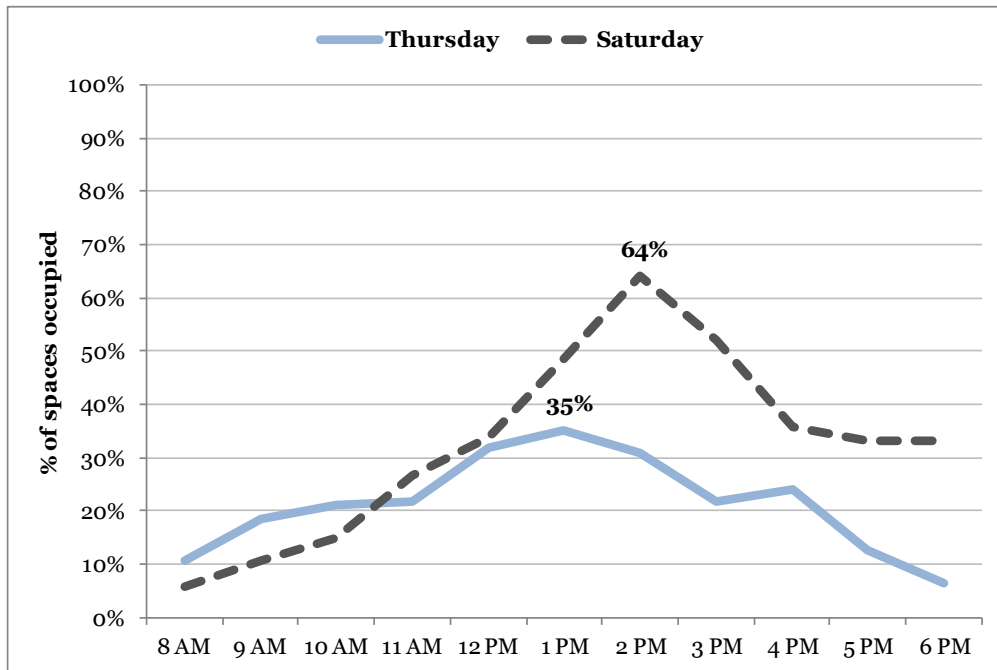
Figure 4-6 Forest Road



Off-Street

Unlike the on-street parking, there are a large number of available off-street³ spaces at all times throughout the day on both weekdays and weekends. In fact, the Municipal Lot peaked at 64% at 2 PM on Saturday, which meant that there were no less than 51 parking spaces available in the Municipal Lot at any time during the 2012 parking study. Parking occupancy was higher in Sinagua Plaza on Saturday, yet there were still close to two dozen available spaces during the peak period.

Figure 4-7 Municipal Lot



³ The 2012 study only counted the Municipal Lot and Sinagua Plaza, and does not include data for the numerous private off-street lots in Uptown.

Figure 4-8 Sinagua Plaza (Upper + Lower)

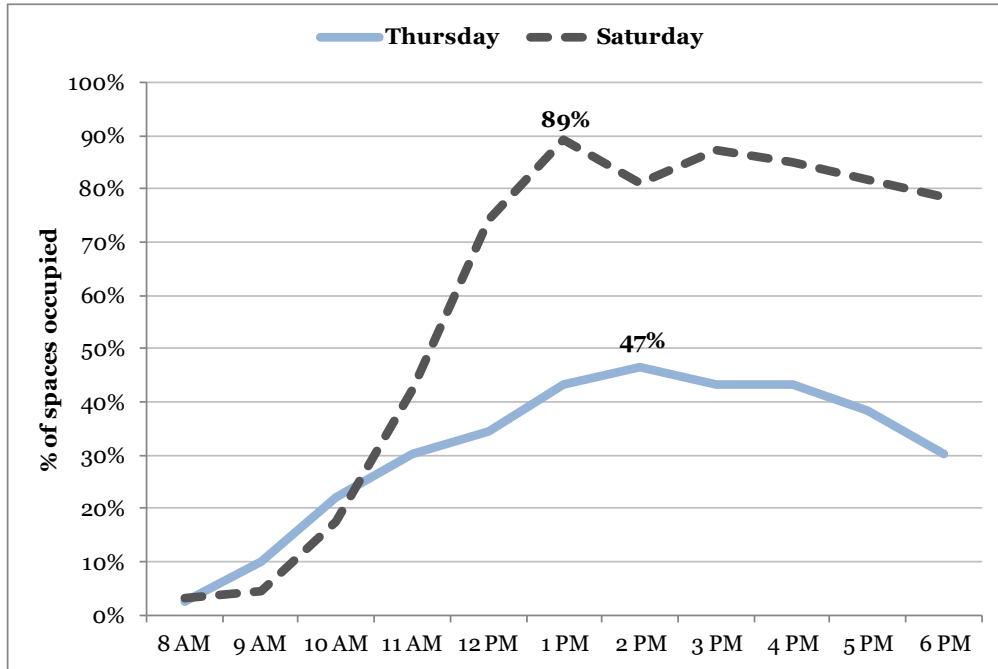
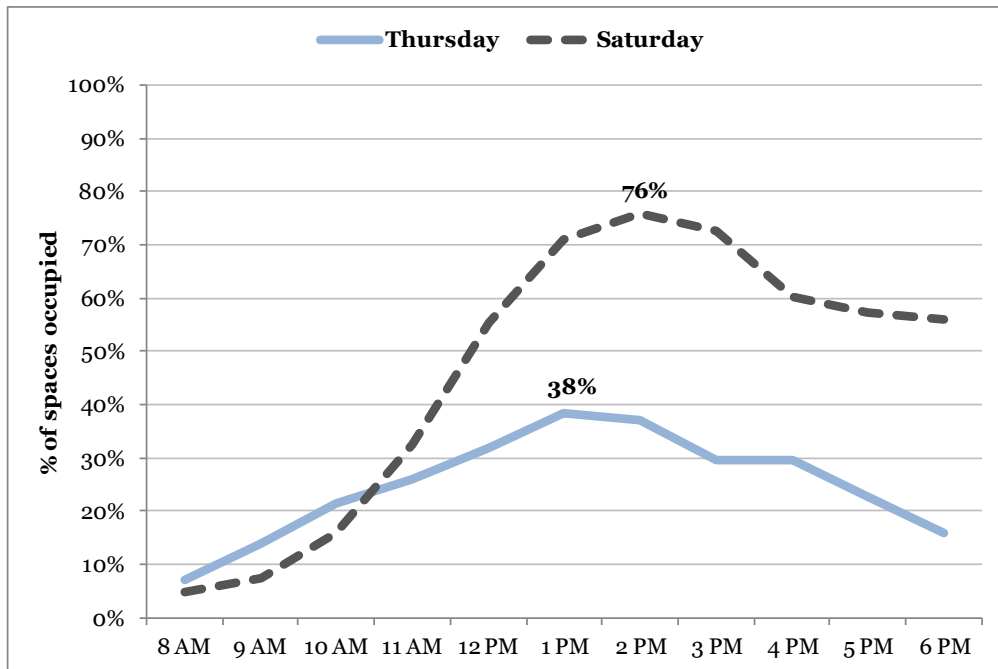


Figure 4-9 All Public Off-street (No Employee Parking)



On- and Off-street

Figures 4-10 and 4-11 summarize the combined on- and off-street parking availability for Uptown. Once again, the key finding is that the on-street parking is heavily utilized, while much of the off-street parking sits empty. For example, on Thursday at 2 PM the on-street spaces showed occupancies of more than 100%, while parking occupancies in the nearby Municipal Lot were less than 40%.

In brief, there is ample parking supply in Uptown. However, the existing parking supply is not managed in a way to effectively utilize existing resources so that some of the on-street parking demand in Uptown is redistributed to the nearby off-street facilities. Figure 4-12 summarizes the availability of public parking in Uptown.

Figure 4-10 On- and Off-street Public Spaces, Thursday

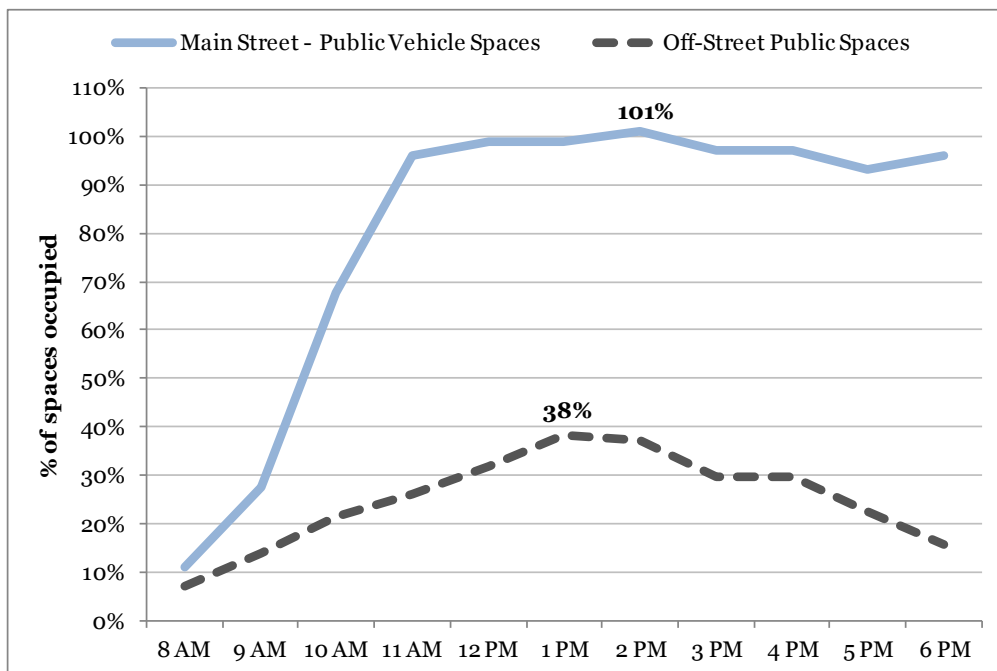


Figure 4-11 On- and Off-Street Saturday

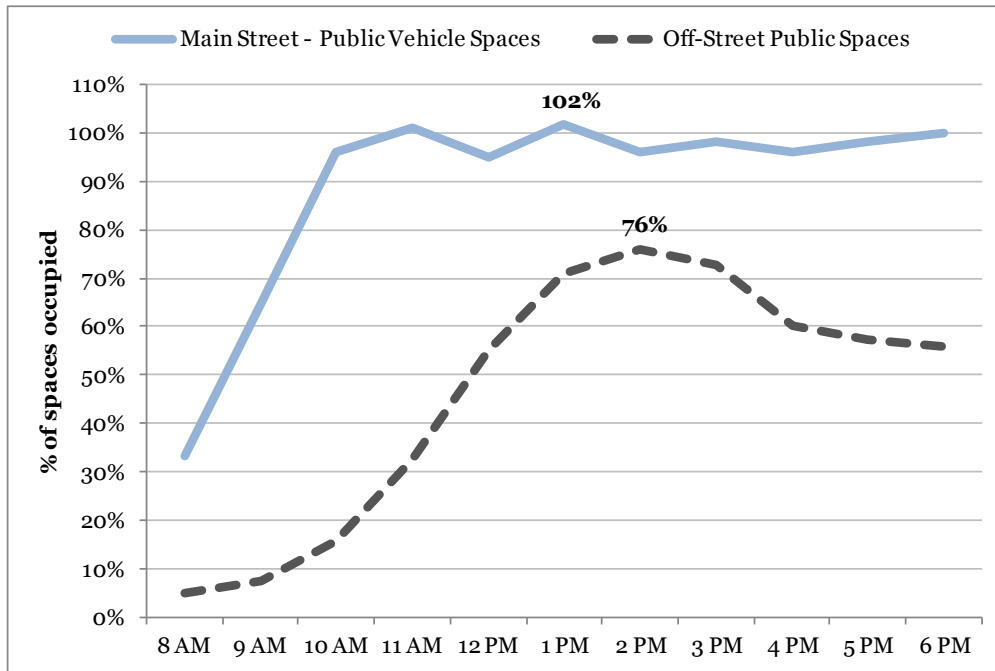


Figure 4-12 Summary of Public Parking Spaces

Time	Main Street - Public Vehicle Spaces						Off-Street Public Spaces					
	Thursday			Saturday			Thursday			Saturday		
	#	%	Open	#	%	Open	#	%	Open	#	%	Open
8 AM	11	11%	91	34	33%	68	19	7%	247	13	5%	253
9 AM	28	27%	74	66	65%	36	37	14%	229	20	8%	246
10 AM	69	68%	33	98	96%	4	57	21%	209	42	16%	224
11 AM	98	96%	4	103	101%	-1	69	26%	197	86	32%	180
12 PM	101	99%	1	97	95%	5	85	32%	181	147	55%	119
1 PM	101	99%	1	104	102%	-2	102	38%	164	189	71%	77
2 PM	103	101%	-1	98	96%	4	99	37%	167	202	76%	64
3 PM	99	97%	3	100	98%	2	79	30%	187	193	73%	73
4 PM	99	97%	3	98	96%	4	79	30%	187	160	60%	106
5 PM	95	93%	7	100	98%	2	60	23%	206	152	57%	114
6 PM	98	96%	4	102	100%	0	42	16%	224	149	56%	117

PARKING TURNOVER

In addition to parking occupancy data, parking “turnover” was also assessed for the public spaces along Main Street. The data collected allows for an evaluation of the average duration parked, as well as the share of vehicles parking longer than the posted three-hour time limit. This data was obtained by recording the last four digits of each license plate every hour from 10 AM – 4 PM.

Average Parking Duration

Figure 4-13 shows the average length of stay (in hours) for a vehicle on both Thursday and Sunday. The data indicates that the average vehicle is staying for less than two hours and far less than the posted three-hour time limit. Surveyors noted several vehicles that stayed for more than five hours, but, on average, most vehicles parked for shorter periods of time.

Figure 4-13 Parking Turnover, Main Street

Block ID	Average Parking Duration (Hours)	
	Thursday	Saturday
1	1.91	1.38
2	1.92	1.62
3	1.56	1.59
4	1.82	1.91
7	1.70	1.72
8	1.82	1.72
ALL	1.79	1.66

3-hour Time Limit

Figure 4-14 provides another view of parking turnover along Main Street. The figure shows the share of vehicles parking more than three hours beginning at 1 PM⁴ and through 4 PM. In all, less than one of every six vehicles is parking for more than three hours, resulting in a relatively high amount of parking turnover along Main Street. While parking enforcement can be improved to address the number of “long-term” parkers, it does not appear to be a major contributor to the lack of parking availability along Main Street.

Figure 4-14 Share of Vehicles Parking 3+ Hours, Main Street

Time	Thursday	Saturday	Combined
1 PM	18%	10%	14%
2 PM	17%	8%	13%
3 PM	11%	5%	8%
4 PM	12%	5%	9%

⁴ Parking turnover data was collected starting at 10 AM so the 1 PM slot represents the first 3-hour “window.”

SUMMARY OF 2012 KEY FINDINGS

1. Demand for on-street parking is very high, which impacts parking availability and traffic flow.

The publicly available vehicle parking spaces (i.e. not including loading or motorcycle parking) on Main Street were consistently at or near 100% occupancy beginning at 11 AM until the end of the count period (6 PM) for both Thursday and Saturday. Furthermore, peak occupancy along Main Street was 101% on Thursday at 2 PM and 102% on Saturday at 1 PM. This means that all legal parking spaces are occupied and some vehicles are parking illegally.

As a result of these high occupancies, the average motorist driving down Main Street will be unable to find an on-street parking space. The cumulative effect of multiple vehicles “cruising” down Main Street searching for parking is no doubt contributing to traffic congestion issues and back-ups.



Fully occupied on-street parking in Uptown.

2. Demand for off-street spaces in the Municipal Lot and Sinagua Plaza is much lower.

In the Municipal Lot, peak occupancies for Thursday and Saturday were 35% and 64%, respectively. In Sinagua Plaza, peak occupancies for Thursday and Saturday were 47% and 89%, respectively. When only including public parking in this facility (i.e. no employee spaces), peak occupancies for public parking were even lower on both Thursday (38%) and Saturday (76%).



Underutilized Municipal Lot

3. There is a geographical imbalance between parking supply and demand.

During the on-street peak period on Thursday (101% at 2 PM), there were 98 available spaces in the Municipal Lot and 69 public spaces available in Sinagua Plaza. During the on-street peak period on Saturday (102% at 1 PM), there were 73 available spaces in the Municipal Lot and 4 public spaces available in Sinagua Plaza.

4. While some vehicles exceed the 3-hour parking limit, parking turnover does not appear to be a major issue.

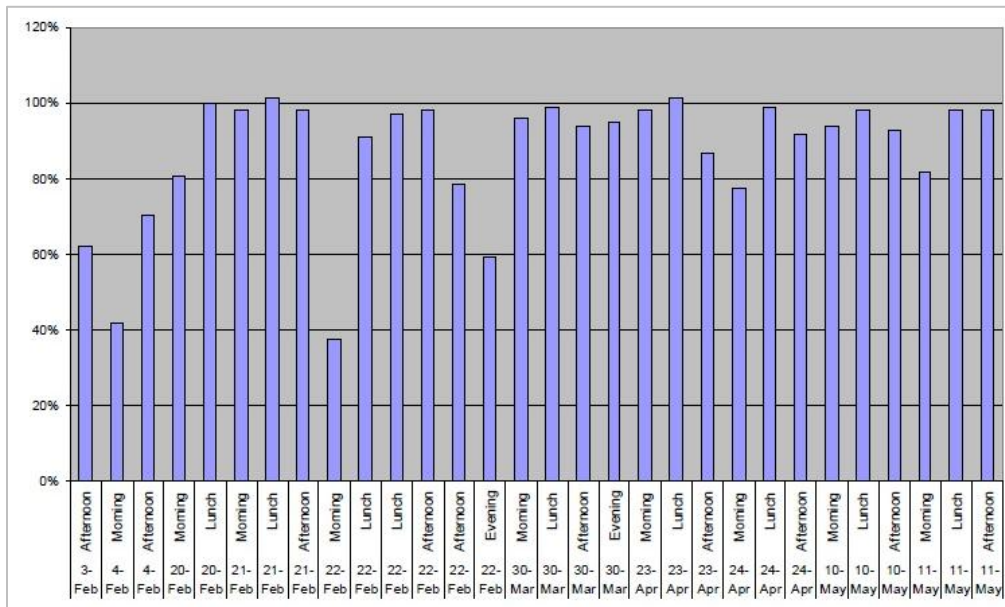
On Thursday, the average length of stay for a vehicle was 1.8 hours. Block #2 (east side of 89A from Forest Road to Jordan Road) had the longest average length of stay at 1.9 hours. On Saturday, the average length of stay for a vehicle was 1.7 hours. Block #4 (east side of 89A from Jordan Road to the loading zone) had the longest average length of stay at 1.9 hours. In addition, only a small percentage of vehicles parked in the on-street parking spaces stay three or more hours.

Relationship to the 2005 Parking Study

As part of the 2012 analysis, Nelson\Nygaard reviewed the parking data from the 2005 study⁵ to confirm data findings and assess how parking trends may have changed over the past seven-plus years. By reviewing an additional data point, any limitations with the 2012 study (time of year, two count days, and ongoing effects from the economic recession) could be evaluated and cross-checked. It is clear that a number of findings are consistent across the two time periods. These are summarized below.

- 1. On-street parking is at capacity, while off-street parking sits empty.** As is the case in 2012, the most popular spaces in Uptown in 2005 were the on-street spaces and these were often occupied near or at capacity. Figure 4-15 shows the occupancy data from 2005, which underscores the fact that overall on-street parking trends have not been affected a great deal by the economic recession or other changes in Uptown between 2005 and 2012.

Figure 4-15 Main Street Parking Occupancies, 2005



The 2005 data also reinforces the findings in 2012 that many of the off-street lots are underutilized. Figure 4-16 shows that the Municipal Lot in 2005 was also rarely above 40%

⁵ Included parking counts across consecutive days in February, March, April, and May.

occupied. Furthermore, the 2005 study also found that there is ample parking availability in many of the private off-street street facilities. Figure 4-17 indicates that on average there were approximately 800 available parking spaces in Uptown and the Highway 179 area.

Figure 4-16 Municipal Lot Parking Occupancies, 2005

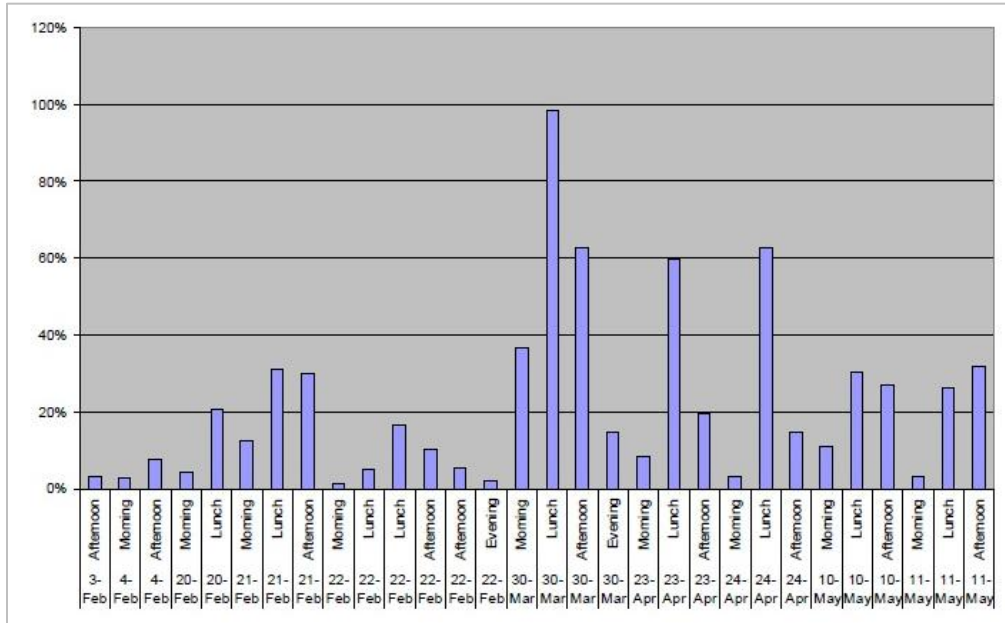


Figure 4-17 Potential Public Parking, 2005

Location	Avg Veh Count	Capacity	Avg Available Spaces
HWY 179 - EXPOSURES GALLERY TO BRIDGE	21	131	110
HWY 179 - EAST SIDE - BRIDGE TO HWY 89A	52	196	144
HWY 179 - WEST SIDE - RANGER RD TO HWY 89A	21	89	68
LOS ABRIGADOS	98	149	51
AMARA RESORT	12	68	57
BEST WESTERN	24	71	47
LOS ABRIGADOS LODGE	41	83	42
SINAGUA PLAZA	60	163	103
JORDAN - HWY 89A TO STAR MOTEL	11	35	24
PERMIT ONLY VAN DEREN	1	20	19
ROBERT SHIELDS DESIGN	4	30	26
SACAJAWEA & ROLLIES CAMERA	30	61	31
WAYSIDE CHAPEL LOT	2	48	46
Totals	346	1144	799

- As in 2012, parking turnover was quite high in 2005 and few vehicles parked more than three hours. Figure 4-18 includes a summary of the parking turnover data from the 2005 data. This data is consistent with the recent 2012 numbers, which found that most vehicles are parking less than three hours at a time. Once again, this data reinforces the

finding that the lack of parking availability on Main Street is not primarily caused by long-term parkers.

Figure 4-18 Parking Turnover, 2005

Location	Avg Duration	% Vehicles Parked	% Vehicles Parked	% Vehicles Parked	% Vehicles Parked
	Parked	1 hr or Less	More Than 1 hr	More Than 2 hrs	More Than 3 hrs
Hwy 89A - W Side (PM)	1:35	41%	59%	35%	12%
Hwy 89A - E Side (PM)	1:19	48%	52%	24%	19%
Sinagua Plaza (PM)	1:06	62%	38%	18%	18%
Hyatt - N Lot (AM)	0:48	76%	24%	21%	n/a
Hwy 89A - S End (AM)	1:21	61%	39%	35%	22%
Hwy 89A - N End (PM)	1:03	53%	47%	15%	9%
Tlaquepaque Ovfl (Lunch)	1:09	59%	41%	18%	9%
City Lot (PM)	1:35	41%	59%	29%	24%
Averages	1:14	55%	45%	24%	16%

- Off-street parking is heavily restricted and parking signage remains inconsistent and confusing.** The 2005 study found that “...the placement, low frequency and inconsistency of the parking signs in Sedona results in confusion to visitors.” While some improvements to signage and wayfinding have been made in Uptown since 2005, the general condition remains one of inconsistency and confusion to the driver.

As discussed in greater detail in Chapter 5, the vast majority of off-street parking lots in 2005 were restricted for customer or employee use, thereby restricting the public supply of parking. Attempts were made to establish shared parking arrangements with private property owners, but many of these arrangements have since been dissolved.

5 RECOMMENDATIONS

This chapter provides a summary of the recommended parking management strategies for the Uptown District in Sedona. Because many of the same parking challenges exist in Uptown today as in 2005, there is overlap between some of the recommendations between the two studies. Unfortunately, because the primary issue of high parking demand on-street and inefficient use of off-street facilities persists, much of this overlap is unavoidable. In short, several of the 2005 strategies remain best practices in parking management, and, ultimately, offer the City of Sedona the best course for solving its parking problem.

The recommendations are organized in a manner to facilitate actionable steps for the City and are presented in a phased implementation plan. Immediate actions items are those that should take place within the next 6-12 months and can result in tangible improvements to parking conditions in Uptown. Short-term strategies will likely take additional planning, but should be implemented within 1-3 years to achieve City parking goals. Long-term strategies will require significant additional planning and/or are contingent on processes not necessarily within the City's control.

It is important to emphasize that the recommendations included below are designed to work together to meet Uptown's parking management goals. While these recommendations could theoretically be implemented as individual pieces, ***their effectiveness can only be ensured if they are implemented together.*** It is important that to the greatest extent possible the recommendations be implemented as a cohesive "package" of reforms.

Figure 5-1 Summary of Parking Management Plan

Implementation Timeframe	No.	Recommendation
Immediate (within 6-12 months)	1	Continue with implementation of a more active parking enforcement program with the understanding that the fundamental parking challenge in Uptown is NOT related to violation of the current 3-hour limits. Conduct a study to monitor the effects of enhanced enforcement on parking turnover and availability.
	2	Improve awareness of, and access to, the underutilized off-street public parking facilities in Uptown through additional wayfinding improvements.
	3	Improve the motorist experience and perceived safety of using off-street parking through enhanced lighting and pedestrian improvements to and from existing off-street facilities.
	4	Expand the public parking supply in a cost-effective manner and improve the visitor experience by opening up privately-owned off-street lots to public parking through legally binding, public parking agreements.
	5	Lease a specific off-street lot and designate the lot for tour bus parking.
	6	Reevaluate a circulator shuttle to connect the greater Uptown area, Hillsdale area, and off-street parking facilities. Coordinate with NAIPTA on upcoming transportation study and possible shuttle service.
Short-term (within 1-3 years)	7	Designate a specific off-street facility for employee parking and implement an employee permit program.
	8	Install “smart” parking meters and use pricing to make parking more convenient and easier to find. Designate meter revenue specifically for improvements in Uptown that merchants and business owners want.
	9	Evaluate a parking validation program as a means to reward drivers who shop in Uptown.
	10	If needed to reduce parking spillover impacts in Uptown-adjacent neighborhoods, implement a residential parking program.
	11	Designate a part-time/seasonal “Uptown Parking and Transportation Manager” to serve as single point of contact for parking and transportation issues during peak season. The manager’s first task would be to establish an ongoing data collection, monitoring, and evaluation process of the City’s parking management program and regularly report back to community stakeholders and decision makers so adjustments can be made as needed.
Mid-term (within 3-5 years)	12	Identify additional opportunities to expand the public parking supply, either through a public-private partnership to create a mixed-use parking garage project in the Uptown District or the development of additional remote parking facilities connected by a shuttle circulator.

Immediate (within 6-12 months)

#1. Continue with implementation of a more active parking enforcement program with the understanding that the fundamental parking challenge in Uptown is NOT related to violation of the current 3-hour limits. Conduct a study to monitor the effects of enhanced enforcement on parking turnover and availability.

2005 Recommendation:

- Establish a parking enforcement division separate from the Sedona Police Department.
- Hire dedicated enforcement staff.
- Implement an automated ticket management system.

2005 Status:

- “Courtesy” notices issued at one time, but never fully implemented.
- Additional enforcement staff recently hired by Sedona PD.

2012 Recommendation:

Both of the parking studies found that there are a portion of vehicles parking on Main Street that park for longer than three hours. In addition, stakeholders clearly stated that enforcement was needed along Main Street to ensure that vehicles do not park for more than three hours and thereby prevent additional visitors parking on Main Street. The City has recently moved forward with hiring new enforcement staff to implement the three-hour parking limit. It is likely that the enforcement would begin with “courtesy” notices.

Nelson\Nygaard supports the City’s recent efforts to begin enforcement on Main Street and recommends that the City actively enforce the time limit along Main Street. After an initial transition period, it is highly recommended that the City move beyond the issuance of “courtesy” notices to actually issuing citations. Furthermore, enforcement should be consistent and should not seek to distinguish between visitors and employees. Businesses with visitors who need to park longer than the time limit (i.e. tour companies) should direct their customers to park in the Municipal Lot or other unrestricted off-street facilities.



Three-hour time limit in Uptown

As was discussed in the 2005 study, it is strongly recommended that the City utilize an automated ticket management system that allows for easy downloads of citations into a database, immediate notification of repeat offenders, revenue and enforcement reports, delinquent ticket collections, and streamlined operations. The citation process should also allow for written disputes (via a web-based interface) to account for the transient nature of the visitors to Sedona.

Nelson\Nygaard would strongly emphasize, however, that any enforcement efforts should be done with the understanding that the parking data shows that **enforcement alone will not solve Uptown’s fundamental parking problems**. Both the 2005 and 2012 data demonstrate that the average parking duration is less than two hours and that only a small share of vehicles are parking for longer than three hours. In other words, no amount of enforcement will change the fact that drivers will continue to seek out the limited number of convenient on-street spaces and to underutilize the off-street supply under the current regulatory framework.

#2. Improve awareness of, and access to, the underutilized off-street public parking facilities in Uptown through additional wayfinding improvements.

2005 Recommendation:

- Develop a consistent and user-friendly wayfinding program.
- Detailed recommendations and guidelines were made regarding on-street signage, privately-owned parking lots, directional signage, and quantity of signs.

2005 Status:

- Partially implemented



2012 Recommendation:

Parking signage remains a key issue in Uptown. While efforts have been made since 2005 to improve signage the lack of consistent, user-friendly, and intuitive signage makes it difficult for drivers and visitors to easily find parking, especially the off-street parking facilities. Furthermore, the large number of signs in private off-street facilities that announce parking restrictions and threaten vehicle towing have the effect of actively discouraging visitors.



By contrast, an effective wayfinding signage helps orient visitors, shoppers, and residents alike, pointing them to area parking facilities, retail establishments, pedestrian and bicycle access routes, and other important destinations. A wayfinding program can be tailored to specific groups depending on contextual factors and desired outcomes; however, these tools are most relevant and important for those unfamiliar with an area. Wayfinding informs people of the best way to access an area, depending on their mode of travel. Parking

Existing wayfinding in Uptown

wayfinding signs can also display real-time availability data, pointing motorists to facilities with available spaces.

Parking signs can direct motorists to underutilized off-street facilities, freeing up the most convenient “front-door” curbside spaces, and maximizing the efficiency of a parking system. Improved wayfinding in the form of new signs helps maximize the use of off-street parking facilities, representing another way to help eliminate traffic caused by cars cruising for on-street parking. Wayfinding helps dispel perceived (but not actual) shortages in parking.

However, much like parking enforcement, ***a wayfinding program by itself is not enough to solve a district’s parking problems if there are basic issues related to parking supply and demand.***

Specific wayfinding recommendations for Uptown include:

- Reduce the amount of unnecessary parking signage in Uptown, especially existing restrictive signage in private off-street facilities that discourages visitors from parking. As private parking is transitioned to public parking (see Recommendation #4), install signage indicating public parking supply.
- For those private off-street lots that remain restricted, develop a single type of sign that must be used by all property owners.
- Continue to utilize the green wayfinding (with blue “P” symbol) design and scheme. Phase out use of blue signage with white letter and all other signage types.
- Sign type should increase in size relative to the speed in which cars are expected to be traveling. Cars going faster (~30 miles an hour) need larger and simpler signs. Explore the development of larger and more conspicuous signs for major intersections.
- Directions to parking must be repeated often, especially after turns, to direct drivers to parking that is in off-street lots. Without such signage, drivers will likely try to only use on-street parking.
- Off-street parking signage should be supplemented with detailed maps, promotional materials (window posters or customer brochures), and graphics. Pedestrian signage indicating location of parking will ensure that people parking at the site will easily find their car when they return to it.
- Provide signage for delivery vehicles directing them to appropriate locations for loading and unloading.
- Explore the use of real-time parking signage. Recent advances in sign technology means that parking wayfinding signs can be enhanced by electronic signs, occupancy tracking systems, and user interface devices to provide real-time pricing and occupancy data to motorists. This information can be conveyed to motorists once they are at their parking destination (via pole signs, wall signs, or on parking meters/facilities), when motorists are on their way to the parking destination (via cell phone), or even before the motorist has left the house (via the Internet).
- Specific locations for new or additional signage include:
 - Highway 179 and 89 approaches into Uptown. Parking signage should be made available to drivers at least 1/4th of a mile before they need to make a decision about where to park.
 - At key intersections and along key routes to parking facilities:

- The “Y” at Highway 179 and Highway 89A and at each round-about, signs should indicate the direction, distance and availability of public parking
- Highway 89A and Forest Road
- Highway 89A and Jordan Road
- Highway 89A and Apple Ave
- Jordan Road, Van Deren Street, and Schnebly Road corridors
- Signage for northbound drivers (at stoplight) to indicate that there is no turnaround or parking beyond Arroyo Roble Road.
- Entrances to each off-street parking facility indicating public parking.
- Reform Article 11 of the Sedona Land Development Code to institutionalize wayfinding changes and provide a regulatory means by which the City can enforce parking signage.

#3. Improve the motorist experience and perceived safety of using off-street parking through enhanced lighting and pedestrian improvements to and from existing off-street facilities.

2005 Recommendation:

- Not specifically recommended.

2005 Status:

- Not applicable.

2012 Recommendation:

One of the primary pieces of feedback from stakeholders is that people do not use the Municipal Lot or other nearby off-street lots because the lighting is poor, there are safety concerns, and the pedestrian environment can be uninviting. This recommendation seeks to make targeted improvements to pedestrian conditions as a means to not only improve the overall experience in

Uptown, but also help shift parking demand from Main Street to the underutilized off-street lots.

Lighting

Street lighting is crucial to a positive pedestrian experience and is critical for both traffic safety and pedestrian safety and security. In short, lighting should be designed not just for vehicles, but also specifically oriented to the pedestrian. Key lighting elements include:



Existing pedestrian conditions to Municipal Lot

- Place pedestrian-scale lighting in areas with high pedestrian volumes. Potential locations in Uptown include:
 - Schnebly Road
 - Van Deren Street
 - Jordan Road
 - Common pedestrian paths to/from Municipal lot, such as the path behind the church and along Mountain View Dr.
- Pedestrian-scale lighting should be approximately 12-15 feet above the roadway. Such lighting should share poles with existing street lights when possible to reduce streetscape clutter.
- Place lighting at points on the street where there is a high potential for conflict, such as driveways and intersections. Particular attention should be paid to the underground level in Sinagua Plaza.
- Orient lighting to maximize lighting efficiency and eliminate blind spots or dead zones.
- Avoid lighting that is too bright or out of character with the rest of an area, as it can undermine natural surveillance through excess glare.
- Glare should be mitigated by selecting the proper lamp wattage and mounting fixtures at the appropriate height.
- Use energy efficient lamps that aim for a measureable efficiency of 70-115 lumens/watt.
- Select light fixtures that are appropriate for the local context and neighborhood.

Safety and Security

A person must feel safe and secure in the public realm before walking can become an attractive transportation option. Good design can help to enhance safety and security through the principles of natural surveillance and territorial reinforcement. This type of design is often referred to as Crime Prevention Through Environmental Design (CPTED). Key elements include:

- Encourage natural surveillance or “eyes on the street” to enable active spaces, where people are able and willing to watch public activity, to create a safer and more secure public realm.
- Orient buildings and windows toward streets, plazas, parking lots, and other public spaces and maximize the use of ground floor retail to bring activity to street level.
- Maintain adequate sightlines with transparent materials in key design features, such as fences.
- Maximize visibility between the street, sidewalk and buildings by encouraging windows on the ground floor of street-facing buildings.
- Use signage to communicate ownership and indicate the rules of use.
- Ensure basic upkeep of buildings, landscaping, lighting, and other streetscape amenities to demonstrate to users that a space is being maintained.

#4. Expand the public parking supply in a cost-effective manner and improve the visitor experience by opening up privately-owned off-street lots to public parking through legally binding, public parking agreements.

2005 Recommendation:

- Establish public parking agreements (PPAs) with private property owners for the establishment of a pool of public parking locations.
- For consistency, City will provide all signs, or specify the size, color, location, and text for all signs.
- City will provide enforcement of public parking.

2005 Status:

- Several property owners initially agreed to a PPA shortly after the 2005 study was completed. However, many of these PPAs have since dissolved.

2012 Recommendation:

In accordance with the 2005 study, Nelson\Nygaard strongly recommends that the city of Sedona pursue PPAs with property owners in Sedona as a means to increase the share of public parking supply in a cost-effective manner.



Underutilized private lots off of Apple Avenue

Shared parking is one of the most effective tools in parking management. Because different land uses have different periods of parking demand, those uses can easily share a common parking facility, thereby limiting the need to provide additional parking. Shared parking policies do not treat the parking supply as individual units specific to particular businesses or uses, but rather emphasize the efficient use of the parking supply by including as many spaces as possible in a common pool of shared, publicly available spaces. Overall, the benefits of fully implementing a “shared” parking strategy include:

- Reduces vehicle trips and required parking spaces because existing spaces can be efficiently shared between uses.
 - Creates a more welcoming environment for customers and visitors because they do not have to worry about getting towed for parking at one business while visiting another.
 - Allows for fewer but more strategically placed lots, resulting in better urban design and greater redevelopment opportunities.
- By transforming motorists into pedestrians, who walk instead of drive to different destinations, shared parking can immediately activate public life on the streets and generate additional patrons of street-friendly retail businesses.
 - It is substantially cheaper than building additional parking supply. For example, leasing of spaces can cost anywhere from \$50-500 per space annually. By contrast, a space in a

new parking garage can cost between \$1,000-2,500 per space annually (including debt service, operations, maintenance, etc.).

While some progress was made in regards to shared parking after 2005, all of the agreements were voluntary in nature. Many of these agreements quickly dissolved when parking challenges continued to persist in Uptown. As a result, many of the “public” spaces were quickly made private again and restrictive parking policies are once again standard.

Moving forward, it is recommended that the City enter into a leasing agreement with property owners to ensure a legally binding agreement and that parking spaces would remain publicly available for a guaranteed length of time. Some property owners may be willing to enter into such an agreement with the City, in which case the City could lease their spaces for a nominal cost (\$1 per space per year). Other property owners may require additional financial incentives, in which case the City would need to negotiate a per-space leasing cost. At a minimum, any shared lot should have 10 or more contiguous parking spaces.

A sample public parking agreement has not been developed as part of this study. However, any PPA should include the following key elements:

- List the names and ownership interest of all parties to the agreement and contain the signatures of those parties
- Assure the continued availability of the spaces for joint use and provide assurance that all spaces will be usable without charge to all participating uses
- Days and hours of operation
- Signage requirements
- Enforcement provisions
- Any design or access improvements
- Maintenance provisions
- Liability and insurance requirements
- Language noting that failure to comply with the shared parking provisions shall constitute a violation of the agreement and can be cause for a fine

#5. Lease a specific off-street lot and designate it for tour bus parking.

2005 Recommendation:

- Not specifically recommended

2005 Status:

- Not applicable.

2012 Recommendation:

The amount of tour bus parking is limited in the Uptown area, especially during peak tourist season. Tour bus parking is currently located in the Hyatt lot and in the lot on the west side of Main Street just north of the crosswalk at Jordan Road. Stakeholders in Uptown often referenced feedback from tour bus operators who stated that the lack of bus parking is a deterrent and sometimes prevents them from dropping off passengers in Uptown.

It is recommended that the City work with private property owners to develop additional parking for tour buses in Uptown. As discussed on Recommendation #4, the City may need to lease these spaces and provide a financial incentive for property owners to participate in such a program. The primary recommended location would be the existing dirt lot off of Art Barn Road. This underutilized site offers ample parking room for buses and adequate maneuverability.



Unused lot off of Art Barn Road

#6. Reevaluate a circulator shuttle to connect the greater Uptown area, Hillside area, and off-street parking facilities. Coordinate with NAIPTA on upcoming transportation study and possible shuttle service.

2005 Recommendation:

- Evaluate impacts of a free circulator shuttle on parking demand.
- Proposed shuttle did not serve Municipal Lot.

2005 Status:

- Road Runner Circulator shuttle service was implemented, but discontinued in 2011.

2012 Recommendation:

Subsequent to the 2005 parking study, the Road Runner Circulator shuttle was implemented. The Roadrunner shuttle served a 1.3 mile corridor from Uptown to Hillside along Highway 179. The service offered 15-minute headways from 10 AM – 6 PM every day. In 2011 the shuttle was discontinued.

It is recommended that the City reevaluate the role of a circulator shuttle within Uptown. The Road Runner service was not well-received by many in the Sedona community. However, some Uptown stakeholders have recently expressed their renewed support for expanded transit service to and from Uptown. Moving forward, a transit service that offered connections to the Municipal Lot would strongly support the other parking recommendations in this plan and help to redistribute parking demand to the off-street lots. One option for the City of Sedona would be to work with Cottonwood Area Transit (CAT) and explore expanded Verde Lynx service to Sedona and Uptown.

It is also important to note that the Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA) is about to initiate an Alternative Transportation System (ATS) Implementation Plan within the Sedona



Road Runner Shuttle (Flickr User – gillfoto)

Red Rock Ranger District area of the Coconino National Forest. It is a strong possibility that the outcome of this project would be a new shuttle service for the great Red Rock and Coconino National Forest. It is highly recommended that the City of Sedona work closely with NAIPTA on this project to ensure that any future transportation plans support the City's parking and transportation goals.

Short-term (within 1-3 years)

#7. Designate a specific off-street facility for employee parking and implement an employee permit program.

2005 Recommendation:

- Establish designated lots for use by employees in Uptown.
- Issue permits to ensure compliance.

2005 Status:

- Not completed.

2012 Recommendation:

Much like in 2005, employee parking is an issue in Uptown as employees for various businesses will seek to park their vehicles and go to work. Some employees will park in off-street lots designated to their place of employment. However, many businesses do not have designated employee parking and will instead park on residential streets such as Van Deren Street, Wilson Road, Forest Road, or Smith Road, or in limited cases, along Main Street. In many instances, employee vehicles, especially since they are parked for longer periods of time, can limit the degree to which visitors and customers can park in Uptown.

It is recommended again that the City evaluate the use of designated off-street lots for employees. These lots would be available to employees of any businesses in Sedona and a permit would be required to park in each lot. Permits would be issued for free (one per vehicle) and employees would need to submit a pay stub to verify employment in Uptown. Enforcement would be provided by the City and vehicles without valid permits would receive a citation. Time-restricted or fee-based parking in public parking areas will encourage employees to participate in the employee parking program.

Potential lots, or portions of the following lots, for employee parking include:

- Municipal Lot
- Apple Road lots at Jordan Road and Cedar Street
- Lot off of Schnebly Road, just west of Jordan Road
- Christian Science Reading Room lot
- Amara Resort upper lots

As discussed on Recommendation #4, the City may need to lease these spaces and provide a financial incentive for property owners to participate in such a program.

#8. Install “smart” parking meters and use pricing to make parking more convenient and easier to find. Designate meter revenue specifically for improvements in Uptown that merchants and business owners want.

2005 Recommendation:

- Parking fee of \$1 per hour for spaces on Main Street
- Maintain free off-street parking

2005 Status:

- Not implemented

2012 Recommendation:

Description

It is recommended that the City install “smart” parking meters and price on-street parking as a means to make parking more convenient and accessible for visitors and residents. Meter pricing will improve convenience by helping to ensure turnover and parking availability for customers. Meter prices would be based on length of stay and also adjusted to respond to seasonal fluctuations in demand so that when parking demand is higher or lower, prices would increase or decrease accordingly.

Rationale for Implementation

As described in Chapter 4, the occupancy counts in Uptown reflect a number of trends related to parking demand. Most importantly, the occupancy counts reinforce a common parking trend – free on-street spaces in prime locations are highly utilized while off-street lots (paid and unpaid) sit mostly empty. For example, on Thursday at 2 PM the on-street spaces showed occupancies of more than 100%, while parking occupancies in the nearby Municipal Lot were less than 40%. This is reflective of the universal hierarchy of parking demand in which on-street spaces are the most demanded, and is particularly interesting given that counts were conducted in the “off-peak.”



Fully occupied parking near Matterhorn Plaza.

Given the existing parking challenges, the primary rationale for parking meters in Uptown is to **make parking more convenient and accessible for visitors, employees, and residents**. By setting specific availability targets and adjusting prices up or down, demand can be effectively managed so that when a motorist chooses to park, he or she can do so without circling the block or searching aimlessly.

It is important to understand that demand-based pricing does not need to change the parking behaviors of *every* motorist. Motorists can be thought of as falling into two primary categories: bargain hunters and convenience seekers. Convenience seekers (such as tourists) are more willing to pay for an available front door spot, and are typically less sensitive to parking charges because they have planned trips long in advance and stay for relatively short periods of time. By contrast, many long-stay parkers, such as employees, find it worthwhile to walk a few blocks to save on eight hours' worth of parking charges. With proper pricing, the bargain hunters will choose currently underutilized lots, leaving the prime spots free for those convenience seekers who are willing to spend a bit more. In Sedona, the majority of the tourists visiting Uptown, as in all tourist destinations, can be classified as convenience seekers. The ultimate goal, therefore, is to shift the parking behaviors of not all, but *just enough* motorists to reach target occupancy levels.

So, if prices are used to create vacancies and turnover in the prime parking spots, then what is the right price? A well-established, industry standard target occupancy rate for on-street spaces is approximately 85%. At this level of occupancy, at even the busiest hour about one out of every seven or eight spaces will be available, or approximately one empty space on each block face. This provides enough vacancies so that visitors can easily find a spot near their destination when they first arrive.

In short, the right price is the price that will achieve this occupancy target. This means that pricing need not be uniform: the most desirable spaces may need higher prices, while less convenient lots are less expensive. Pricing can also be based on length of stay with a higher rate charged the longer one stays. In other words, the goal is not to ticket someone for wanting to stay longer than two hours, but allow them to stay as long as they are willing to pay for the space being used.

Benefits

Demand-based pricing can result in the following benefits:

- Consistent availability and ease in finding a parking space
- Convenient payment methods that eliminate the need to “plug the meter” and make it easier to pay for parking and avoid parking tickets
- Incentivizes long-term parkers to park in off-street lots
- Reduces search time for parking, resulting in less local congestion and vehicle emissions
- Reduces illegal parking and improves safety and street operations
- A more equitable and efficient way to account for the real costs to a city for providing parking
- Improved economic vitality and business environment due to increased visitors and customer convenience
- A potential revenue stream for improvements to Uptown

Specific recommendations for Uptown

Outlined below are the specific project locations and program parameters recommended for demand-based pricing in Uptown.

Meter Location: Meters should be installed to regulate all public on-street spaces along Main Street. Existing commercial and passenger loading on Main Street would not be metered and would maintain existing parking restrictions. Disabled parking spaces would not be subject to metering.

Meter Type: Based on the analysis of parking conditions in Uptown and the needs of the area, it is recommended that the City install multi-space, pay-by-space meters (with wireless, pay-by-phone technology) for its on-street spaces (see below for more information).

As described above, pay-by-space meters offer aesthetic advantages over single-space meters and benefits motorists because they do not have to return their vehicle for the initial or subsequent payments. For the City, such meters are space-efficient and can reduce enforcement costs.

An initial assessment of the on-street facilities indicates that the City would need to install between 10-15 multi-space meters along Main Street to provide convenient coverage for motorists.

Time Restriction: It is recommended that the City extend the three-hour time limit to four hours to allow visitors additional flexibility. Pricing would be used to generate turnover, as people who stay longer would pay more for those spaces.

Target Occupancy Rate: Target occupancy rates for on-street spaces should be 85%, which would translate into approximately one space per block being available at all times of the day.

Initial Hours & Pricing Structure:

- 8 AM – 8 PM, 7 days a week
- Peak Period (March to November)
 - \$1 per hour (0-2 hours)
 - \$1.50 (2-4 hours)
- Off-peak Period (November to March)
 - \$.50 per hour (0-2 hours)
 - \$1 per hour (2-4 hours)
- Maintain free, unrestricted off-street parking
- 4-hour time limit

Meter Pricing Adjustments: It is possible that the initial pricing structure proposed above will not achieve the target occupancy rate. Therefore, meter prices should not be static, but periodically adjusted to respond to changes in demand. Rates need not change constantly or abruptly. When revising meter hours or rates, it is safest to increase or decrease rates slowly, with occupancy checks before and after each rate adjustment, in order to avoid overshooting and accidentally driving away customers (see Recommendation #11).

Meter Revenue: The City should utilize any net parking revenue generated from newly installed meters at curb spaces for Uptown improvements supported by merchants, property owners, and local businesses. This revenue could be deposited in a new Uptown Reinvestment Fund, and could be spent on projects or programs designed to improve conditions within Uptown.

Paying for parking can be unpopular for a number of reasons. One of the primary reasons is that when motorists feed the meter, their money seems to “disappear” and they feel they derive little benefit from the transaction. Local businesses often voice similar objections to the pricing of parking, arguing that it “drives customers away” and they don’t see any direct benefit from the parking revenue. This is largely because most cities have traditionally sent their parking revenue into the general fund, and not necessarily to improving parking or enhancing the local transportation system.

In recent years, some cities have sought to reverse this dynamic by guaranteeing that local parking revenue “stays local.” Experiences from these cities have shown that when local merchants, residents, and property owners are involved in revenue decisions and can clearly see that the monies collected are being spent for the benefit of their blocks they become willing to support market rate pricing.

Potential investments for stakeholders to consider include:

- Purchase and installation costs of meters (e.g., through revenue bonds or a “build-operate-transfer” financing agreement with a vendor)
- Purchase or leasing of private off-street spaces
- Wayfinding and signage
- Landscaping and streetscape greening
- Street cleaning and power-washing of sidewalks
- Transit, pedestrian, and bicycle infrastructure and amenities
- Additional parking enforcement
- Valet parking services during peak periods
- Outreach program related to parking reforms
- Marketing and promotion of local businesses
- Construction of additional parking, if deemed to be necessary

Meter Technologies

Various new meter technologies exist beyond the conventional coin meters used for the better part of the 20th century. These include smart meters, multi-space meters, and wireless / pay-by-phone technology.

Single-space Meters

Conventional Coin Meters

These meters have been used by municipalities since the 1930s. They only accept change, and do not exhibit illuminated displays.

Smart Meters

Smart meters are very similar to conventional coin meters; however, they allow motorists to pay for parking via credit or debit card. They also have illuminated displays that allow viewing of parking rates, hours, time limits, and other important information. The ease of payment with smart meters tends to reduce parking and ticketing anxiety.

Furthermore, when combined with embedded roadway sensors, smart meters allow for demand-based pricing schemes, as they can send and receive data regarding parking pricing and availability. Some are also pay-by-phone enabled (see section below). A single smart meter can cost around \$200-500.



Coin meter in Sausalito, CA
Source: Flickr user wuestenigel



Pay-by-phone meters in San Francisco, CA
Source: SFPark

Multi-space Meters

Pay-and-Display Meters

Pay-and-display meters can be placed on existing light or utility poles and serve roughly 10 to 20 parking spaces each. People must park, walk to the meter where they receive a receipt, and return to their vehicle to display the receipt on their dashboard. Pay-and-display meters cost approximately \$10,000 to \$12,000. These meters have minimal maintenance costs; operating costs vary depending on the type of power system used. Some pay-by-space meters can use solar power, keeping operational costs very low and requiring no utility work for installation (battery powered meters are also available).

Pay-by-Space Meters

Multi-space pay-by-space meters require that on-street parking stalls be numbered. They are more convenient to motorists because they are not required to return to their cars. Similar to pay-and-display meters, operational and maintenance costs are minimal, and many new models can support pay-by-phone technology. Finally, such meters have substantially lower enforcement costs, as enforcement staff do not have to inspect each vehicle, and can instead utilize handheld devices. Although such meters require each space to be numbered, this can be done in an inexpensive and conspicuous manner, typically with stencils on the curb. Pay-by-space meters cost between \$7,000 and \$10,000 per unit.

Wireless / Pay-by-Phone

Pay-by-phone technology allows a driver to pay a parking fare via cell phone, mobile phone application, or computer. Motorists can receive a reminder text when their time is almost up, and can add time without returning to their vehicle or parking meter. Receipts are available via email. Typically these programs require pre-registration. Pay-phone technology reduces maintenance and operational costs associated with meters, fare collection, and ticketing.

These meters typically require wireless technology, which can increase setup and maintenance costs, but also offer the potential benefit of creating a free, publicly available wireless network for the area in which the meters are installed.



Pay-and-display meter in Portland, OR
 Source: Flickr user Ian Broyles



#9. Evaluate a parking validation program as a means to reward drivers who shop in Uptown.

2005 Recommendation:

- Not specifically recommended

2005 Status:

- Not applicable.

2012 Recommendation:

If on-street paid parking is implemented, the City should also evaluate implementation of a parking validation program as a means to continue to offer visitors the benefit of some free parking while encouraging them to shop locally. In a validation program, visitors who spend over a certain amount at Uptown business can have their parking fee refunded to them by participating merchants (who are then reimbursed by the City). Another option would be for the City to refund visitors' parking fees directly at a centrally-located kiosk or a storefront window. A maximum of two hours free parking should be allowed as part of the validation program. Visitors who stay longer would be required to pay the incremental parking fees.

#10. If needed to reduce parking spillover impacts in Uptown-adjacent neighborhoods, implement a residential parking program.

2005 Recommendation:

- If needed, implement an RPP on residential streets

2005 Status:

- Not implemented.

2012 Recommendation:

If the City moves forward with pricing of on-street spaces in Uptown, it is possible that parking demand will spill over into nearby residential districts. The City should monitor parking on the residential streets and if spillover parking becomes a major impediment to residents, the City should establish an RPP.

A RPP operates by exempting permitted vehicles from the parking restrictions and time limits for non-metered, on-street parking spaces within a geographic area. The primary goal of an RPP is to manage parking spillover into residential neighborhoods. By managing spillover, RPPs can ensure that residential neighborhoods are not overwhelmed by commuters, employees, or visitors, thereby enabling local residents to park their vehicles on-street. RPPs are especially important in neighborhoods where residents have limited off-street parking.

A typical RPP is one that allows those without a permit to park for a limited time frame (i.e. one or two hours) during a specified time frame, such as 8 AM to 6 PM, Monday to Sunday. Permit holders (i.e. residents) are exempt from these regulations and able to essentially store their vehicle on-street. Ownership of a permit, however, does not guarantee the availability of a parking space.

#11. Designate a part-time/seasonal “Uptown Parking and Transportation Manager” to serve as single point of contact for parking and transportation issues during peak season. The manager’s first task would be to establish an ongoing data collection, monitoring, and evaluation process of the City’s parking management program and regularly report back to community stakeholders and decision makers so adjustments can be made as needed.

2005 Recommendation:

- Not specifically recommended

2005 Status:

- Not applicable

2012 Recommendation:

It is recommended that the City designate an “Uptown Parking and Transportation Manager” to serve as the primary contact for all parking related issues in Uptown. This position would be instrumental in managing Uptown’s parking programs and addressing parking issues as they arise, especially during the peak season and on holiday weekends.

In parking, you can only manage what you measure. Based on this maxim, it is recommended that one of the Manager’s first tasks would be to establish an annual parking occupancy data count for both on- and off-street parking facilities. This data is essential for evaluating whether the demand-based pricing policies recommended are achieving their goals.

Demand-based pricing policies are based on the goal of meeting target occupancy levels to ensure that there are always an adequate number of parking spaces available, that “cruising” for a parking space is limited to greatest degree possible, and that parking demand is evenly distributed. As part of Recommendation #8, this Plan recommends an initial pricing structure to help the City achieve 85% and 90% target occupancy levels for on-street and off-street spaces, respectively.

As mentioned earlier, it is possible that these pricing levels will be higher or lower than needed and will have to be adjusted accordingly. Without adequate occupancy data, however, it will very difficult to determine whether the pricing and regulatory structures are having their desired effect. By developing a formal data collection process, the City will be able to better understand its parking supply and quickly make adjustments to its pricing and regulatory structure to respond to changes in parking demand. Furthermore, ongoing data collection can improve transparency in decision-making and public understanding of parking behavior.

The City should collect occupancy data for Main Street and selected off-street parking facilities. Above all, consistency is the most important part of any data collection effort, as it allows for easy comparisons over time. The baseline data collected as part of this study should serve as a foundation for future data collection efforts.

There are a number of potential methods by which the City could collect the necessary data, including:

- Manual counts conducted by trained surveyors (such as the Park Rangers).
- Automatic data provided by parking meters. Automatic collection of such data would depend on the type of meter installed for on-street facilities.

- At a minimum, data should be collected and analyzed on an annual basis. For example, if manual counts are utilized, they should be done during the peak period of demand. It is recommended that both an hourly Thursday and Saturday count be conducted during a *non-holiday* week between March and October.
- If feasible, another count during the off-peak period should also be conducted to evaluate off-peak pricing and regulatory structures. Once again, consistency is most important and subsequent counts should take place at the same time each year.
- Depending on use of parking meters, however, it is also possible that occupancy data could be collected and analyzed much more frequently.

Long-term (within 3-5 years)

#12. Identify additional opportunities to expand the public parking supply, either through a public-private partnership to create a mixed-use parking garage project in the Uptown District or the development of additional remote parking facilities connected by a shuttle circulator.

2005 Recommendation:

- Three potential sites identified, but parking management recommended prior to construction of new facilities

2005 Status:

- Not applicable

2012 Recommendation:

At this time Uptown does not need additional parking supply. The parking counts from 2005 and 2012 conclusively show that while on-street supply is constrained, there are hundreds of available parking spaces in off-street lots at almost all times. The parking management strategies outlined above are designed to enable the City to better utilize the existing supply in the immediate and short-term. In short, a new parking structure or the construction of new supply is not recommended at this time.

However, as new development occurs, the economy continues to recover, and parking demand increases in Uptown, the City should evaluate the construction of an additional parking lot or a parking structure. Given the costs associated with building new parking facilities, as described in greater detail below, it is recommended that the City explore public-private partnerships as a means to finance such a costly investment. Furthermore, the City should explore alternative development scenarios to simply a parking lot or structure, and seek to prioritize mixed-use development which includes a retail or commercial component.

No matter its size, location, or other uses, a parking facility is going to require substantial public investment. When evaluating development of a parking structure, it is important that the City comprehensively assess all of the costs associated with parking structures. These include:

Capital Costs

- **Construction costs:** Construction costs represent the actual cost to build and are often referred to as “hard” costs. It is important to emphasize that construction costs are highly dependent on local and project context. The size, type, physical design, location, shape of parcel, soil condition, water table depth, and topography can all affect construction costs. In recent years, the median construction costs for parking structures across the country were estimated at \$16,323 - \$18,300 per space.⁶
- **“Soft” costs:** Capital costs should also include “soft” costs, which typically include project planning and design, architect/consultant fees, legal fees, construction management services, etc. Soft costs are generally estimated as a 25-40% mark up of per

⁶ Rowland, Joey D. "Parking Structure Cost Outlook for 2011." 2011. www.carlwalker.com/press/newsletters; RS Means (2009). "Building Construction Cost Data, 2009." (Kingston, MA: Construction Publishers & Consultants, 2008).

space construction costs. Soft costs are also largely dependent on the local context and may also take into account any project contingencies, typically another 10-15%.

Operating Costs

- **Debt service:** The construction of a parking structure will require long-term financing. As a result, there will be annual, ongoing costs to pay off the debt obligation. The level of this annual payment will depend on the initial capital budget and financing rate.
- **Operation and Maintenance:** Parking structures require ongoing investments to ensure their efficient operation and upkeep, including: enforcement, insurance, labor, administration, security, and various maintenance needs (cleaning, lighting, repaving, landscaping, structural upgrades, etc.). These costs are also highly variable, but, on average, it costs \$450-1,000 per space per year to operate and maintain a parking structure.⁷

Environmental Costs

The development of new parking facilities has impacts on the environment. Parking facilities increase the area of impervious surfaces, contribute to heat island effects, and can impact stormwater runoff.⁸ While parking structures can mitigate these effects more effectively than surface parking lots, the externalities still exist. The actual construction of parking facilities consumes large amounts of energy and materials, and also results in additional greenhouse gas emissions.⁹ Finally, parking structures do generate vehicle trips and can create localized congestion, which may impact nearby businesses or residents.

Land Costs

As with all development, the cost of land is a key consideration. One square foot of land in a CBD or near a popular commercial corridor will have higher costs than one square foot of land in a suburban or undeveloped area. The issue of land costs underscores the fact that there are definitive tradeoffs in choosing to construct a parking structure – land devoted to parking prevents that land from being used for housing, commercial, or office uses. The higher the land costs the greater the potential opportunity costs and tradeoffs.

Figure 5-2¹⁰ provides an illustration of how the various costs described above translate to various parking facility and land use scenarios.¹¹ In short, on an annualized basis, a new parking facility can cost between \$700 and \$4,400 per space per year.

Potential sites

- Municipal Lot
- Tlaquepaque overflow lot and employee lot
- Between Jordan Road and Van Deren Street at Mesquite Avenue

⁷ Litman, Todd. *Transportation Cost and Benefit Analysis II - Parking Costs*. VTPI, 2012. www.vtpi.org/tca/tca0504.pdf

⁸ Litman, Todd. *Pavement Busters Guide: Why and How to Reduce the Amount of Land Paved for Roads and Parking Facilities*. VTPI, 2011. www.vtpi.org/tca/tca0504.pdf

⁹ Shoup, Donald. *The High Cost of Free Parking*. Chicago: American Planning Association, 2005.

¹⁰ Analysis adapted from VTPI's "Parking Cost, Pricing and Revenue Calculator." www.vtpi.org/parking.xls

¹¹ Assumptions include: 5% interest rate over 30 years; Soft cost markup: 25% (suburban), 30% (urban), and 35% (CBD); Spaces per acre: suburban (110/acre), urban (120/acre), and CBD (125/acre); Underground parking is assumed to have no incremental land cost; Does not include any property taxes on facilities.

Figure 5-2 Example Parking Facility Costs, by Location and Type

Type of Facility	Land Costs			Construction Costs Per Space				Total Capital Costs Per Space	Annual O&M Costs Per Space	Total Per Space Costs
	Per Acre	Per Space	Annualized	Hard	Soft	Total	Annualized			Annual
Suburban, Surface, Free Land	\$0	\$0	\$0	\$5,000	\$1,250	\$6,250	\$407	\$6,250	\$300	\$707
Suburban, Surface	\$250,000	\$2,273	\$148	\$5,000	\$1,250	\$6,250	\$407	\$8,523	\$300	\$854
Suburban, 2-Level Structure	\$250,000	\$1,136	\$74	\$20,000	\$5,000	\$25,000	\$1,626	\$26,136	\$500	\$2,200
Urban, Surface	\$1,000,000	\$8,333	\$542	\$5,000	\$1,500	\$6,500	\$423	\$14,833	\$400	\$1,365
Urban, 3-Level Structure	\$1,000,000	\$2,778	\$181	\$20,000	\$6,000	\$26,000	\$1,691	\$28,778	\$650	\$2,522
Urban, Underground	\$1,000,000	\$0	\$0	\$35,000	\$10,500	\$45,500	\$2,960	\$45,500	\$650	\$3,610
CBD, Surface	\$5,000,000	\$40,000	\$2,602	\$6,000	\$2,100	\$8,100	\$527	\$48,100	\$550	\$3,679
CBD, 4-Level Structure	\$5,000,000	\$10,000	\$651	\$30,000	\$10,500	\$40,500	\$2,635	\$50,500	\$850	\$4,135
CBD, Underground	\$5,000,000	\$0	\$0	\$40,000	\$14,000	\$54,000	\$3,513	\$54,000	\$850	\$4,363

6 APPENDIX A – STAKEHOLDER INTERVIEW NOTES

Interview #1: Sedona Main Street Program

Present: Jeremy Nelson, Phil Olmstead, Tim Ware (Nelson\Nygaard); Karen Daines (City of Sedona); Ray Cota (Chief of Police); Holly Epright (Main St. Program); Anne Di Battista; John Di Battista, Nancy Scagnelli (Esteban's); Becky O'Banion (Zonies Galleria); David Tracy (Sedona resident); Lonnie Lillie (Best Western); Kyle Larson; Janeen Trevillyan; Sherry Weathers

Date & Time: August 22nd 2012, 8-9 AM

Location: Wayside Chapel

Summary of Stakeholder Feedback and Discussion

What do you think are the biggest parking issues facing your neighbors, tenants, employees, or customers?

- Need additional parking and to increase parking capacity – parking structure would be ideal
- There is a perception about lack of parking – it is available but people just can't find it
 - New signage is helpful, but still not enough
- Municipal lot is underutilized – hard to find, poor signage, no lighting, up the hill, farther away, no bathrooms. Circulator was discontinued in June 2011 due to concerns about ridership.
 - “People find the Municipal lot by accident.”
- Distribution of parking is not equal – more parking to the south than to the north
 - Parking is dispersed, which leads people to search for parking
- Employee parking can be an issue – employees don't want to park in Municipal lot (poor lighting, farther away, etc.), so many will park on Main St., as well as Van Deren Street or Wilson Street between Forest Rd. and Apple Ave.
- No enforcement on Main Street – attempts were made a few years ago, but never truly enforced the 3-hr limit [Note: the City is initiating enforcement of the existing time limits in the immediate future]
- RV parking can also be an issue
 - There are only a few spaces on Forest Rd. (poorly signed) and RVs are not allowed to park in the Municipal lot
 - RVs will occasionally park on Main Street
- Tour buses

- Signage for tour buses is also poor – not well marked when coming from north or south
- Buses load easily on Main Street, but issue is where they stage
- Buses will park on Jordan Rd., Hyatt lot, or behind business on Main Street (but only if they patronize those businesses)
- Number of buses varies by season, but usually 3-4 loads of day trippers per day
- Bus operators have stated that they are not coming through Sedona anymore because they cannot find anywhere to park
- Some business owners are opposed to paid parking because currently there are no good alternatives – a free off-street alternative is crucial, and Municipal lot is not working well enough
- One goal of Main St. Program is to improve relationships with nearby residents – parking is a major issue
 - Van Deren and other streets are being used by employees
 - Residents have strong concerns about adding more parking or building a structure
 - Additional traffic
 - Impacts on views
 - Construction impacts
 - Could hurt the small town “character” of Sedona

What are your ideas for managing parking in Sedona?

- Potential opportunities for additional shared parking
 - West end of Forest Road
 - Hyatt lot, especially for more bus parking
 - Property owner has stated that open to using lower dirt lot by Arts Center for additional bus parking (off of Art Barn Rd.)
 - Additional lots on Van Deren that could be utilized
 - Red Rock News has availability, especially on weekends
 - Fire Department lot off of Forest Rd.
 - Lot next to Coldwell Banker
 - Lots along Jordan Rd. (between Schnebly Rd. and Apple Ave)
 - 2 small lots off of Apple Ave.
- Enforcement is absolutely essential, would solve most of the problems
- Need to encourage an environment where people can park once and leave their car to walk around
 - Circulator was needed and unfortunate that it was cut

How would you define a successful outcome for this project?

- Develop a long-term vision for parking that seeks to remove politics from parking decisions – “We need to know we are going someplace.”
- Well-signed, ample parking
- Locals and visitors can find an available space

- Parking plan that works without sacrificing the nature, aesthetics of Sedona – “A parking plan that is for us, not another town.”
- Traffic congestion and parking hassles should not be part of the Sedona experience
 - Remote parking at the edges of Uptown: “You don’t park the cars inside the football stadium.”
- Not just parking, but get people moving
- More time shopping, less time parking
- Need strong investment from the City

What would constitute a failure for this project?

- Just another study that doesn’t actually do anything
- Solving parking shouldn’t make traffic worse
- Only listening to a few property owners and not the needs of businesses, residents, or visitors
- A plan that is only “put on the backs of Uptown businesses”

Other Input

- Late August is not necessarily the “high” season. October is most crowded, but late August would probably be an “average” week for activity. [Note: this input contradicts the input on timing from Group #2]
- We would like to see some case studies (appropriate to Sedona) that are “small town” and/or rural in nature
 - How do we define ourselves? How do we define our peers?

Stakeholder Interview #2

Present: Jeremy Nelson, Phil Olmstead, Tim Ware (Nelson\Nygaard); Karen Daines (City of Sedona); Ray Cota (Chief of Police); Jennifer Wesselhoff (Chamber of Commerce); Nicole Davis (Cheers); John Davis (Cheers); Rob Arbogast (Cheers); Mike Cahill (Cahill Leather Company); Ralph Woellmer

Date & Time: August 22nd 2012, 9-10 AM

Location: Wayside Chapel

Summary of Stakeholder Feedback and Discussion

What do you think are the biggest parking issues facing your neighbors, tenants, employees, or customers?

- Parking capacity is the biggest issue in Uptown
 - Locals no longer come because they can’t find parking
- Poor visibility of Municipal lot is a major issue – people cannot find the public lot
- Municipal lot is inconvenient
 - 1/2 mile too far for employees (especially at night)
 - Pedestrian wayfinding is poor
 - Poor entrances and exits

- Employee parking is a major issue
 - Park on Main Street and in neighborhoods for entire day
 - Ongoing and daily battle with employees to get them to park off-street
 - Why no follow through from the 2005 study on this issue?
 - Karen: City will be hiring additional part-time staff to assist with enforcement
 - Chief Cota: City had allocated funding years ago, but positions were cut with recession
 - Looking to hire 4 staff (about 100 hours per week)
 - Will be a pilot project
 - Initial courtesy notice
 - Hard to educate a community that is constantly changing – need more education and marketing
- 3-hr limit is not enforced at all
 - Can we enforce 3-hr limit on employees, but not on visitors?
- 3 hours is too short – people can't shop, have lunch, go on a jeep tour, etc.; people need more time to visit stores
 - NN: 2005 study found that people spent about 2 hrs on average
- Traffic is perhaps a bigger issue – there is no comprehensive traffic management plan
 - Congestion can be “grinding”
 - People circle and circle looking for parking
 - Shuttle went away last year
 - Was supported by businesses, but residents thought it was not performing well enough
 - We need a plan that covers all parking, traffic, and transit issues
 - NN: clarify that this is a study defined to update 2005 data and recommendations
 - Pedestrians significantly slow down traffic at roundabouts and at traffic signal on Main Street – during busy times, backups can be 3-5 miles

What are your ideas for managing parking in Sedona?

- City needs to acquire land and build more parking
 - Any kind of parking plan has to include additional supply
 - Build a 2-level garage behind visitor center and make it paid parking
- Potential opportunities for additional shared parking
 - Red Rock News has availability, especially on weekends
 - Pink Jeep lot off of Jordan Rd.
- 7-10 property owners control 140+ businesses
 - They control the agenda, not the businesses
 - We need additional education for the whole community
 - How do we reach out and speak to the entire community?
 - Need more opportunities for people to be engaged on this issue

- There are 1,000+ employees and approximately 40-45 residents in the area. Residents don't understand what the Uptown area brings to Sedona – we need more education
- Need additional parking
- Find additional, dedicated parking for employees
- Jordan Rd. offers the best option for expanding supply and/or building new lot
- Need to add supply not just for today, but future growth
- NN: Can we ever build enough supply for the busiest weekends?
 - Group: No, but we want enough to handle most weekends

How would you define a successful outcome for this project?

- No paid parking
- More capacity
- Whatever allows people to park easily and stay longer
- A cohesive agreement by the entire Sedona community – bring the residents on board

What would constitute a failure for this project?

- No action
- Discussing the same issues again in 5 years

Other Input

- Late August is the wrong time to count because not as busy [Note: this input contradicts the input on timing from Group #1]
 - NN can potentially work with City to supplement data with additional counts using volunteers
 - Will also review 2005 data for comparisons, possibly make reasonable adjustments / projections of 2012 demand data based on 2005 variability across months
- There is a strong concern among many merchants of the effect of paid parking
 - Don't want it to be tourist unfriendly
 - Don't want it to drive people out of Uptown
 - “We are struggling to survive as it is.”

Stakeholder Interview #3

Present: Jeremy Nelson, Phil Olmstead, Tim Ware (Nelson\Nygaard); Karen Daines (City of Sedona); Ray Cota (Chief of Police); Tom Gilomen (Cowboy Club)

Date & Time: August 22nd 2012, 10-11 AM

Location: Wayside Chapel

Summary of Stakeholder Feedback and Discussion

What do you think are the biggest parking issues facing your neighbors, tenants, employees, or customers?

- Enforcement is key problem

- We have lost 25 on-street spaces since 2005
- Average check in his restaurant has dropped 20% since 2007

What are your ideas for managing parking in Sedona?

- Willing to work together on this issue, but City is the biggest problem
 - City won't support a new parking facility because they want to spend money on more "visible" improvements
- Uptown vs. West Side of Sedona
 - Old vs. new businesses
- Willing to pay for his employees to park elsewhere other than Main Street
- Willing to help
- NN: What do you recommend for parking management?
 - Form a committee of 5-6 property owners to make decisions about parking in Uptown
 - Form a parking district
 - Would agree that additional parking is needed – added 44 spaces for his employees

Other Input

- Provided letter from some Sedona businesses expressing opposition to paid parking in Uptown
- 100% against paid parking – no reason to put it in
 - No one he has talked to is in support of paid parking
 - Paid parking is all about politics and additional revenue for the City
 - There is no paid parking in most AZ communities. Why here? Sedona would be the only one
- LA community of San Pedro took out parking meters

Stakeholder Interview #4

Present: Jeremy Nelson, Phil Olmstead, Tim Ware (Nelson\Nygaard); Karen Daines (City of Sedona); Ray Cota (Chief of Police); Vikki Schlee (Owner, Kid's Corner and Tickle Your Funnybone)

Date & Time: August 22nd 2012, 11 AM - 12 PM

Location: Wayside Chapel

Summary of Stakeholder Feedback and Discussion

What do you think are the biggest parking issues facing your neighbors, tenants, employees, or customers?

- Lack of parking and finding parking are the biggest issues
- Not enough signage and wayfinding
 - Parking signs are too small
 - Real-time signage is a great idea – had no idea existed

What are your ideas for managing parking in Sedona?

- New parking garage is a great idea
- Get employees off of Main St. and designate employee parking
- Make it 4-hr limit and enforce – only ones obeying 3-hr limit are first-time visitors
- Enforce first and then reevaluate
- Trolley was good idea, why not just run it from March to October and reduce the number of buses running

How would you define a successful outcome for this project?

- Parking program that makes it more convenient to find parking

What would constitute a failure for this project?

- People come in complaining about parking that puts them in a negative frame of mind

Other Input

- Economy has really impacted sales - North vs. South end of Uptown
- Even if parking revenue were invested in Uptown, likely would not support paid parking
- Had no idea about meter technology, pay-by-cell, etc; this would definitely make it more convenient

7 APPENDIX B – 2005 PARKING MANAGEMENT PLAN

See separate attachment for 2005 Parking Management Plan