



STAFF REPORT

Report To:	Board of Supervisors	Meeting Date:	July 16, 2020
Staff Contact:	Darren Schulz, Public Works Director		
Agenda Title:	For Discussion Only: Discussion and presentation on the 2019 Carson City Downtown Parking Analysis. (Darren Schulz, DSchulz@carson.org; Lee Plemel, LPlemel@carson.org; Lucia Maloney, LMaloney@carson.org)		

Staff Summary: At the direction of the Board of Supervisors, Public Works and Community Development staff had a parking study conducted in 2019 to identify issues related to parking in the downtown area, including the availability of parking spaces and parking time management. Staff will present the conclusions and recommendations of the study.

Agenda Action:	Other / Presentation	Time Requested:	10 minutes
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Proposed Motion

N/A

Board's Strategic Goal

Sustainable Infrastructure

Previous Action

N/A

Background/Issues & Analysis

Carson City retained LSC Transportation Consultants to conduct weekday parking counts within downtown Carson City during the months of May 2019 (when the Legislature was in session) and September 2019 (when the Legislature was not in session) to evaluate parking regulations. The evaluation will help ensure that public parking facilities are used to best manage parking demand and to support activities in downtown Carson City.

LSC staff inventoried and conducted usage counts of all publicly accessible parking spaces within the parking study area, defined by Nevada Street on the west, William Street on the north, Stewart Street on the east, and 5th Street on the south (excluding the area north of Robinson Street and east of Plaza Street, as well as south of Musser Street and east of Carson Street). This included on-street spaces as well as the spaces within seven off-street parking lots. The area has a total of 1,387 available parking spaces, with 564 (40.7 percent) within lots, and 823 (59.3 percent) on-street. Of the total, 71.4 percent have no restrictions, 22.8 percent are two-hour spaces, 2.5 percent are ADA spaces, and the remaining 3.3 percent are resident, loading, or special curb rental spaces. Additionally, turnover counts were conducted in high-use parking areas in September 2019, to aid in defining short-term customer parking versus long-term employee parking.

The study resulted in the following conclusions and recommendations:

- There is sufficient public parking in downtown Carson City, with a maximum observed utilization rate of 57 percent when the Legislature is in session and 51 percent at other times. The area from Robinson Street north has the lowest peak utilization of 34 percent in May during the legislative session and 33 percent in September when not in session. The central area from Musser Street north to Robinson Street had utilization rates of 60 percent in May and 59 percent in September. The area south of Musser Street had the highest peak utilization rate of 76 percent in May, dropping to 45 percent in September.
- The parking areas near the State Capitol buildings have overall high parking utilization from approximately 10 AM to 5 PM during the Legislative session. At peak times, spaces remained available in the Nugget parking lots, one block from the Capitol buildings.
- Several of the off-street lots were never observed to be more than half full, indicating that the educational efforts such as a parking map could be beneficial in directing more motorists towards using Lots 3 and 4.
- The higher utilization rate of 2-hour spaces over regular spaces in north of Robinson Street indicates that it may be beneficial to designate four to eight more spaces for 2-hour parking in this area.
- Lot 2 (bordered by Musser, Nevada, Proctor and Curry Streets) has low utilization of the existing 2-hour spaces and full utilization of the unrestricted spaces. It is recommended that the 16 spaces on the south side of the northern portion of the lot be made unrestricted rather than 2-hour parking. The City will need to coordinate with the Adams Foundation to see whether an agreement can be made.

Applicable Statute, Code, Policy, Rule or Regulation

N/A

Financial Information

Is there a fiscal impact? No

If yes, account name/number: N/A

Is it currently budgeted? No

Explanation of Fiscal Impact: N/A

Alternatives

N/A

Attachments:

[Exhibit1_2019 Carson Parking Report Final Report.pdf](#)

[Exhibit2_Presentation Downtown Parking Study 2020.pdf](#)

Board Action Taken:

Motion: _____

1) _____

Aye/Nay

2) _____

(Vote Recorded By)



2019 Carson City Downtown Parking Analysis

Final Report

Prepared for the
Carson City Community Development Department



2019 Carson City Downtown

Parking Analysis

Final Report

Prepared for the
Carson City Community Development Department

January 27, 2020

Prepared by
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Executive Summary

2019 Carson City Downtown Parking Analysis

*Prepared for the Carson City Community Development Department
Prepared by LSC Transportation Consultants, Inc.*

Carson City retained LSC Transportation Consultants to conduct weekday parking counts within downtown Carson City during the months of May 2019 (when the Legislature was in session) and September 2019 (when the Legislature was not in session) and assess changes in parking regulations. The goal of this work was to assess parking conditions and ensure that public parking facilities are used to best manage parking availability and to support activities in downtown Carson City.

PARKING INVENTORY

LSC staff conducted an inventory of all publicly accessible parking spaces within the parking count area, defined by Nevada Street on the west, William Street on north, Stewart Street on the east and 5th Street on the south (excluding the area north of Robinson Street and east of Plaza Street, as well as south of Musser Street and east of Carson Street). This included on-street spaces as well as the spaces within seven off-street parking lots. The area has a total of 1,387 available parking spaces (excluding bus stops), of which 564 (40.7 percent) are within lots and 823 (59.3 percent) are on-street. Of the total, 71.4 percent have no restrictions, 22.8 percent are two-hour spaces, 2.5 percent are ADA spaces and the remaining 3.3 percent are resident, loading, motorcycle or special.

MAY PARKING COUNTS

The parking counts conducted on Wednesday May 29th, 2019 indicate the following:

- A maximum of 784 parked vehicles were observed in any one hour, equal to 56 percent utilization. This was observed in the 11 AM hour. The maximum on-street parked vehicles were observed to be 467, in the 11 AM hour, equal to 55 percent utilization, while the maximum lot utilization was 317, or 59 percent utilization, that occurred in the 11 AM and 1 PM hours. Overall parking demand stayed relatively high (above 700 total vehicles) through the 4 PM hour but dropped substantially in the 5 PM hour.
- While overall utilization does not exceed 57 percent, there are specific “hot spot” areas with high utilization. In particular, parking areas on S. Carson Street and S. Curry Street between 2nd and 5th Streets are largely to completely utilized for much of the day. The area around Curry, Spear, Carson and Musser Streets also had high utilization, particularly in the afternoon.
- The area south of Musser Street had the highest peak utilization (76 percent) followed by 60 percent between Musser Street and Robinson Street and 34 percent north Robinson Street.
- Total study area peak utilization in the regular spaces and the 2-hour spaces was very similar (58.6 percent versus 60.2 percent).

SEPTEMBER PARKING COUNT ANALYSIS

The parking counts conducted Tuesday, September 24th and Thursday September 26th, 2019 indicate the following:

- The parking peak was observed during the 11 AM hour, when 722 parked vehicles were observed (52 percent utilization). This was only 62 less vehicles than in May. The maximum on-street parked vehicles were observed to be 441, in the 12 PM hour, equal to 54 percent utilization. The maximum lot utilization was 284, or 50 percent utilization, during the 11 AM. Overall parking demand stayed between 500 and 700 total vehicles throughout the whole day.
- There are specific “hot spot” areas with high utilization. In particular, the area around Musser between Plaza and Stewart Street also had high utilization, particularly in the afternoon. These occupancy rates are also shown in Figure 4.
- The area between Musser Street and Robinson Street had the highest peak utilization (58 percent), whereas utilization to the south was 45 percent followed by 37 percent to the north.
- Peak utilization in the two-hour spaces were greater than the regular spaces (56.3 percent and 50.8 percent respectively).

PARKING TURNOVER COUNTS

Parking turnover counts were conducted in September to aid in defining short-term (such as customer) parking versus long-term (such as employee) parking. The last four digits of vehicle license plates were recorded every half-hour over an 8-hour period in two busy areas:

- In the **south area** around 3rd Street, Carson Street, 5th Street and Curry Street, the overall average parking duration was 1.6 hours. The spaces designated for 2-hour parking (along Carson Street and the block of 4th Street from Carson to Curry) had an average duration of 1.2 hours, while the undesignated spaces had a duration of 2.1 hours. 14 percent of all vehicles observed in this area parked for 3 or more hours, indicating a relatively low use by employees. These longer-term parkers were spread around the area, with no real concentration in any one block. Of the 78 total vehicles parking in the 2-hour spaces, 9 (or 12 percent) exceeded the 2-hour time limit.
- In the **central area** around Telegraph Street, Curry Street, Musser Street and Nevada Street, average parking duration within the Central Area was observed to be 1.6 hours. Vehicles in the undesignated spaces had an average duration of 4.9 hours, those with a 2-hour time limit had an average duration of 1.4 hours, while the 20-minute spaces had an average of 0.6 hours. The undesignated spaces had 64 percent of vehicles staying longer than 3 hours. Of the total of 9 vehicles parked for these longer stays, 6 of them were parked along Musser Street between Plaza Street and Fall Street. The 20-minute designation was seen to be effective in providing convenient space for short-term stops.

CONCLUSIONS AND RECOMMENDATIONS

- There is sufficient public parking available in downtown Carson City, with a maximum observed utilization rate of 57 percent when the Legislature is in session and 51 percent at other times of

year. The area from Robinson Street north has the lowest peak utilization of 34 percent in the May counts and 33 percent in the September counts. The central area from Musser Street north to Robinson Street had utilization rates of 60 percent in May and 59 percent in September. The area south of Musser Street had the highest peak utilization rate of 76 percent in May, dropping to 45 percent in September.

- Not surprisingly, the parking areas convenient to the State Capitol buildings have overall high parking utilization at peak times (from roughly 10 AM to 5 PM) during the Legislative session. Even in the busiest times, however, there are many spaces available in the Nugget lots one block from the Capitol buildings.
- Several of the off-street lots were never observed to be more than half full, indicating that educational efforts such as a parking map could be beneficial in directing more motorists towards using Lots 3 and 4.
- The higher utilization rate of 2-hour spaces over regular spaces in north of Robinson Street (63 percent in May versus 33 percent peak utilization in the September) indicates that it may be worthwhile to designate 4 to 8 more spaces for 2-hour parking in this area.
- Lot 2 (on the block bordered by Musser, Nevada, Proctor and Curry Streets) has low utilization of the existing 2-hour spaces and full utilization of the unrestricted spaces. It is recommended that the 16 spaces on the south side of the northern portion of the lot be made unrestricted rather than 2-hour parking. The City will need to coordinate with the Adams Foundation to see whether an agreement can be made.

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Chapter 1

Introduction and Methodology

Public parking is a crucial factor in the success and functionality of a city's downtown district. Parking supply needs to be sufficient to provide convenient access and avoid the frustration and traffic congestion generated by long searches for available parking. This supply needs to be managed to ensure that various types of motorists (such as employees, customers and delivery drivers) all have adequate parking availability. At the same time, excessive parking can be costly to provide and can reduce the attractiveness and sense of vibrancy of a downtown area. The importance of this issue is increased in Carson City due to the re-invigoration of the downtown district over recent years as well as the impact of the Nevada State Legislature.

To assess current parking conditions, Carson City retained LSC Transportation Consultants to conduct parking counts within downtown Carson City during the months of May 2019 (when the Legislature was in session) and September 2019 (when the Legislature was not in session). The following chapters describe the existing parking inventory studied, count methodology and results for both months. The final chapter provides our findings and recommendations.

PARKING INVENTORY

LSC staff conducted an inventory of all publicly accessible parking spaces within the parking count area, including on-street spaces as well as the spaces within seven off-street parking lots. This area is shown in Figure 1. Note that spaces were counted on both sides of the streets shown within the boundary line, while spaces were not counted for streets outside of the boundary line. For instances, spaces were counted on both sides of Nevada Street and Fifth Street, but not on either side of Stewart Street or William Street.

Table 1 presents the resulting inventory of parking spaces, by street, block and lot. Spaces were inventoried for "regular" spaces (no restrictions), those with 2-hour or 20-minute parking limitations, those restricted to ADA (disabled) users, those restricted to residents, loading-only spaces, and a few spaces with other restrictions. While the large majority of spaces in the count area are individually marked, there are several on-street areas without marked parallel spaces. In these unmarked areas, the capacity was estimated by assuming 1 space per 25 feet of curb length.

As shown, the area as a whole has a total of 1,387 available parking spaces (excluding bus stops). Of these, 564 (40.7 percent) are within lots and 823 (59.3 percent) are on-street. Of the total, 71.4 percent have no restrictions, 22.8 percent are 2-hour spaces, 2.5 percent are ADA spaces and the remaining 3.3 percent are resident, loading, motorcycle or special.

COUNT METHODOLOGY

Parking counts were conducted in downtown Carson City on May 29th (when the Legislature was in session) and September 24th and 26th (when the Legislature was not in session). On all count days, there were no weather conditions or construction projects that impacted parking. All vehicles parked on the roadways and designated parking lots within the parking study area shown in Figure 1 were included in this study. Counts were performed by LSC staff once an hour starting at 8:00 AM with the last lap

starting at 5:00 PM. Two LSC staff members traveled the count route in one car; one person drove while the second recorded the data on paper count forms that were prepared prior to the counts.

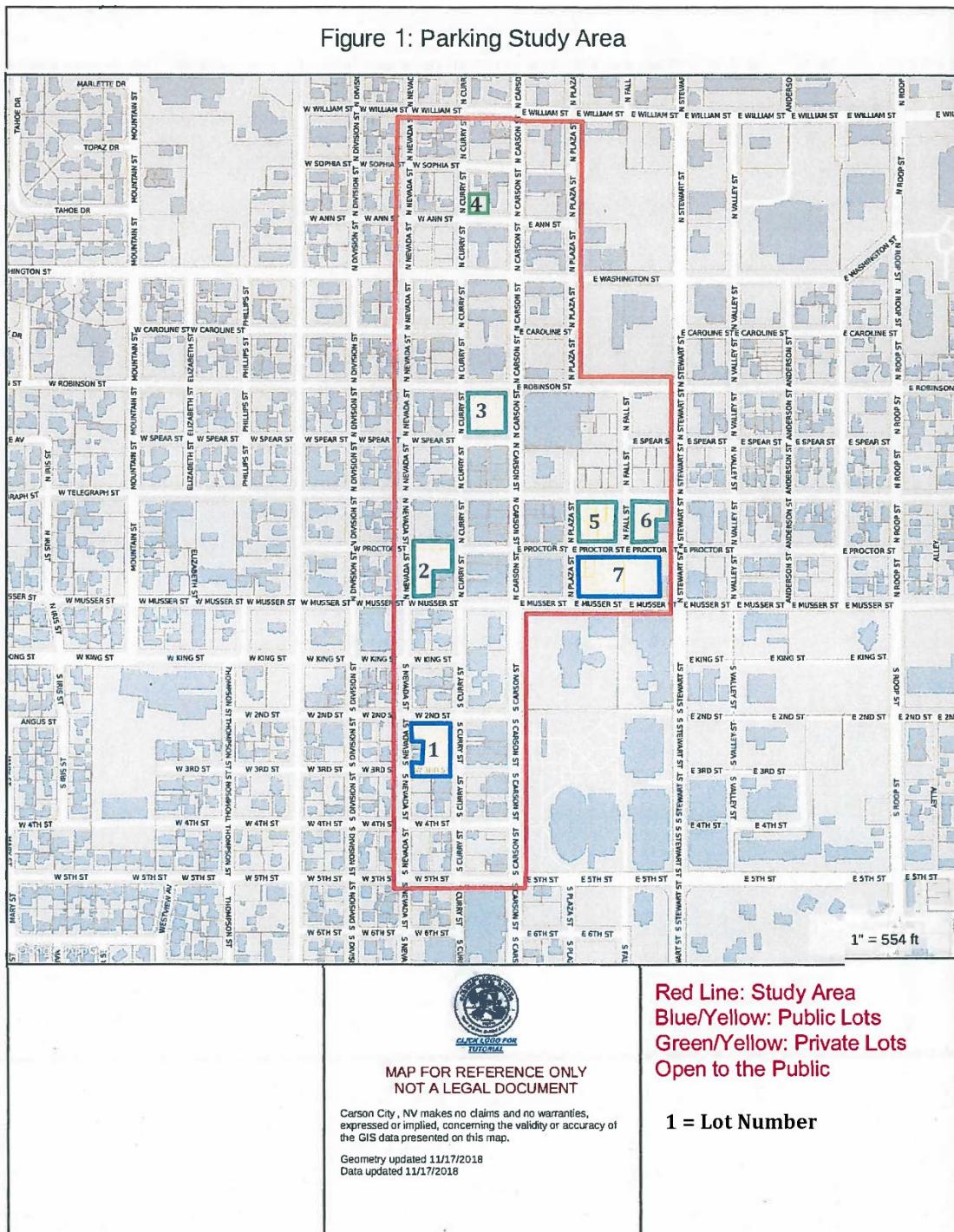


TABLE 1: Downtown Carson City Parking Inventory (1 of 3)

		Inventory										
		Street	Between	Regular	2hr	ADA	Resident	Loading	Bus Stop	Motorcycle	Special	Total (1)
Nevada	Nevada	5th	4th	10								10
		4th	3rd	9								9
		3rd	2nd	8								8
		2nd	King	8								8
		King	Musser	4	7		1					12
		Musser	Proctor	12								12
		Proctor	Telegraph	12								12
		Telegraph	Spear	11								11
		Spear	Robinson	6			2					8
		Robinson ¹	Caroline	7			1				1	9
		Caroline	Washington	8								8
		Washington	Ann	11								11
		Ann	Sophia	13								13
		Sophia	William	13								13
		Total		132	7		4			1		144
Curry	Curry	5th	4th	9								9
		4th	3rd	9		1						10
		3rd	2nd	3	2			3				8
		2nd	King	11	1							12
		King	Musser	7								7
		Musser	Proctor	15			1					16
		Proctor	Telegraph	16								16
		Telegraph	Spear	15								15
		Spear	Robinson	15								15
		Robinson	Washington	17				1	1			18
		Washington	Ann	7								7
		Ann	Sophia	11	3							14
		Sophia	William	8			1					9
		Total		64	84	2	6	1				156
Carson	Carson	5th	4th	2								2
		4th	3rd	2								2
		3rd	2nd	5								5
		Musser	Proctor	3					1			3
		Proctor ²	Telegraph	3						3		6
		Telegraph	Spear	5								5
		Spear	Robinson	6								6
		Robinson	Washington	2								2
		Washington	Ann	2								2
		Total		30			1			3		33
Plaza	Plaza	Musser	Proctor	9								9
		Proctor	Telegraph	16			1					17
		Telegraph	Spear ⁵	12						2		14
		Robinson	Caroline	5				2				5
		Caroline	Washington	4				2				4
		Washington	Ann	13								13
		Ann	Sophia	11								11
		Sophia	William	5								5
		Total		50	25		1	4		2		78
Fall	Fall	Musser	Proctor	6								6
		Proctor	Telegraph	12								12
		Telegraph	Spear	8								8
		Spear	Robinson	5								5
		Total		31								31

Note 1: Bus stops are not included in the total inventory count.

TABLE 1: Downtown Carson City Parking Inventory (2 of 3)

			Inventory										
			Street	Between	Regular	2hr	ADA	Resident	Loading	Bus Stop	Motorcycle	Special	Total (1)
East/West Streets	5th	Nevada	Curry		13								13
		Nevada	Curry		10								10
		4th	Curry	Carson		17					1		18
			Total		10	17				1			28
	2nd	Nevada	Curry		10								10
		Curry	Carson			11	1						12
			Total		10	11	1						22
	King	Nevada	Curry		20			1					21
		Nevada	Curry			10							10
	Musser	Curry ³	Carson			2					2		4
		Plaza	Fall		8		2		2				12
		Fall	Stewart		6								6
			Total		16	10	2		2		2		32
	Proctor	Curry	Carson			16	2						18
		Carson	Plaza			14	2						16
		Plaza	Fall		10								10
		Fall	Stewart		8								8
			Total		18	30	4						52
	Telegraph	Nevada	Curry		7		1	2					10
		Curry	Carson			17	1						18
		Carson	Plaza			14		1					15
		Plaza	Fall		5				1				5
		Fall	Stewart		11								11
			Total		23	31	2	3	1				59
	Spear	Nevada	Curry		14								14
		Curry	Carson			18	2						20
		Fall	Stewart		12								12
			Total		26	18	2						46
	Robinson	Nevada	Curry		9								9
		Curry	Carson		5								5
		Plaza ⁴	Fall						1		2		2
			Total		14				1		2		16
	Caroline	Carson	Plaza		6								6
	Washington	Nevada	Curry		6			2					8
		Carson	Plaza		7								7
			Total		13			2					15
	Ann	Nevada	Curry		11								11
		Curry	Carson		17								17
		Carson	Plaza		13	2		1	1				16
			Total		41	2		1	1				44
	Sophia	Nevada	Curry		10								10
		Curry	Carson		9								9
		Carson	Plaza		8								8
			Total		27								27

Note 1: Bus stops are not included in the total inventory count.

TABLE 1: Downtown Carson City Parking Inventory (3 of 3)

		Inventory									
		Regular	2hr	ADA	Resident	Loading	Bus	Motorcycle	Total(1)		
LOTS	Lot										
	1 Nevada/2nd/Curry/3rd	85		2	6				93		
	2 Nevada/Musser/Curry ⁶	26	53	6			2	6	93		
	3 Nugget - Curry/Robinson/Carson/Spear	66							66		
	4 NE Corner Ann/Curry	15		1					16		
	5 Nugget - Plaza/Telegraph/Fall/Proctor	88							88		
	6 Nugget - Hall/Telegraph/Steward/Proctor	57							57		
	A	16		1					17		
7 Plaza/Proctor/Stewart/Musser		B	69	5					74		
		C	55	5					60		
		<i>Subtotal</i>	140	11					151		
		Total	477	53	20	6	2	6	564		
TOTALS		NS Streets	277	146	2	4	7	6	0	442	31.9%
		EW Street	237	117	13	1	8	3	1	381	27.5%
		Lots	477	53	20	6	0	0	2	564	40.7%
		Grand Total	991	316	35	11	15	9	3	1,387	100%
		71.4%	22.8%	2.5%	0.8%	1.1%	--	0.2%	1.2%	100.0%	
Note 1: Bus stops are not included in the total inventory count.											
Special # Type 1 Client 2 20 minute 3 Secretary of State 4 Cab Company 5 Reserved 6 Lumos											

Parked vehicles were recorded by the street and the block which they resided. The type of parking space (disabled, 2-hour limit, etc) which the vehicle was parked in was also recorded independently. On the day of the parking counts no construction was observed to be occurring on any of the roadway or parking lots within the study area, and the weather was fair. This data was entered into a spreadsheets for analysis.

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Chapter 2

May Parking Count Analysis

This chapter documents the parking counts conducted on Wednesday, May 29th, 2019. This date was selected as a typical weekday while the State Legislature was in session.

PARKING COUNT RESULTS

Table 2 presents the total vehicles observed in each individual block and lot for each hour. The right hand portion of this table also shows the utilization – the percent of total legal spaces utilized. Color shading in the utilization data reflects the relative value, with higher values shown in orange and lower values shown in green. Note that some counts indicate more than 100 percent utilization, reflecting either illegal parking (such as partially blocking a drive aisle) or more cars squeezing into an unmarked area than estimated in the inventory.

A review of Table 2 indicates the following:

- A maximum of 784 parked vehicles were observed in any one hour, equal to 56 percent utilization. This was observed in the 11 AM hour.
- The maximum on-street parked vehicles were observed to be 467, in the 11 AM hour, equal to 55 percent utilization.
- The maximum lot utilization was 317, or 59 percent utilization, that occurred in the 11 AM and 1 PM hours.
- While overall utilization does not exceed 57 percent, there are specific “hot spot” areas with high utilization. In particular, S. Carson Street and S. Curry Street between 2nd and 5th Streets are largely to completely utilized for much of the day. The area around Curry, Spear, Carson and Musser also had high utilization, particularly in the afternoon. These peaks in utilization are also shown in Figure 2.
- The overall parking counts by hour are shown in Figure 3, which indicates the 11 AM peak as well as the fact that overall parking demand stayed relatively high (above 700 total vehicles) through the 4 PM hour but dropped substantially in the 5 PM hour.

To gain additional understanding of parking patterns, the overall data was also summarized into three sub-areas:

- North – From Robinson Street (inclusive of both sides) north.
- Central – From Musser Street (inclusive of both sides) north to Robinson Street.
- South – South of Musser Street.

TABLE 2: May Parking Count and Utilization Summary (1 of 3)

		Vehicle Count		Percent Utilization			
		Inventory		Maximum		Inventory	
Time	Location	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM
5th	4th	10	1	6	6	6	6
4th	3rd	9	0	1	2	4	5
3rd	2nd	8	1	0	1	0	5
2nd	King	8	1	1	3	4	5
King	Musser	11	1	2	4	2	2
Musser	Proctor	12	9	11	13	12	10
Proctor	Telegraph	12	10	10	11	10	8
Telegraph	Spear	11	4	5	5	6	4
Spear	Robinson	10	2	2	4	2	4
Robinson	Caroline	9	3	4	3	1	0
Caroline	Washington	8	1	1	3	1	2
Washington	Ann	11	2	3	2	0	1
Ann	Sophia	13	1	2	2	1	4
Sophia	William	14	0	0	0	0	1
5th	4th	9	3	7	9	4	8
4th	3rd	10	10	7	9	10	10
3rd	2nd	9	1	3	5	5	7
2nd	King	14	5	1	7	10	8
King	Musser	5	0	2	4	2	3
Musser	Proctor	16	4	3	6	11	14
Proctor	Telegraph	16	2	10	9	15	12
Telegraph	Spear	15	1	2	2	8	11
Spear	Robinson	14	2	4	6	5	7
Robinson	Washington	18	13	14	17	16	14
Washington	Ann	9	3	4	4	5	4
Ann	Sophia	14	0	1	2	4	2
Sophia	William	8	1	4	4	3	1
5th	4th	2	1	3	0	2	2
4th	3rd	3	0	3	2	2	3
3rd	2nd	6	3	6	5	7	6
2nd	Musser	2	0	1	2	1	0
Musser	Proctor	6	1	1	4	2	1
Proctor	Telegraph	6	2	1	2	1	2
Telegraph	Spear	6	2	0	2	1	0
Spear	Robinson	6	2	0	1	0	1
Robinson	Washington	3	0	1	0	1	0
Washington	Ann	2	0	0	1	0	1
North/South Streets							

TABLE 2: May Parking Count and Utilization Summary (2 of 3)

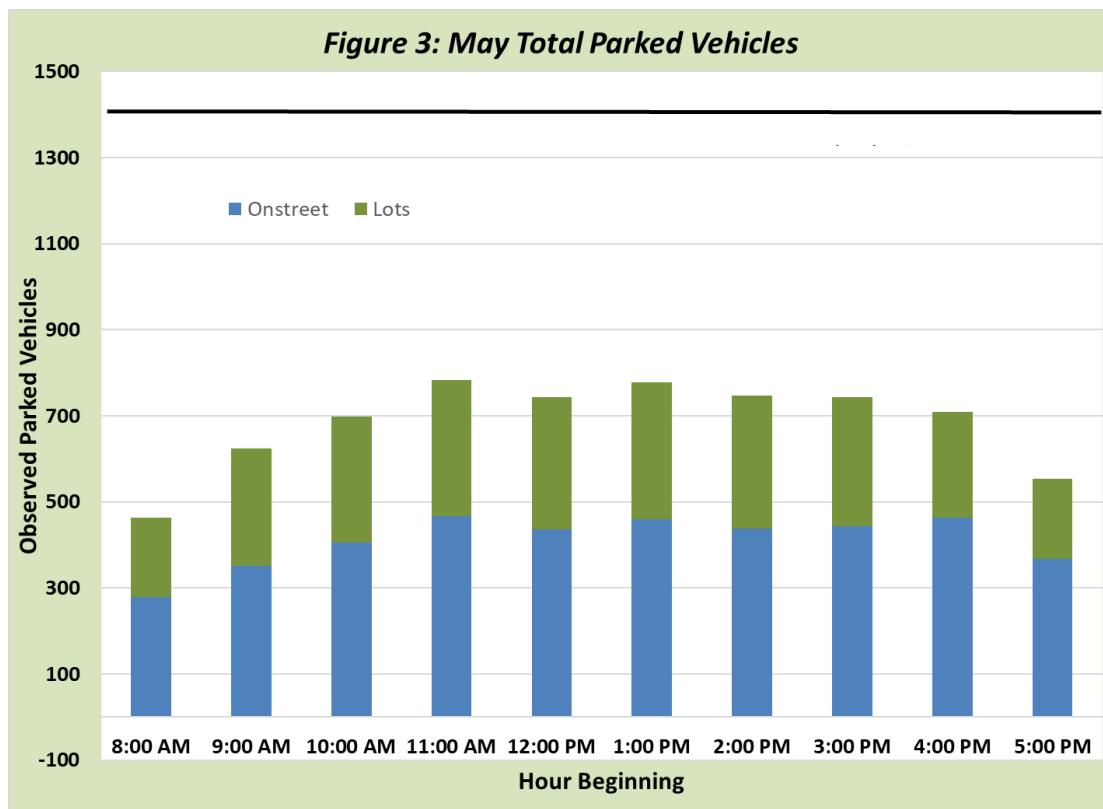
Plaza	North/South Streets		East/West Streets		Vehicle Count		Percent Utilization		Maximum					
	Inventory	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	
Fall	Musser Proctor Telegraph Spear	9 16 2 12	8 9 10 11	9 10 11 13	7 11 12 13	5 6 7 14	9 14 5 13	9 13% 13% 13%	89% 89% 89% 89%	100% 100% 100% 100%	67% 63% 56% 56%	88% 88% 88% 88%	11% 11% 11% 11%	100% 100% 100% 100%
	Caroline Washington Ann Sophia William	4 3 13 13	1 2 5 7	2 0 5 8	1 1 5 10	1 0 4 9	1 1 2 5	0% 15% 38% 54%	0% 25% 25% 50%	0% 25% 25% 75%	63% 92% 93% 62%	44% 38% 38% 69%	44% 44% 44% 54%	88% 88% 88% 54%
	Proctor Telegraph Spear	6 14 8 5	6 11 1 2	6 10 1 2	4 1 1 1	5 7 1 1	5 0 1 1	7 11 11 11	100% 100% 100% 100%	100% 100% 100% 100%	67% 67% 67% 67%	67% 67% 67% 67%	33% 33% 33% 33%	33% 33% 33% 33%
	Proctor Telegraph Spear	6 14 8 5	6 11 1 2	6 10 1 2	4 1 1 1	6 7 1 1	6 0 1	11 13 1 2	100% 100% 100% 100%	100% 100% 100% 100%	69% 69% 69% 69%	38% 38% 38% 38%	46% 46% 46% 46%	77% 77% 77% 77%
	Nevada Curry	15 14	0 6	0 10	0 8	0 7	0 6	0 6	0 6	0 6	0 6	0 6	0 6	100% 100% 100% 100%
	Nevada Curry	14 18	2 7	6 9	11 10	9 10	11 10	11 10	11 10	11 10	11 10	11 10	11 10	100% 100% 100% 100%
	Nevada Carson	18 15	6 5	10 9	13 10	15 8	12 6	12 6	12 6	12 6	12 6	12 6	12 6	100% 100% 100% 100%
	Nevada Carson	15 12	5 4	10 5	16 10	10 11	10 9	11 11	10 11	10 11	10 11	10 11	10 11	100% 100% 100% 100%
	Nevada Curry	21 18	18 20	20 20	15 16	20 21	18 19	12 12	21 21	86% 86%	95% 95%	71% 71%	76% 76%	95% 95% 100% 100%
	Nevada Curry	11 14	7 4	7 8	11 9	13 10	12 9	11 10	12 11	12 13	11 15	10 15	10 15	64% 64% 64% 64%
King	Carson Fall Stewart	4 12 6	1 5 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44% 44% 44%
	Carson Fall Stewart	5 12 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44% 44% 44%
	Carson Fall Stewart	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
	Carson Fall Stewart	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
	Carson Fall Stewart	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
	Carson Fall Stewart	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
Musser	Carson Plaza Fall	4 12 6	1 5 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44% 44%
	Carson Plaza Fall	5 12 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44% 44%
	Carson Plaza Fall	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
	Carson Plaza Fall	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
	Carson Plaza Fall	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
Proctor	Carson Plaza Fall	4 12 6	1 5 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44%
	Carson Plaza Fall	5 12 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44%
	Carson Plaza Fall	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
	Carson Plaza Fall	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
Telegraph	Carson Plaza Fall Stewart	4 12 6	1 5 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44%
	Carson Plaza Fall Stewart	5 12 6	2 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	1 5 6	44% 44% 44% 44%
	Carson Plaza Fall Stewart	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%
	Carson Plaza Fall Stewart	18 21	1 7	7 7	4 11	4 10	8 9	5 10	5 11	5 11	5 11	5 11	5 11	33% 33% 33% 33% 33% 33%

TABLE 2: May Parking Count and Utilization Summary (3 of 3)

Lots	East/West Streets	Vehicle Count	Percent Utilization												Maximum
			8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	
1	Nevada/2nd/Curry/3rd	96	25	57	68	77	87	89	77	78	72	80	89	26%	59%
2	Nevada/Musser/Curry	64	6	12	13	20	25	22	20	14	13	25	9%	19%	71%
3	Nugget - Curry/Robinson/ Carson/Spear	66	14	10	12	15	13	14	16	14	7	5	16	21%	15%
4	NE Corner Ann/Curry	16	0	1	1	1	1	1	1	1	1	1	0%	6%	6%
5	Nugget - Plaza/Telegraph/ Fall/Proctor	88	26	37	44	53	51	45	43	41	32	28	53	30%	42%
6	Nugget - Hall/Telegraph/ Steward/Proctor Plaza/Proctor/	57	6	13	16	17	14	15	13	12	6	17	11%	23%	28%
7	Stewart/Musser	537	185	273	293	317	308	317	309	300	247	187	317	34%	51%
Total Lots		823	279	352	406	467	436	460	438	443	463	367	467	34%	43%
Grand Total		1387	464	625	699	784	744	777	747	743	710	554	784	33%	45%

Figure 2
Peak Observed Occupancy Rate -
May Counts





Data for each of these three subareas is shown under Appendix A for the North, Central and South areas, respectively. These tables also present the detailed data by type of parking space. Table 3 presents a summary of utilization by subarea. As shown, the South area had the highest peak utilization (76 percent) followed by 60 percent in the Central area and 34 percent in the North area. Utilization peaked in the 11 AM hour for the North and Central areas, and in the 1 PM hour for the South area.

	Inventory	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Maximum
Vehicle Count												
North	270	56	76	84	93	89	86	78	74	78	61	93
Central	815	324	404	441	491	441	468	466	462	430	295	491
South	295	84	145	174	200	214	223	203	207	202	198	223
Utilization												
North		21%	28%	31%	34%	33%	32%	29%	27%	29%	23%	34%
Central		40%	50%	54%	60%	54%	57%	57%	57%	53%	36%	60%
South		28%	49%	59%	68%	73%	76%	69%	70%	68%	67%	76%

Finally, the counts can be summarized by the type of space, as shown in Table 4. Total study area peak utilization in the regular spaces and the 2-hour spaces was very similar (58.6 percent versus 60.2 percent). In each of the three subareas, the peak utilization of the 2-hour and unrestricted spaces were roughly equal, indicating a good balance of 2-hour spaces versus unrestricted spaces.

TABLE 4: May Summary of Peak Parked Vehicle Counts by Type

	Regular	2hr	ADA	Resident	Loading	Special	Total
Peak Observed Parked Vehicles							
NS Streets	215	44	1	0	0	0	244
EW Street	161	68	3	1	0	0	232
Lots	293	21	8	6	0	4	317
North Subarea	91	2	0	0	0	0	93
Central Subarea	416	78	9	2	0	4	491
South Subarea	170	50	4	6	0	0	223
Grand Total	660	124	11	6	0	4	784
Peak Percent Utilization							
NS Streets	55.6%	71.0%	100.0%	--	0.0%	--	54.1%
EW Street	56.5%	77.3%	25.0%	100.0%	0.0%	0.0%	59.2%
Lots	64.5%	37.5%	47.1%	100.0%	--	100.0%	59.0%
North Subarea	34.7%	40.0%	0.0%	--	--	--	34.4%
Central Subarea	64.6%	57.4%	37.5%	--	0.0%	66.7%	60.2%
South Subarea	77.3%	76.9%	133.3%	85.7%	--	--	75.6%
Grand Total	58.6%	60.2%	36.7%	85.7%	0.0%	66.7%	56.8%

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Chapter 3

September Parking Count Analysis

This chapter documents the parking counts conducted by LSC Transportation Consultants, Inc. on Tuesday, September 24th and Thursday September 26th, 2019. These dates were selected to represent a typical work day not during the legislative session.

PARKING COUNT RESULTS

Table 5 presents the total vehicles observed in each individual block and lot for each hour. Identical to the May analysis, the right hand portion of this table also shows the utilization – the percent of total legal spaces utilized.

A review of Table 5 indicates the following:

- Similar to the May counts, the parking peak was observed during the 11 AM hour. The observed maximum was 722 parked vehicles, equal to 52 percent utilization. This was only 62 less vehicles than in May.
- The maximum on-street parked vehicles were observed to be 441, in the 12 PM hour, equal to 54 percent utilization. This on-street maximum was only 26 vehicles less than those observed in May.
- The maximum lot utilization was 284, or 51 percent utilization, during the 11 AM. This was approximately 8 percent less utilization than observed during the May parking counts.
- While overall utilization does not exceed 53 percent, there are specific “hot spot” areas with high utilization. In particular, the area around Musser between Plaza and Stewart Street also had high utilization, particularly in the afternoon. These occupancy rates are also shown in Figure 4.
- The overall parking counts by hour are shown in Figure 5, which indicates the peak in the 11 AM hour as well as the fact that overall parking demand stayed between 500 and 700 total vehicles throughout the whole day.

The overall data was also summarized into the same three sub-areas as discussed in Chapter 2. Specific data for each of these three subareas is shown in Appendix A for the North, Central and South areas, respectively. These tables also present the detailed data by type of parking space.

Table 6 presents a summary of utilization by subarea. As shown, peak utilization varied from the May counts in terms of subarea location. During September, the Central area had the highest peak utilization (58 percent), whereas peak utilization in May was within the South subarea. September utilization within the South area was 45 percent followed by 37 percent in the North area. Utilization peaked in the 11 AM hour for the Central and South areas, and in the 12 PM hour for the North area.

TABLE 5: September Parking Count and Utilization Summary (1 of 3)

Street	Between	Vehicle Count		Percent Utilization		Maximum
		Average of 2 count days	Inventory	8:00 AM	8:00 PM	
Nevada	5th	4th	10	2	2	2
	4th	3rd	9	0	0	2
	3rd	2nd	8	2	1	2
	2nd	King	8	0	2	3
	King	Musser	12	4	4	3
	Musser	Proctor	12	11	12	10
	Proctor	Telegraph	12	10	9	10
	Telegraph	Spear	11	4	6	7
	Spear	Robinson	8	3	4	3
	Robinson	Caroline	9	1	1	2
Curry	Caroline	Washington	8	1	1	2
	Washington	Ann	11	2	3	3
	Ann	Sophia	13	0	5	4
	Sophia	William	13	1	1	2
	William	9	2	3	2	2
	9	10	5	6	7	6
	10	8	3	5	6	4
	8	12	5	8	9	7
	12	4	4	1	2	3
	4	16	2	5	12	10
Carson	16	10	9	14	15	11
	10	15	3	7	7	11
	15	15	3	7	8	11
	15	19	1	2	3	8
	19	2	5	12	10	8
	2	7	1	5	4	6
	7	14	0	3	5	5
	14	9	6	4	5	4
	9	6	4	4	5	4
	6	2	1	3	2	2
North/South Streets						

TABLE 5: September Parking Count and Utilization Summary (2 of 3)

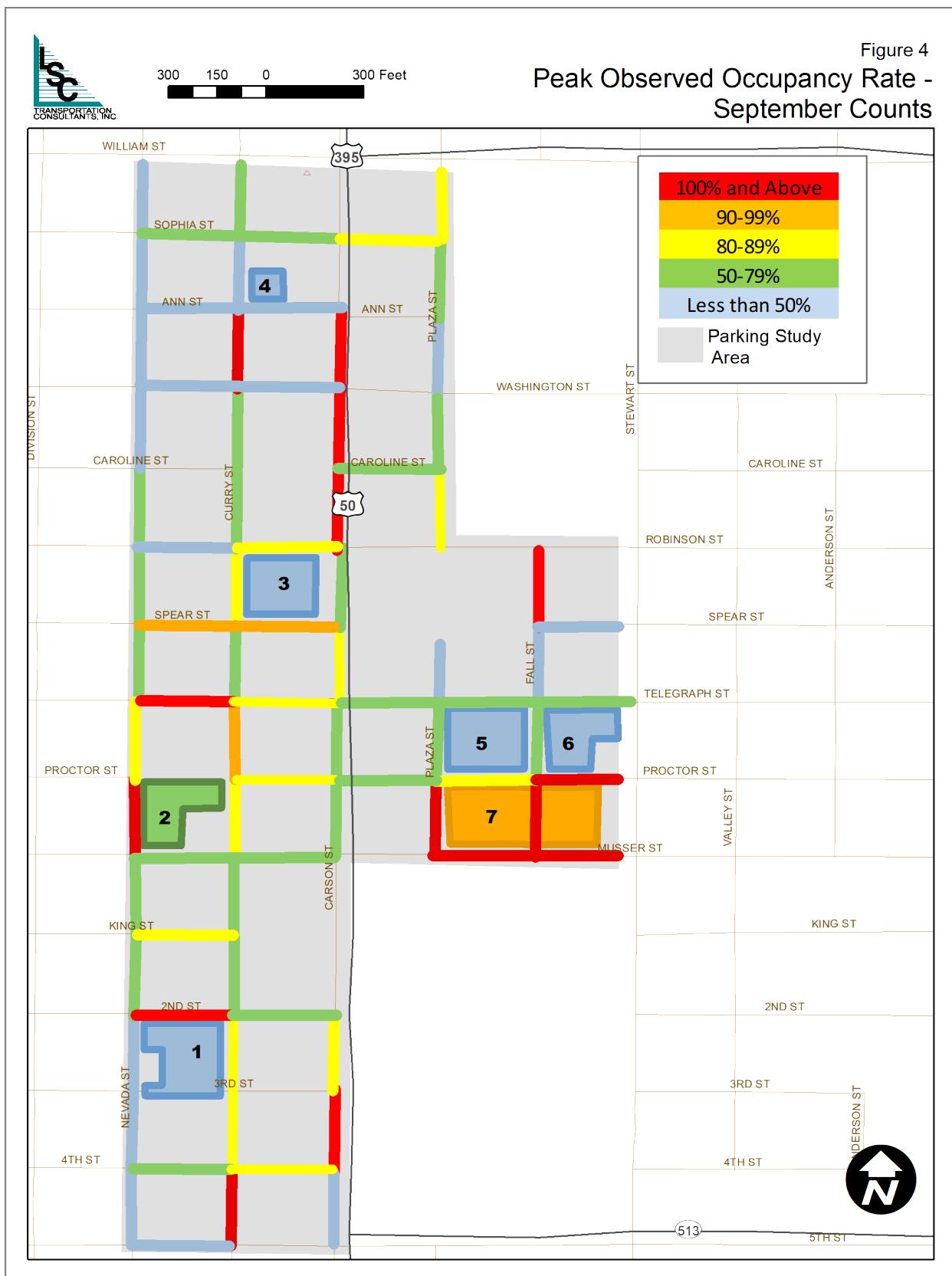
		Average of 2 count days		Vehicle Count		Percent Utilization				
		Street	Between	North/South Streets	East/West Streets	North/South Streets	East/West Streets	North/South Streets	East/West Streets	
Plaza	Musser	Proctor	9	9	9	9	9	100%	100%	
	Proctor	Telegraph	17	6	9	10	9	89%	89%	
	Telegraph	Spear	14	13	12	14	12	78%	78%	
	Robinson	Caroline	7	1	3	1	1	53%	53%	
	Caroline	Washington	6	0	3	4	1	41%	41%	
	Washington	Ann	13	2	3	1	2	59%	59%	
	Ann	Sophia	11	6	5	7	5	47%	47%	
	Sophia	William	5	1	2	1	1	53%	53%	
	William	Proctor	6	6	6	6	5	41%	41%	
	Proctor	Telegraph	12	2	3	8	7	100%	100%	
Fall	Spear	Robinson	8	1	1	1	1	100%	100%	
	Robinson	Nevada	13	0	0	2	1	100%	100%	
	Nevada	Curry	10	3	2	3	6	100%	100%	
	Curry	Carson	18	2	5	8	11	100%	100%	
	Carson	4th	10	4	8	11	9	100%	100%	
	4th	Curry	12	5	4	4	7	100%	100%	
	Curry	2nd	10	13	16	19	10	100%	100%	
	2nd	Curry	Carson	12	5	4	7	5	100%	100%
	Carson	King	21	10	13	16	19	100%	100%	
	King	Nevada	Curry	10	5	5	6	10	100%	100%
Musser	Nevada	Curry	10	1	0	3	1	100%	100%	
	Curry	Carson	4	1	0	3	1	100%	100%	
	Carson	Fall	12	11	10	10	9	100%	100%	
	Fall	Stewart	6	6	6	5	6	100%	100%	
	Stewart	Curry	18	3	6	10	15	100%	100%	
	Curry	Carson	16	8	5	7	8	100%	100%	
	Carson	Plaza	10	4	6	8	7	100%	100%	
	Plaza	Fall	8	2	6	7	6	100%	100%	
	Fall	Nevada	Curry	10	6	5	9	10	100%	100%
	Curry	Carson	18	12	14	14	17	100%	100%	
Telegraph	Carson	Plaza	15	3	7	4	6	100%	100%	
	Plaza	Fall	6	2	0	3	2	100%	100%	
	Fall	Stewart	11	0	0	1	0	100%	100%	
	Stewart	Inventory	12:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	
		Maximum		Maximum		Maximum		Maximum		
		5:00 AM		5:00 PM		5:00 PM		5:00 PM		
		4:00 AM		4:00 PM		4:00 PM		4:00 PM		
		3:00 AM		3:00 PM		3:00 PM		3:00 PM		
		2:00 AM		2:00 PM		2:00 PM		2:00 PM		
		1:00 AM		1:00 PM		1:00 PM		1:00 PM		
		10:00 AM		10:00 AM		10:00 AM		10:00 AM		
		9:00 AM		9:00 AM		9:00 AM		9:00 AM		
		8:00 AM		8:00 AM		8:00 AM		8:00 AM		
		7:00 AM		7:00 AM		7:00 AM		7:00 AM		
		6:00 AM		6:00 AM		6:00 AM		6:00 AM		
		5:00 AM		5:00 AM		5:00 AM		5:00 AM		
		4:00 AM		4:00 AM		4:00 AM		4:00 AM		
		3:00 AM		3:00 AM		3:00 AM		3:00 AM		
		2:00 AM		2:00 AM		2:00 AM		2:00 AM		
		1:00 AM		1:00 AM		1:00 AM		1:00 AM		
		12:00 AM		12:00 AM		12:00 AM		12:00 AM		
		Inventory		Inventory		Inventory		Inventory		

TABLE 5: September Parking Count and Utilization Summary (3 of 3)

Street	Between	Average of 2 count days		Percent Utilization													
		Vehicle Count		Maximum													
Spear	Nevada Curry Fall	Curry Carson Stewart	14 20 12	11 12 13	12 15 18	6 15 18	9 13 13	7 11 13	12 1 1	50% 0%	79% 0%	86% 75%	43% 75%	64% 50%	64% 65%	86% 90%	
Robinson	Nevada Curry Plaza	Curry Carson Fall	9 5 3	1 0 0	2 2 0	2 3 0	2 0 0	2 0 0	2 0 0	0% 0%	8% 0%	8% 8%	8% 60%	22% 60%	22% 0%	22% 80%	
Caroline	Carson Plaza	Plaza	6	1	2	2	4	1	1	0	4	17%	33%	33%	17%	0% 67%	
Washington	Nevada Carson	Curry Plaza	8 7	1 2	3 2	3 1	2 2	2 2	2 2	3	13% 29%	38% 29%	38% 43%	25% 14%	25% 29%	25% 29%	38% 43%
Ann	Nevada Curry Carson	Curry Carson Plaza	11 17	2 5	3 1	1 2	2 3	1 1	2 1	3	18% 27%	9% 9%	18% 18%	27% 27%	9% 9%	18% 18%	27% 27%
Sophia	Nevada Curry Carson	Curry Carson Plaza	10 9	3 3	4 5	4 4	4 4	3 4	3 4	5	30% 33%	40% 56%	50% 67%	40% 67%	40% 56%	40% 44%	40% 50%
1	Nevada/2nd/Curry/3rd	93	26	35	33	39	38	41	32	44	44	28%	38%	35%	42%	41% 63%	
2	Nevada/Musser/Curry	93	42	48	49	54	55	57	48	36	57	57	45%	52%	53%	58%	59% 52%
3	Nugget - Curry/Robinson/ Carson/Spear	66	7	7	8	7	8	15	9	8	4	15	11%	11%	12%	12%	14% 61%
4	NE Corner Ann/Curry	16	1	2	2	3	2	2	1	2	1	3	6%	13%	13%	13%	13% 61%
5	Nugget - Plaza/Telegraph/ Fall/Proctor	88	18	30	33	34	35	32	32	31	29	21	35	20%	34%	39%	40% 35%
6	Nugget - Hall/Telegraph/ Stewart/Proctor	57	12	15	18	17	10	12	12	8	6	18	21%	26%	32%	30%	18% 21%
7	Plaza/Proctor/ Stewart/Musser	151	136	138	141	142	124	129	126	131	109	55	142	90%	91%	93%	94% 83%
Total		Total	562	241	273	282	284	273	275	281	271	223	187	284	43%	49%	50% 49%
Onstreet Lots		Onstreet Lots	823	276	347	397	438	441	452	393	356	340	296	441	34%	42%	48% 52%
Total		Grand Total	1387	517	620	679	722	714	707	674	627	563	483	722	37%	45%	49% 51%

Figure 4

Peak Observed Occupancy Rate - September Counts



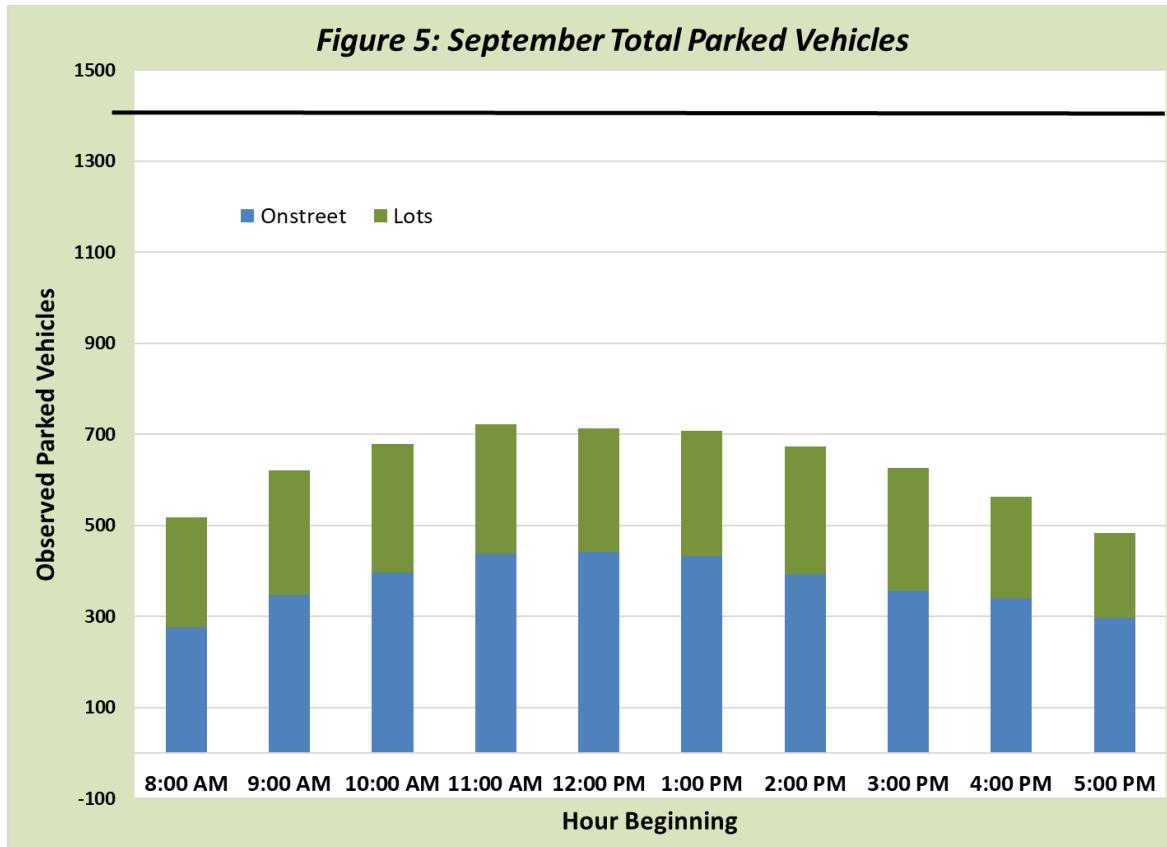


TABLE 6: September Summary By Subarea

Data is the average of the 2 count days

	Inventory	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Maximum
Vehicle Count												
North	275	48	83	87	90	102	98	88	75	64	60	102
Central	842	380	421	471	490	477	473	455	425	381	320	490
South	279	78	105	111	125	122	123	119	114	103	91	125
Total	1396	505	608	668	704	701	694	661	614	548	470	704
Utilization												
North		17%	30%	31%	33%	37%	36%	32%	27%	23%	22%	37%
Central		45%	50%	56%	58%	57%	56%	54%	50%	45%	38%	58%
South		28%	38%	40%	45%	44%	44%	42%	41%	37%	33%	45%
Total		36%	44%	48%	50%	50%	50%	47%	44%	39%	34%	50%

Finally, the counts can be summarized by the type of space, as shown in Table 7. Unlike the counts conducted during May, September peak utilization in the 2-hour spaces were greater than the regular spaces (56.3 percent and 50.8 percent respectively). This was particularly true for the northern subarea, where the peak utilization of the 2-hour spaces was 62.5 percent compared with a peak utilization of the unrestricted spaces of 33.3 percent. This indicates that overall parking use and convenience could be improved for this area by designating more unrestricted spaces (roughly 4 to 8 spaces) into 2-hour parking spaces.

TABLE 7: September Summary of Peak Parked Vehicle Counts by Type

	Regular	2hr	ADA	Resident	Loading	Bus Stop	Motorcycle	Special	Total
Peak¹ Observed Parked Vehicles									
NS Streets	130	81	2	3	0	0	0	3	219
EW Street	121	78	3	0	1	1	0	1	205
Lots	252	19	8	1	0	0	1	4	285
North Subarea	80	10	0	0	0	0	0	0	90
Central Subarea	336	132	11	3	1	1	1	8	493
South Subarea	87	36	2	1	0	0	0	0	126
<i>Grand Total</i>	<i>503</i>	<i>178</i>	<i>13</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>8</i>	<i>709</i>
Peak Percent Utilization									
NS Streets	46.9%	55.5%	100.0%	75.0%	0.0%	0.0%	--	50.0%	48.9%
EW Street	51.1%	66.7%	23.1%	0.0%	12.5%	33.3%	--	25.0%	53.5%
Lots	52.8%	35.8%	40.0%	16.7%	--	--	50.0%	66.7%	50.5%
North Subarea	33.3%	62.5%	0.0%	0.0%	0.0%	0.0%	--	0.0%	32.7%
Central Subarea	60.8%	55.9%	40.7%	150.0%	14.3%	50.0%	50.0%	61.5%	58.6%
South Subarea	43.9%	56.3%	40.0%	12.5%	0.0%	--	0.0%	--	45.2%
<i>Grand Total</i>	<i>50.8%</i>	<i>56.3%</i>	<i>37.1%</i>	<i>36.4%</i>	<i>6.7%</i>	<i>11.1%</i>	<i>50.0%</i>	<i>50.0%</i>	<i>50.8%</i>
Note 1: Peak is defined by peak hour (11:00AM) of all parked vehicles within the study area. As such sub areas or type can have a greater individual peak.									

PARKING TURNOVER COUNTS

Parking turnover counts provide information regarding how long individual vehicles are parked in specific areas. These counts consist of recording the last four digits of vehicle license plates on a half-hourly basis over an 8-hour period, and then matching the data to identify the parking duration of individual vehicles. (Recording four digits has been found to be sufficient to avoid any duplicates, and also avoids issues related to personal privacy associated with recording full license plate numbers.) This is particularly useful in assessing whether individual vehicles are associated with employees (typically parking 3 or more hours) versus customers (parking a shorter duration), as well as the appropriate designation of timed parking restrictions.

LSC conducted parking turnover counts in two areas found to be relatively busy: (1) a **south area** around 3rd Street, Carson Street, 5th Street and Curry Street and (2) a **central area** around Telegraph Street,

Curry Street, Musser Street and Nevada Street. These count areas include both 2-hour and unrestricted spaces, and the specific type of space was identified. Staffers recorded license plates observed in each space every half-hour from the 9:00 AM – 9:30 AM period until the 3:30 PM – 4:00 PM period. The data was then analyzed to identify the number of individual vehicles parking in each area by their estimated parking duration. Vehicles observed only once are estimated to average 0.5 hours (30 minutes) in duration, vehicles observed twice are estimated to stay one hour, etcetera.

The results for the southern area is shown in Table 8. A review of this data indicates the following:

- The overall average parking duration in this area was 1.6 hours. The spaces designated for 2-hour parking (along Carson Street and the block of 4th Street from Carson to Curry) had an average duration of 1.2 hours, while the undesignated spaces had a duration of 2.1 hours.

TABLE 8: South Area Observed Parking Duration

Street	Segment	Side	Type of Space	Estimated Parking Duration														Exceeds Time Limit	
				0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7+		
Number of Observed Vehicles															Average				
Carson St	5th to 4th	West	2 Hr	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	
	4th to 3rd	East	2 Hr	4	4	3	0	0	0	0	0	0	0	0	0	0	0	1.0	
4th St	Carson to Curry	North	2 Hr	8	4	3	0	2	0	0	0	0	0	0	0	0	0	1.0	
		South	2 Hr	17	13	6	5	2	0	4	0	0	1	0	0	0	0	1.3	
Curry St	Curry to Nevada	North	Regular	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5.5	
		South	Regular	1	1	1	0	0	1	1	0	0	0	0	0	0	0	1.9	
Curry St	5th to 4th	East	Regular	1	0	3	0	2	0	1	0	0	0	0	0	0	0	1.9	
		West	Regular	2	2	0	0	1	0	0	0	0	0	0	0	0	0	1.1	
Nevada St	4th to 3rd	East	Regular	5	1	0	1	0	1	0	0	0	0	1	0	0	2	2.7	
		West	Regular	4	6	3	1	0	0	0	0	0	0	1	0	0	0	1.6	
Nevada St	5th to 4th	East	Regular	0	0	0	0	0	1	0	0	0	0	0	0	0	1	5.5	
		West	Regular	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4.0	
Nevada St	4th to 3rd	East	Regular	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1.5	
		West	Regular	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1.2	
Subtotal: 2 Hr				31	21	12	5	4	0	4	0	0	1	0	0	0	0	1.2	
Subtotal: Regular				15	10	9	2	4	3	2	1	0	1	3	0	0	3	2.1	
Total				46	31	21	7	8	3	6	1	0	2	3	0	0	3	1.6	
Percent of Observed Vehicles															Total Exceeding				
Carson St	5th to 4th	West	2 Hr	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	4th to 3rd	East	2 Hr	36%	36%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
4th St	Carson to Curry	North	2 Hr	47%	24%	18%	0%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	
		South	2 Hr	35%	27%	13%	10%	4%	0%	8%	0%	0%	2%	0%	0%	0%	0%	15%	
Curry St	Curry to Nevada	North	Regular	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	--	
		South	Regular	20%	20%	20%	0%	20%	20%	0%	0%	0%	0%	0%	0%	0%	0%	--	
Curry St	5th to 4th	East	Regular	14%	0%	43%	0%	29%	0%	14%	0%	0%	0%	0%	0%	0%	0%	0%	
		West	Regular	40%	40%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	--	
Nevada St	4th to 3rd	East	Regular	45%	9%	0%	9%	0%	9%	0%	0%	0%	0%	9%	0%	0%	18%	--	
		West	Regular	25%	38%	19%	6%	0%	0%	0%	0%	0%	6%	6%	0%	0%	0%	--	
Nevada St	5th to 4th	East	Regular	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	50%	--	
		West	Regular	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	--	
Nevada St	4th to 3rd	East	Regular	50%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	--	
		West	Regular	33%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	--	
Subtotal: 2 Hr				40%	27%	15%	6%	5%	0%	5%	0%	0%	1%	0%	0%	0%	0%	12%	
Subtotal: Regular				28%	19%	17%	4%	8%	6%	4%	2%	0%	2%	6%	0%	0%	6%	--	
Total				35%	24%	16%	5%	6%	2%	5%	1%	0%	2%	2%	0%	0%	2%	--	
<i>Source: LSC counts conducted on Thursday October 3, 2019.</i>																			

- Overall average parking duration within the Central Area was observed to be 1.6 hours. Vehicles in the undesignated spaces had an average duration of 4.9 hours, those with a 2-hour time limit had an average duration of 1.4 hours, while the 20-minute spaces had an average of 0.6 hours.
- The undesignated spaces had 64 percent of vehicles staying longer than 3 hours. Of the total of 9 vehicles parked for these longer stays, 6 of them were parked along Musser Street between Plaza Street and Fall Street.
- During observation, 13 percent of the vehicles parked in the 2-hour spaces (27 out of a total of 217) exceeded the 2-hour parking limit. Of those 27 vehicles observed, 3 vehicles were parked throughout the 7-hour count period. Of the vehicles exceeding the 2-hour parking limit within the Central area, half of the vehicles were located along Curry Street (7 of 14).
- The 3 spaces along the west side of Carson Street between Procter and Telegraph designated for 20-minute parking duration were observed to be used by a total of 10 vehicles, of which 8 were observed once and 2 were observed twice. Note that many more vehicles may have parked in these spaces for short periods between the half-hourly counts. This indicates that the 20-minute designation is effective in providing convenient space for short-term stops.

Overall between the two areas, this data indicates that the designation of spaces for limited duration (largely 2-hour spaces) is effective in shifting longer term parking to other areas and increasing availability of on-street parking for shorter stops. With the exception of the spaces along Musser Street between Plaza Street and Fall Street, the level of employee parking use in the two areas is low.

Chapter 4

Conclusions and Recommendations

This chapter provides a summary of the count data, and discusses potential changes in the parking program, as follows:

- There is overall sufficient public parking available in downtown Carson City, with a maximum observed utilization rate of 57 percent when the Legislature is in session and 51 percent at other times.
- Considered by three sub-areas, the northern area (from Robinson Street north) has the lowest peak utilization of 34 percent in the May counts and 33 percent in the September counts. The central area from Musser Street north to Robinson Street had utilization rates of 60 percent in May and 59 percent in September. The southern area (south of Musser) had the highest peak utilization rate of 76 percent in May, dropping to 45 percent in September.
- Not surprisingly, the parking areas convenient to the State Capitol buildings (between King Street and 5th Street west of the Capitol and between Plaza Street and Stewart Street north of the Capitol) have overall high parking utilization at peak times (from roughly 10 AM to 5 PM) during the Legislative session. Parking availability when the Legislature is not in session is much better, with high utilization confined to only the one block just to the north of the Musset Street. Even in the busiest times, however, there are many spaces available in the Nugget lots one block from the Capitol buildings.
- Several of the off-street lots were never observed to be more than half full, specifically Lot 3 (Nugget Lot between Curry/Robinson/Carson/Spear), Lot 4 on the northeast corner of Ann and Curry and Lot 6 (Nugget Lot between Fall/Telegraph/Stewart/Proctor. This indicates that educational efforts such as a parking map could be beneficial in directing more motorists towards using Lots 3 and 4.
- The higher utilization rate of 2-hour spaces over regular spaces in the North subarea (63 percent in May versus 33 percent peak utilization in the September) indicates that it may be worthwhile to designate 4 to 8 more spaces in the North subarea for 2-hour parking.
- Lot 2 is comprised of two separate parking lots. The northern lot was recently repaved and striped with all spaces (with the exception of the Lumos Engineering spaces) designated as 2-hour parking to provide customer parking. The southern portion of Lot 2 is private property of the First Presbyterian Church. On weekdays the “Church lot” is opened to the public with no parking restrictions. It is observed that the Church lot reaches 90 to 100 percent utilization most of the day while the 2-hour lot reaches 50 percent utilization for only one count interval and is less than 25% most of the day. Curry Street between Musser and Proctor near Lot 2 (immediately adjacent to commercial uses) is designated 2-hour only parking. Though busy, parking on this block never reaches 100 percent utilization. The on-street parking in front of residential homes along Nevada Street on the block adjacent to Lot 2 experiences utilization of 80 to 90% most of the day. It is recommended that the 16 spaces on the south side of the northern lot should be made unrestricted rather than 2-hour parking. This would increase the utilization of Lot 2 and reduce the number of vehicles parking on-street in the residential

neighborhoods. The City will need to coordinate with the Adams Foundation to see whether an agreement could be made to derestrict the 16 parking spaces within Lot 2 to improve downtown parking utilization.

Note that specific changes in parking regulations needs to consider particular local issues beyond the overall parking counts, utilization and turnover data discussed in this report.

Appendix A

TABLE A: North Area Detailed Counts (1 of 2)

		Inventory		8:00 AM		9:00 AM		10:00 AM		11:00 AM		12:00 PM	
		Between		Resident ADA		Regular ADA		Resident ADA		Regular ADA		Resident ADA	
		Total		Special ADA		Special ADA		Special ADA		Special ADA		Special ADA	
		Robinson	Caroline	9	3	3	3	4	3	4	3	3	1
Nevada	Caroline	Washington	Ann	8	1	1	1	1	1	1	3	3	1
	Washington	Ann	Sophia	11	2	2	3	3	2	2	2	2	1
	Ann	Sophia	William	13	1	1	2	2	2	2	3	2	2
	Sophia	Total	Total	55	7	7	9	9	9	11	11	4	4
Curry	Robinson	Washington	Ann	18	13	13	14	14	17	17	16	14	14
	Washington	Ann	Sophia	9	3	3	4	4	4	4	5	5	5
	Ann	Sophia	William	14	14	14	1	1	2	2	4	4	2
	Sophia	Total	Total	49	17	17	23	23	27	27	28	28	22
Carson	Robinson	Washington	Ann	3	3	1	1	1	1	1	1	1	1
	Washington	Ann	Sophia	2	2	1	1	1	1	1	1	1	1
	Ann	Sophia	Total	5	5	1	1	1	1	1	1	1	2
	Sophia	Total	Total	40	12	12	16	16	17	17	17	18	18
Plaza	Robinson	Caroline	Washington	6	1	1	1	1	2	2	1	1	1
	Caroline	Washington	Ann	5	5	2	5	5	5	5	5	6	1
	Washington	Ann	Sophia	13	7	7	8	8	8	8	10	10	9
	Ann	Sophia	William	13	3	3	2	2	2	2	1	1	1
E/W Streets	Nevada	Curry	Carson	9	1	1	2	2	1	1	1	1	1
	Curry	Carson	Total	5	1	1	2	2	4	4	4	4	6
	Carson	Total	Total	14	1	1	2	2	4	4	4	4	6
	Total	Total	Total	43	2	45	4	4	5	5	9	10	10
Washington	Nevada	Curry	Carson	11	1	1	1	1	1	2	1	1	1
	Curry	Carson	Plaza	19	2	2	1	1	1	1	2	2	2
	Carson	Plaza	Total	13	2	15	1	1	3	3	3	3	3
	Total	Total	Total	43	2	40	5	5	3	3	3	3	4
Ann	Nevada	Curry	Carson	14	2	2	3	3	3	3	3	3	4
	Curry	Carson	Plaza	19	5	5	7	7	7	6	6	6	6
	Carson	Plaza	Total	13	8	3	6	6	4	7	7	8	8
	Total	Total	Total	43	10	10	16	16	14	14	16	16	17
Sophia	Nevada	Curry	Carson	14	2	2	3	3	3	3	3	3	3
	Curry	Carson	Plaza	8	5	5	7	7	7	6	6	6	6
	Carson	Plaza	Total	8	3	3	6	6	4	7	7	8	8
	Total	Total	Total	30	10	10	16	16	14	14	16	16	17
Lot	4	15	1	16	16	1	1	1	1	1	1	1	1
	Total	Total	Total	15	1	16	1	1	1	1	1	1	1
	NS Streets	5	149	36	48	1	49	53	56	2	58	44	44
	EW Street	2	105	20	26	30	26	30	34	44	44	44	44
Total	Lots	1	16	1	1	1	1	1	1	1	1	1	1
	Grand Total	262	5	3	270	56	75	1	76	84	91	2	93
													89
													89

TABLE A: North Area Detailed Counts (2 of 2)

		N/S Streets		E/W Streets			
		Inventory	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
Between		Robinson	Caroline	9	1	1	1
		Caroline	Washington	8	1	2	2
Nevada		Washington	Ann	11	1	3	3
		Ann	Sophia	13	1	4	4
Curry		Sophia	William	14	14	1	1
		Total		55	4	10	10
Robinson		Washington	Washington	18	16	16	13
		Washington	Ann	9	4	4	4
Carson		Ann	Sophia	14	4	4	2
		Sophia	William	8	4	2	1
Washington		Total		49	28	28	20
Washington		Robinson	Washington	3	1	1	1
Washington		Washington	Ann	2	2	1	1
Washington		Total		5	1	1	1
Washington		Robinson	Caroline	6	1	3	5
Washington		Caroline	Washington	5	5	5	4
Plaza		Washington	Ann	13	5	4	3
Plaza		Ann	Sophia	13	5	5	6
Plaza		Sophia	William	3	2	2	1
Plaza		Total		40	13	13	15
Carson		Nevada	Curry	9	6	6	4
Carson		Curry	Carson	5	2	2	6
Carson		Total		14	8	8	6
Carson		Caroline	Plaza	6	6	3	3
Carson		Nevada	Curry	5	1	2	2
Carson		Carson	Plaza	5	2	2	1
Carson		Total		10	3	3	3
Washington		Nevada	Curry	11	11	3	1
Washington		Curry	Carson	19	3	2	2
Washington		Carson	Plaza	13	2	6	4
Washington		Total		43	2	13	8
Ann		Nevada	Curry	14	3	3	1
Ann		Curry	Carson	8	6	6	4
Ann		Carson	Plaza	8	6	7	7
Ann		Total		30	15	15	13
Sophia		Nevada	Curry	14	3	2	1
Sophia		Curry	Carson	8	6	4	4
Sophia		Carson	Plaza	8	6	7	7
Sophia		Total		15	1	1	1
Lot		4	15	1	16	1	1
Lot		Total		15	1	16	1
NS Streets		144	5	149	1	46	48
EW Street		103	2	105	39	29	28
Lots		15	1	16	1	1	1
Grand Total		262	5	270	85	77	74
Total						78	61

TABLE B: Central Area Detailed Counts (1 of 2)

TABLE C: South Area Detailed Counts (1 of 2)

		Inventory		8:00 AM		9:00 AM		10:00 AM		11:00 AM		12:00 PM	
Between		Resident ADA		Resident ADA		Resident ADA		Resident ADA		Resident ADA		Resident ADA	
Nevada	5th	4th	10	10	10	1	1	6	6	6	7	8	8
	4th	3rd	9	9	9	1	1	2	2	4	4	5	5
	3rd	2nd	8	8	8	1	1	1	1	1	1	2	2
	2nd	King	8	8	8	1	1	1	1	3	3	4	5
	King	Musser	4	7	11	1	1	2	4	4	4	4	2
	Total		39	7	46	4	4	10	16	19	19	22	22
Curry	5th	4th	9	9	9	3	3	7	7	9	9	4	4
	4th	3rd	10	10	10	10	10	7	7	9	9	10	10
	3rd	2nd	9	9	9	1	1	3	3	5	5	7	7
	2nd	King	13	1	14	4	1	5	1	7	9	1	8
	King	Musser	5	5	5	1	1	2	2	4	4	2	3
	Total		28	18	1	47	14	4	1	19	17	3	32
Carson	5th	4th	2	2	2	1	1	1	3	3	3	2	2
	4th	3rd	3	3	3	1	1	3	3	2	2	3	3
	3rd	2nd	6	6	6	3	3	3	6	5	5	5	7
	Total		11	11	11	4	4	12	12	10	10	7	12
5th	Nevada	Curry	15	15	15	15	15	2	7	6	6	9	11
	Nevada	Curry	14	14	14	2	2	7	7	1	10	13	15
	4th	Curry	17	17	18	5	1	6	9	1	17	12	11
	Total		14	17	32	2	5	8	7	1	14	9	15
2nd	Nevada	Curry	15	15	15	5	5	5	7	4	4	5	10
	Curry	Carson	12	12	12	1	1	1	1	4	4	5	10
	Total		15	12	27	5	1	6	7	4	11	9	20
King	Nevada	Curry	21	21	18	3	3	18	18	20	20	20	15
Lot	1	88	2	6	96	22	3	25	53	1	3	57	64
	Total	88	2	6	96	22	3	25	53	1	3	57	64
NS Streets	67	36	1	104	18	8	1	27	12	3	42	37	43
EW Street	65	29	1	95	25	6	1	32	13	1	46	35	23
Lots	88	2	6	96	22	3	25	53	1	3	57	64	61
Grand Total	220	65	3	7	295	65	14	4	84	112	25	4	145
													214

TABLE C: South Area Detailed Counts (2 of 2)

Between		Inventory		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM	
				Resident ADA	Regular ADA								
Nevada	5th	4th	10	9	8	5	6	5	6	6	6	6	6
	4th	3rd	9	9	8	4	5	4	5	4	5	5	5
	3rd	2nd	8	8	5	5	2	1	1	1	1	1	1
	2nd	King	8	8	6	6	7	6	6	7	7	5	5
	King	Musser	4	7	11	2	4	4	3	3	2	2	2
	Total	Total	39	7	46	29	29	22	21	20	18	18	18
	5th	4th	9	9	8	8	8	8	9	9	9	9	9
	4th	3rd	10	10	10	10	10	10	9	10	10	11	11
	3rd	2nd	9	9	9	8	8	6	6	6	6	6	6
	2nd	King	13	1	14	7	1	8	8	1	11	1	11
	King	Musser	5	5	5	3	3	4	4	3	3	2	2
Curry	Total	Total	28	18	1	47	26	10	1	37	24	14	1
	5th	4th	2	2	2	2	2	2	2	2	1	1	2
	4th	3rd	3	3	3	2	2	3	2	2	2	2	2
	3rd	2nd	6	6	6	7	7	6	5	5	5	7	7
	Total	Total	11	11	11	11	11	11	9	9	8	11	11
	5th	Nevada	Curry	15	15	10	9	10	9	10	11	10	10
	4th	Nevada	Curry	14	14	10	10	11	11	12	13	14	13
	Curry	Carson	14	17	1	18	12	12	11	11	11	12	13
	Total	Total	14	17	1	32	10	12	22	9	11	13	13
	2nd	Nevada	Curry	15	12	27	8	11	11	19	6	16	8
East/West Streets	Curry	Carson	15	12	27	8	11	11	10	9	9	11	11
	King	Nevada	Curry	21	21	16	16	16	16	20	21	18	18
	Lot	Total	1	88	2	6	96	81	2	6	89	74	3
	NS Streets	67	36	1	104	55	21	1	77	46	23	1	68
	EW Street	65	29	1	95	34	23	1	70	45	23	1	68
Total	Lots	88	2	6	96	81	2	6	89	74	3	203	155
	Grand Total	220	65	3	7	295	170	44	3	223	155	47	1
												207	150

TABLE D -North Area Detailed Counts-Tuesday 9/24/2019 (1 of 2)

		Tuesday 9/24/2019										Tuesday 9/24/2019												
		8:00 AM					9:00 AM					10:00 AM					11:00 AM							
N/S Streets	Between	Inventory					Residential					Commercial					Residential							
		Regular	Residential	Commercial	Total	Residential	Commercial	Total	Residential	Commercial	Total	Residential	Commercial	Total	Residential	Commercial	Total	Residential	Commercial	Total	Residential			
Curry	Robinson	Caroline	7	1	9	1	9	1	11%	1	11%	2	2	22%	2	2	22%	2	2	22%	2	22%		
	Washington	Washington	8	1	8	1	8	1	0%	1	0%	1	1	13%	1	1	13%	1	1	13%	1	13%		
	Ann	Ann	11	3	11	3	3	3	27%	4	4	4	5	45%	5	5	45%	5	5	45%	5	45%		
	Sophia	Sophia	13	1	13	1	1	1	0%	1	0%	1	0	0%	0	0	0%	0	0	0%	0	0%		
Carson	Robinson	Washington	17	1	1	19	1	1	5%	3	3	16%	16	16	16	16	16	16	16	16	16	16	16	
	Washington	Ann	7	1	7	1	1	1	14%	2	2	29%	1	1	1	1	1	1	1	1	1	1	1	
	Ann	Sophia	11	3	14	3	1	1	0%	1	1	7%	3	3	3	3	3	3	3	3	3	3	3	
	Sophia	William	8	1	9	3	1	4	44%	3	1	4	44%	4	4	44%	4	4	44%	4	44%	4	44%	
Plaza	Robinson	Washington	2	1	2	2	0%	0%	0%	2	0%	2	100%	1	1	100%	1	1	100%	1	100%	1	100%	
	Washington	Caroline	5	2	7	1	1	1	14%	2	2	29%	0%	0%	0%	0%	0%	0%	1	1	14%	0%	0%	
	Ann	Washington	4	2	6	2	0%	0%	0%	2	15%	3	23%	1	1	8%	1	1	8%	1	8%	1	8%	
	Sophia	Ann	13	2	13	2	2	0%	0%	6	55%	7	64%	8	8	73%	8	8	73%	8	73%	8	73%	
E/W Street	Robinson	Nevada	9	1	9	1	1	1	11%	1	1	11%	1	1	0%	0%	0%	0%	1	1	11%	1	11%	
	Curry	Curry	5	1	5	1	1	1	0%	1	20%	2	2	40%	2	2	40%	2	2	40%	2	40%		
	Carson	Carson	5	1	2	3	0%	0%	0%	1	11%	1	11%	1	1	0%	0%	0%	0%	1	11%	1	11%	
	Caroline	Carson	6	1	6	1	1	17%	2	2	33%	1	2	33%	1	1	17%	2	2	33%	2	33%		
Washington	Washington	Curry	6	2	8	1	1	1	13%	2	2	29%	0%	0%	0%	0%	0%	0%	2	2	29%	3	38%	
	Carson	Plaza	7	1	7	1	1	14%	2	2	29%	2	2	29%	2	2	29%	2	2	29%	2	29%		
	Nevada	Curry	11	2	11	2	2	18%	3	3	27%	1	1	9%	1	1	9%	1	1	9%	1	9%		
	Curry	Carson	17	7	17	7	7	41%	8	8	47%	1	1	6%	1	1	6%	1	1	6%	1	6%		
Lots	Robinson	Curry	10	3	10	3	3	30%	3	3	18%	3	3	18%	3	3	18%	4	4	24%	4	24%		
	Curry	Carson	9	5	5	5	5	56%	5	5	56%	6	6	67%	7	7	78%	7	7	78%	7	78%		
	Carson	Plaza	8	6	6	6	6	75%	5	5	63%	5	5	63%	5	5	63%	7	7	88%	7	88%		
	Lots	4	15	1	16	1	1	6%	2	2	13%	2	2	13%	2	2	13%	2	2	13%	2	13%		
		NS Streets	124	16	125	1	149	19	1	1	0	0	21	14%	27	6	1	34	23%	39	4	42	28%	
		EW Street	101	2	32	2	110	28	0	0	0	0	28	25%	32	32	27	25%	32	32	32	32	29%	
		Lots	15	1	16	1	1	0	0	0	1	6%	2	13%	2	2	13%	2	2	13%	2	13%		
		Total	240	16	315	7	3	275	48	1	1	0	0	50	18%	61	6	1	68	4	72	26%	76	28%

TABLE D -North Area Detailed Counts-Tuesday 9/24/2019 (2 of 2)

		Inventory		Tuesday 9/24/2019		Tuesday 9/24/2019		Tuesday 9/24/2019		Tuesday 9/24/2019		Tuesday 9/24/2019		Tuesday 9/24/2019		
				12:00 PM		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM		
				Regular		DDA		Resident		Resident		Resident		Resident		
				Bus Stop	Motorcycle	Bus Stop	Motorcycle	Bus Stop	Motorcycle	Bus Stop	Motorcycle	Bus Stop	Motorcycle	Bus Stop	Motorcycle	
				Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
N/S Streets				Between												
				Robinson	7	1	9	9	10%	2	22%	2	22%	1	11%	4
E/W Street				Caroline Washington	8	8	9	9	25%	2	25%	2	25%	1	0%	3
				Ann Sophia	11	11	11	11	9%	5	45%	4	36%	4	45%	3
Lots				William	13	13	13	13	0%	0	0%	1	0%	1	8%	0%
				Washington	17	17	17	17	14%	1	14%	1	15%	2	15%	2
Curry				Ann Sophia	7	9	9	9	47%	13	68%	10	53%	14	14%	5
				Washington	8	8	9	9	14%	2	14%	1	21%	4	29%	1
Carson				Robinson	2	2	2	2	100%	3	33%	3	33%	2	22%	4
				Washington	5	2	7	6	6%	1	14%	0	0%	3	44%	6
Plaza				Robinson	13	4	13	4	31%	4	31%	4	31%	3	23%	3
				Caroline Washington	11	11	11	11	9%	7	64%	7	64%	6	55%	5
Robinson				Sophia William	5	6	6	6	120%	1	1	1	50%	2	0%	0%
				Curry Carson	9	1	9	9	11%	1	22%	1	22%	1	11%	2
Caroline				Fall Plaza	5	1	2	3	0%	0	0%	0	0%	1	0%	3
				Washington Carson	6	6	4	4	67%	1	17%	1	17%	1	17%	2
Nevada				Nevada Carson	6	2	8	1	13%	1	25%	1	25%	2	25%	2
				Curry Plaza	7	3	3	3	43%	1	14%	2	29%	3	43%	1
Ann				Curry Carson	11	2	17	2	12%	2	12%	1	9%	1	9%	2
				Plaza Carson	17	4	17	4	24%	5	29%	4	24%	4	24%	4
Sophia				Nevada Carson	10	4	10	4	40%	4	40%	3	30%	2	20%	2
				Curry Carson	9	6	6	6	67%	5	56%	4	44%	5	56%	3
Lots				Plaza Carson	8	4	8	4	50%	7	88%	6	75%	7	88%	2
				Curry Carson	15	1	16	2	19%	1	19%	1	6%	1	6%	1
NS Streets				EW Street Lots	124	16	12	12	34%	40	6	46	31%	36	41	28%
				Total	101	2	3	2	110	31	31	30	27%	22	24	27
EW Street Lots				Total	15	1	16	2	19%	1	6%	1	6%	2	13%	1
				Total	240	16	3	15	7	275	71	6	84	31	59	61

TABLE E - North Area Detailed Counts-Tuesday 9/26/2019 (1 of 2)

		Inventory		Thursday 9/26/2019			Thursday 9/25/2019													
				8:00 AM			9:00 AM			10:00 AM			11:00 AM			12:00 PM				
				Regular			Resident			Regular			Resident			Regular				
				Total	DA	Bus Stop	Total	% Ut	DA											
				Resident	Resident	Resident														
Between		Caroline		7	1	9	1	1	11%	1	11%	2	22%	2	22%	3	33%	3	33%	
		Washington		8	8	1	1	13%	1	13%	2	25%	2	25%	3	38%	3	38%		
N/S Streets		Caroline		11	11	1	1	9%	1	9%	1	9%	1	9%	2	18%	2	18%		
		Washington		13	13	0	5	0%	5	38%	4	31%	4	31%	3	23%	3	23%		
E/W Streets		Sophia		13	13	1	1	8%	1	8%	2	15%	3	23%	3	23%				
		Washington		17	17	1	19	3	16%	6	32%	8	42%	7	37%	7	37%			
Curry		Robinson		7	7	0	8	0%	8	8	114%	7	7	100%	10	143%	4	57%		
		Washington		9	9	14	6	67%	3	0%	1	2	3	21%	2	29%	4	29%	2	14%
Carson		Robinson		2	2	1	1	50%	3	0%	3	33%	4	44%	3	33%	5	56%		
		Washington		2	2	0	0	0%	3	33%	4	44%	3	33%	5	56%				
Plaza		Robinson		5	5	2	7	1	14%	1	14%	1	14%	1	14%	1	14%	1	14%	
		Washington		13	13	2	6	0%	3	33%	4	44%	3	33%	5	56%	3	56%		
Lots		Robinson		6	6	0	0	0%	2	15%	2	15%	1	8%	2	15%	2	15%		
		Washington		7	7	1	1	13%	2	13%	2	18%	6	55%	8	73%	8	73%		
Lots		Caroline		15	15	3	275	3	13%	45	81	54	20%	75	27%	83	30%	77	85	31%
		Washington		15	15	1	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

TABLE E - North Area Detailed Counts-Tuesday 9/26/2019 (2 of 2)

		Thursday 9/25/2019				Thursday 9/25/2019				Thursday 9/25/2019				Thursday 9/25/2019					
		Inventory		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM		6:00 PM		7:00 PM			
		Regular		NDA		Resident		Resident		Resident		Resident		Resident		Resident			
		Between	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA	DA		
N/S Streets		Robinson	Caroline	Washington	8	1	9	6	6	6	6	6	4	4	1	1	1		
E/W Streets		Caroline	Washington	Ann	11	3	11	3	3	27%	3	3	27%	2	18%	1	9%	0%	
Lots		Sophia	William	William	13	3	13	4	3	23%	3	3	23%	2	23%	1	15%	1	
Plaza		Curry	Washington	Ann	17	1	19	8	8	42%	7	7	37%	5	26%	2	15%	1	
Carson		Caroline	Washington	William	8	1	14	6	4	44%	3	3	43%	1	14%	0%	1	1	
Robinson		Robinson	Washington	William	2	2	3	3	3	150%	2	2	100%	1	1	1	1	1	
Washington		Caroline	Washington	Ann	5	2	7	2	2	25%	1	1	2	25%	3	43%	1	14%	0%
Plaza		Caroline	Washington	Ann	13	4	13	4	4	33%	1	2	33%	3	30%	1	17%	0%	
Carson		Sophia	William	William	5	1	11	5	5	45%	5	5	45%	4	36%	3	23%	3	
Robinson		Nevada	Curry	Curry	9	3	9	3	3	33%	3	3	33%	2	20%	1	20%	1	
Carson		Caroline	Fall Plaza	Fall Plaza	5	1	2	3	3	60%	3	3	60%	0%	0%	0%	0%	0%	
Washington		Caroline	Carson	Carson	6	6	6	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Plaza		Nevada	Curry Plaza	Curry Plaza	6	2	8	3	3	38%	3	3	38%	2	25%	2	0%	0%	
Carson		Nevada	Curry Carson	Curry Carson	7	1	11	3	1	14%	1	1	14%	1	14%	3	43%	0%	
Lots		Sophia	Curry Carson	Curry Carson	17	3	17	3	3	27%	3	3	27%	1	9%	1	6%	1	
NS Streets		NS Streets	EW Street Lots	EW Street Lots	124	16	1	2	5	149	53	10	63	42%	48	6	54	36%	31
EW Street Lots		Total	Total	Total	101	2	3	2	110	28	28	25%	28	28	25%	26	26	16	
Lots		Total	Total	Total	15	1	16	2	93	34%	78	6	84	31%	58	7	65	24%	
Lots		4	15	1	275	83	10	16	2	13%	2	2	13%	1	6%	35	38	14%	
Lots		Total	Total	Total	240	16	3	1	5	7	3	275	83	10	65	24%	55	35	

TABLE H - South Area Detailed Counts-Tuesday 9/24/2019 (1 of 2)

		Tuesday 9/24/2019				Tuesday 9/24/2019				Tuesday 9/24/2019				Tuesday 9/24/2019				
		8:00 AM		9:00 AM		10:00 AM		11:00 AM		12:00 PM		1:00 PM		2:00 PM		3:00 PM		
Between		Inventory	Ztr., DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	Resident, DA,	
E/W ST	North/South Streets																	
Lots	1	85	2	6	93	33	1	34	37%	33	1	34	37%	33	1	37	40%	
NS Streets	60	36	2	1	3	102	12	18	1	2	33	11	15	1	2	29	13	
EW Street	53	28	1	1	1	84	28	8	7	8	36	7	8	1	16	16	34	
Lots	85	2	6	93	33	1	34	33	1	1	34	33	1	1	34	36	37	
Grand Total	198	64	5	8	3	279	73	26	1	3	51	23	1	4	103	84	29	2
																116	78	37
																	2	122

TABLE H - South Area Detailed Counts-Tuesday 9/24/2019 (2 of 2)

		Tuesday 9/24/2019 1:00 PM		Tuesday 9/24/2019 2:00 PM		Tuesday 9/24/2019 3:00 PM		Tuesday 9/24/2019 4:00 PM		Tuesday 9/24/2019 5:00 PM		Tuesday 9/24/2019 6:00 PM						
		Inventory	Resident	Regular	Resident	Motorcycle	Bus Stop	Resident	Motorcycle	Bus Stop	Resident	Motorcycle	Bus Stop	Resident	Motorcycle	Bus Stop		
North/South Streets																		
Between	5th	4th	10	2	2	20%	2	4	40%	2	20%	1	10%	2	20%	1		
Nevada	4th	3rd	9	9	9	0%	0	0%	0%	0	0%	1	0%	1	0%	0		
Curry	2nd	2nd	8	8	8	13%	1	13%	2	25%	2	25%	1	13%	1	13%	0	
Mosser	King	King	4	7	1	1	13%	0	0%	0%	0%	1	13%	4	33%	4		
Mosser	King	King	5th	4th	9	7	7	78%	6	67%	5	56%	3	33%	3	33%	4	
Curry	King	King	3rd	2nd	3	10	5	5	40%	5	50%	2	20%	3	30%	3		
Mosser	King	King	2nd	2nd	3	8	1	50%	2	50%	3	53%	2	25%	1	13%	1	
Mosser	King	King	5th	4th	11	1	12	5	1	50%	3	53%	2	25%	1	13%	4	
Carson	4th	3rd	7	7	7	14%	1	14%	2	29%	3	33%	1	10%	10	83%	5	
Lots	5th	2nd	5	2	2	0%	2	100%	2	0%	2	100%	2	0%	2	100%	5	
E/W St	North	South	Carry	13	10	2	0%	2	20%	2	20%	2	0%	2	20%	2	20%	0
Nevada	Carry	Carry	4th	4th	10	10	2	20%	2	20%	2	20%	2	20%	1	10%	1	
Curry	Carry	Carry	2nd	2nd	11	11	1	11	61%	9	50%	9	50%	15	83%	2	11%	2
Curry	Carry	Carry	King	King	20	21	1	10	9	90%	7	70%	5	50%	10	100%	1	
Lots	1	85	2	6	93	37	2	39	42%	35	1	36	39%	41	2	46%	28	
NS Streets	60	36	2	1	3	102	19	14	1	2	37	17	16	1	34	19	19	
EW Street	53	28	1	1	1	84	21	14	35	19	12	31	16	13	29	21	17	
Lots	25	2	6	93	37	2	39	35	1	101	71	28	1	2	43	28	1	
Grand Total	198	54	5	8	3	279	77	28	1	2	111	71	28	1	2	108	59	
																48		
																25		
																3		
																76		

TABLE I - South Area Detailed Counts-Tuesday 9/26/2019 (1 of 2)

E/W St	Lots	Inventory	Thursday 9/26/2019			Thursday 9/25/2019			Thursday 9/25/2019			Thursday 9/25/2019			Thursday 9/25/2019			
			8:00 AM			9:00 AM			10:00 AM			11:00 AM			12:00 PM			
			Total	Regular	Special	Total	Regular	Special	Total	Regular	Special	Total	Regular	Special	Total	Regular	Special	
NS Streets	60	36 2 1 3	102	7 11	18	49 6 1	1	27	20 11	1	32	22 16	38	24 13	1	38		
EW Street	53	28 1 1	84	3 4	7	22 2	1	25	25 3	1	29	58	12 16	28				
Lots	85	2 6	93	17	1	18	32	3	35	30	1	31	28	1	29	40	2	
Grand Total	138	64 5 8 3	1	279	27 15 1	43	73 8 1 3 1	1 87	75 14 2	1 92	86 38 1	125	76 29 2 1	108				

TABLE I - South Area Detailed Counts-Tuesday 9/26/2019 (2 of 2)

		Thursday 9/25/2019						Thursday 9/25/2019						Thursday 9/25/2019						Thursday 9/25/2019								
		1:00 PM			2:00 PM			3:00 PM			4:00 PM			5:00 PM			6:00 PM			7:00 PM			8:00 PM			9:00 PM		
		Inventory		Resident		Regular		Resident		Regular		Resident		Regular		Resident		Regular		Resident		Regular		Resident		Regular		
		ADA	Bus Stop	Motorcycle	Special	ADA	Bus Stop	Motorcycle	Special	ADA	Bus Stop	Motorcycle	Special	ADA	Bus Stop	Motorcycle	Special	ADA	Bus Stop	Motorcycle	Special	ADA	Bus Stop	Motorcycle	Special	ADA	Bus Stop	Motorcycle
E/W St																												
North/South Streets																												
Lots		1	85	2	6	93	35	2	37	40%	38	2	40	43%	36	2	38	41%	33	1	34	37%	51	1	52	56%		
NS Streets		60	36	2	1	3	102	31	20	51	21	18	1	40	17	17	2	36	17	18	1	36	17	8	25			
EW Street		53	28	1	1	84	15	17	32	14	18	32	24	9	1	34	23	9	1	33	5	12	17	17				
Lots		85	2	6	93	35	2	37	38	2	40	36	2	38	33	1	34	51	1	103	73	27	2	1	94			
Grand Total		198	64	5	8	3	1	279	81	37	2	120	73	36	2	112	77	26	3	2	108	73	27	2	1	94		

TABLE J: Summary of Peak Parked Vehicle Counts by Type and Area

		Regular	2hr	ADA	Resident	Loading	Bus Stop	Motorcycle	Special	Total
Inventory of Parking spaces										
North	NS Streets	124	16	0	1	2	5	0	1	149
	EW Street	101	0	2	0	3	2	0	2	110
	Lots	15	0	1	0	0	0	0	0	16
Central	NS Streets	93	94	0	2	2	1	0	5	197
	EW Street	83	89	10	0	5	1	0	2	190
	Lots	377	53	17	0	0	0	2	6	455
South	NS Streets	60	36	2	1	3	0	0	0	102
	EW Street	53	28	1	1	0	0	1	0	84
	Lots	85	0	2	6	0	0	0	0	93
Peak¹ Observed Parked Vehicles										
North	NS Streets	46	10	0	0	0	0	0	0	56
	EW Street	32	0	0	0	0	0	0	0	32
	Lots	2	0	0	0	0	0	0	0	2
Central	NS Streets	63	53	0	3	0	0	0	3	122
	EW Street	55	60	3	0	1	1	0	1	121
	Lots	218	19	8	0	0	0	1	4	250
South	NS Streets	21	18	2	0	0	0	0	0	41
	EW Street	34	18	0	0	0	0	0	0	52
	Lots	32	0	0	1	0	0	0	0	33
Peak Percent Utilization										
North	NS Streets	37%	63%	--	0%	0%	0%	--	0%	38%
	EW Street	32%	--	0%	--	0%	0%	--	0%	29%
	Lots	13%	--	0%	--	--	--	--	--	13%
Central	NS Streets	68%	56%	--	150%	0%	0%	--	60%	62%
	EW Street	66%	67%	30%	--	20%	100%	--	50%	64%
	Lots	58%	36%	47%	--	--	--	50%	67%	55%
South	NS Streets	35%	50%	100%	0%	0%	--	--	--	40%
	EW Street	64%	64%	0%	0%	--	--	0%	--	62%
	Lots	38%	--	0%	17%	--	--	--	--	35%

Note 1: Peak is defined by peak hour (11:00AM) of all parked vehicles within the study area. As such sub areas or type can have a greater individual peak.

Carson City Downtown Parking Study

Downtown Parking Study Area

Includes:

- All on-street parking
- Public parking lots
- Private parking lots open to the public

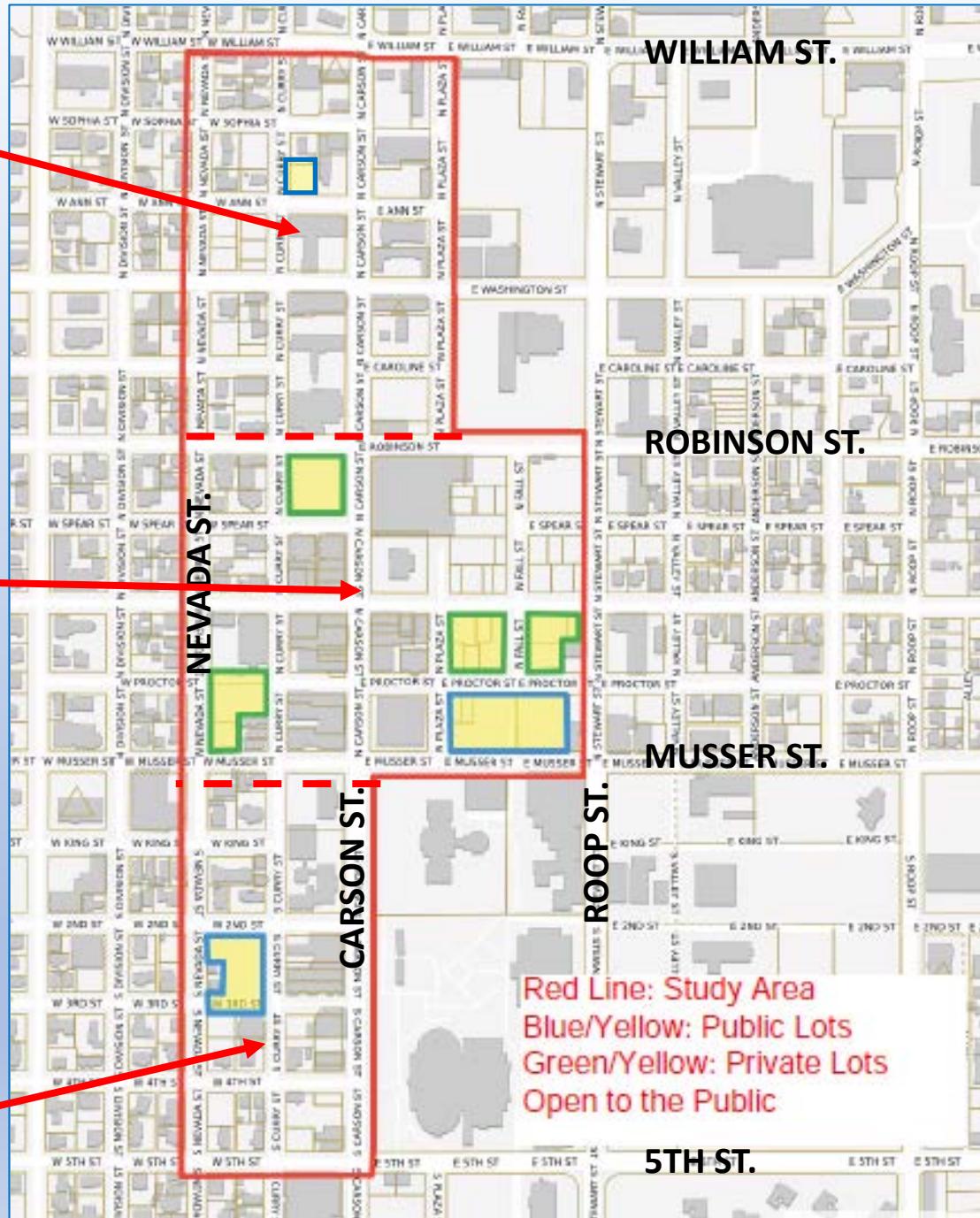
Parking counts conducted in:

- May 2019 (Legislative session)
- September 2019

North

Central

South



Downtown Parking Study Area

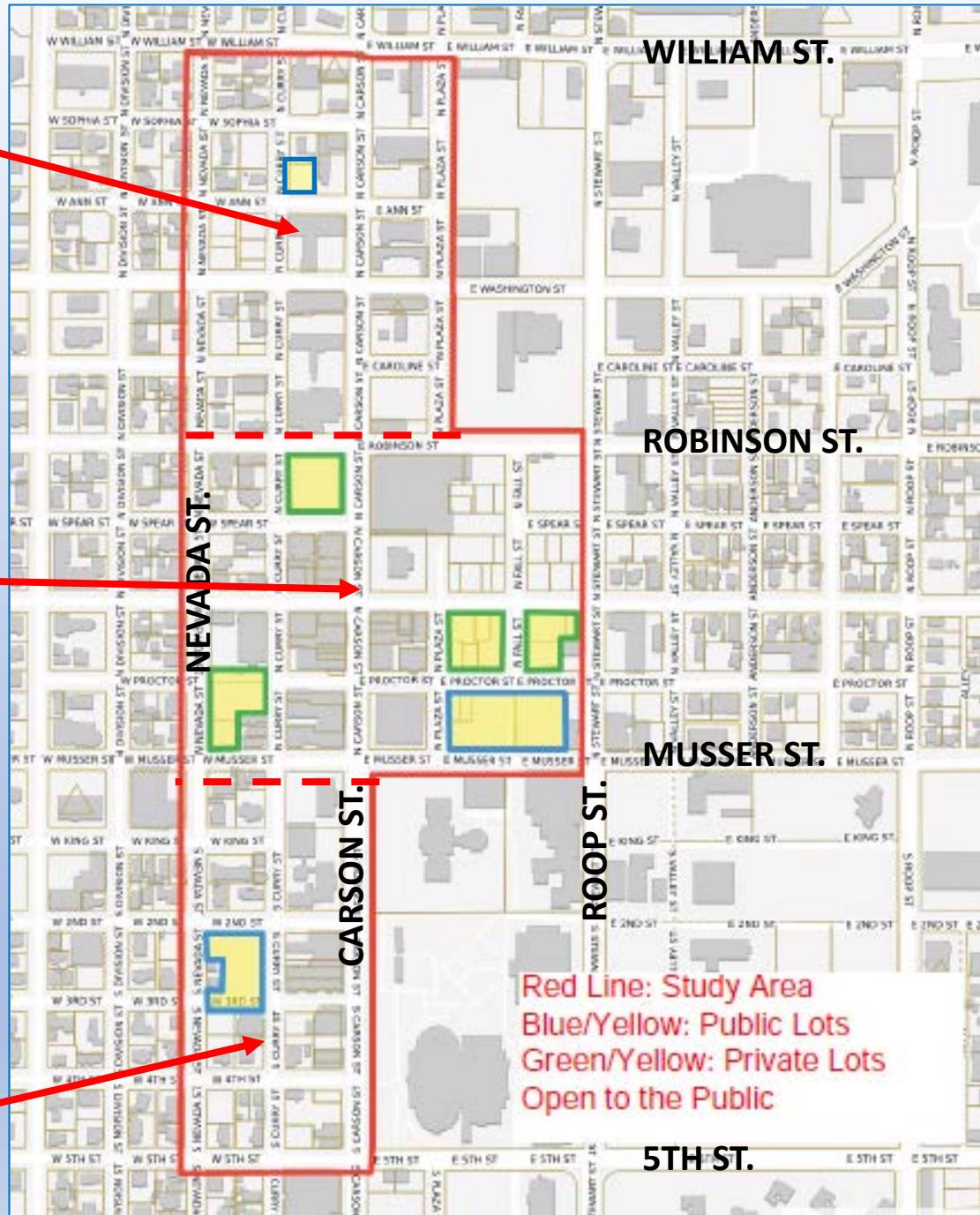
Parking inventory:

- 1,387 total public spaces
- 823 (59.3%) on-street
- 261 (18.8%) in public lots
- 303 (21.8%) in private lots
- 991 (71.4%) no restrictions
- 316 (22.7%) 2-hour limit
- 35 (2.5%) ADA
- 51 Other (resident, loading, bus, special)

North

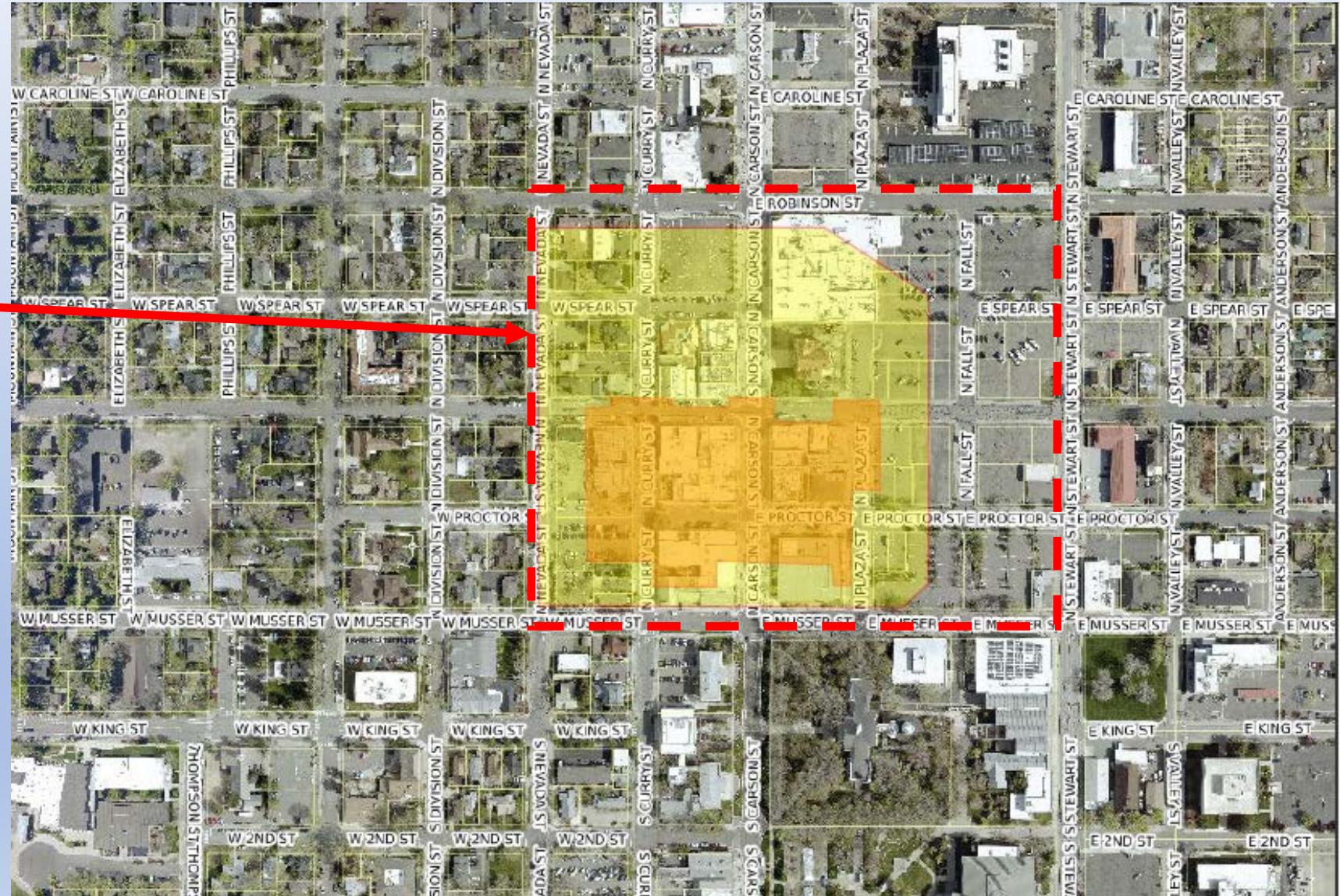
Central

South

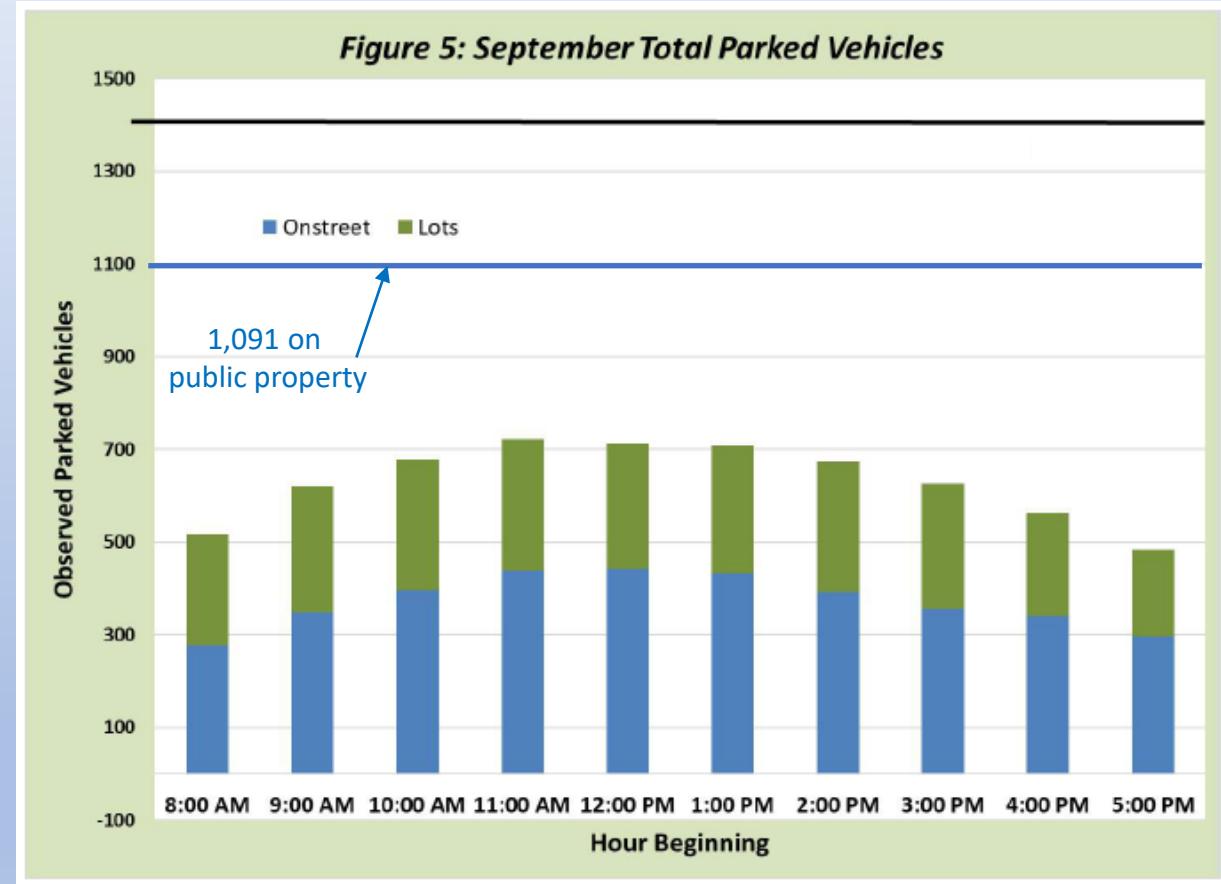
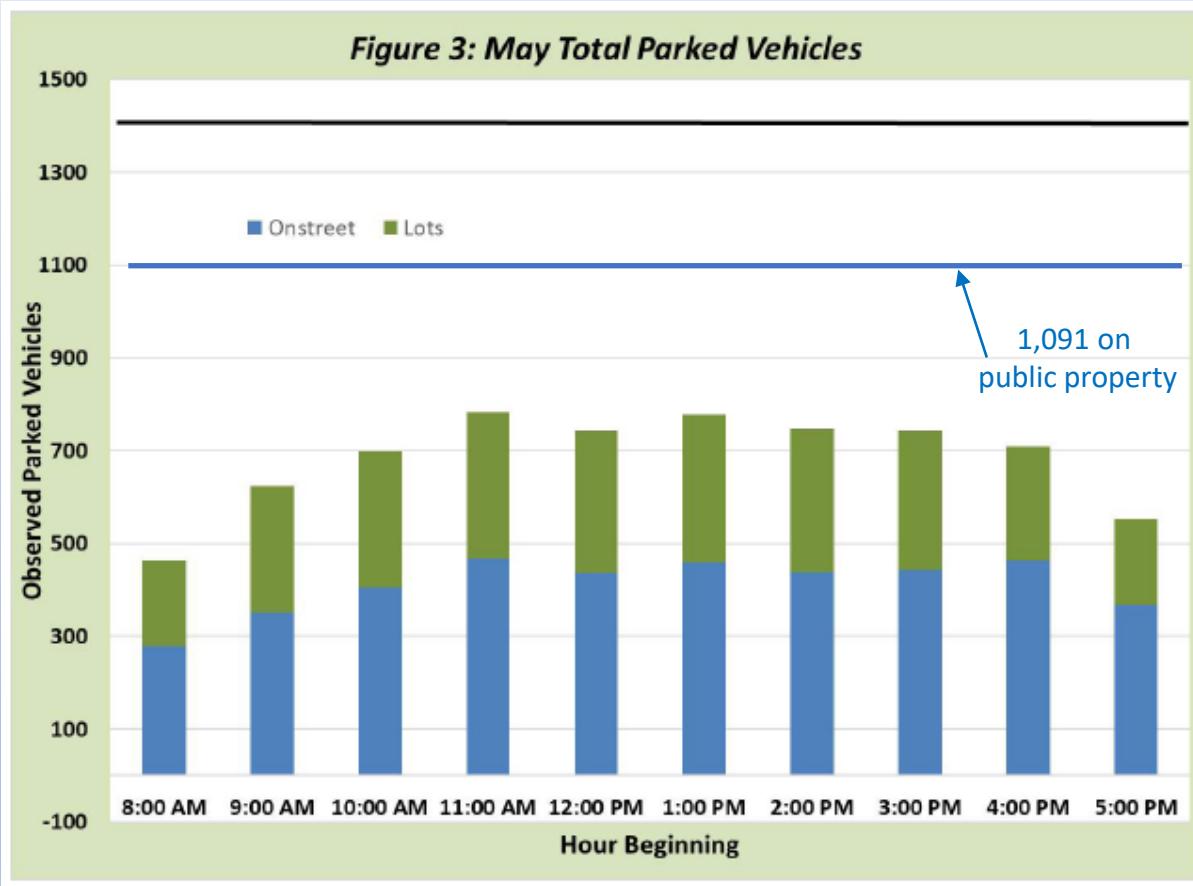


Wal-Mart property compared to downtown

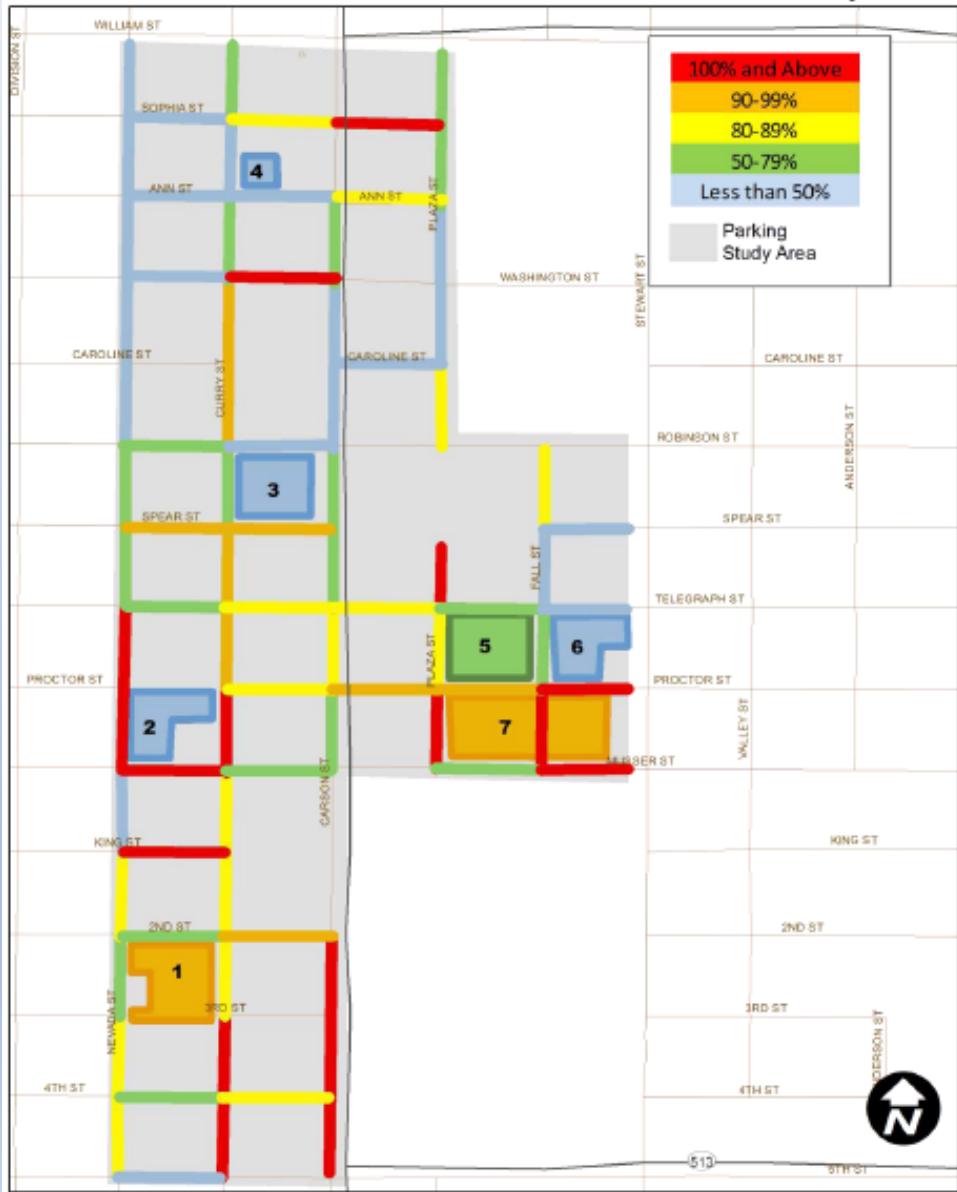
Central
Study Area



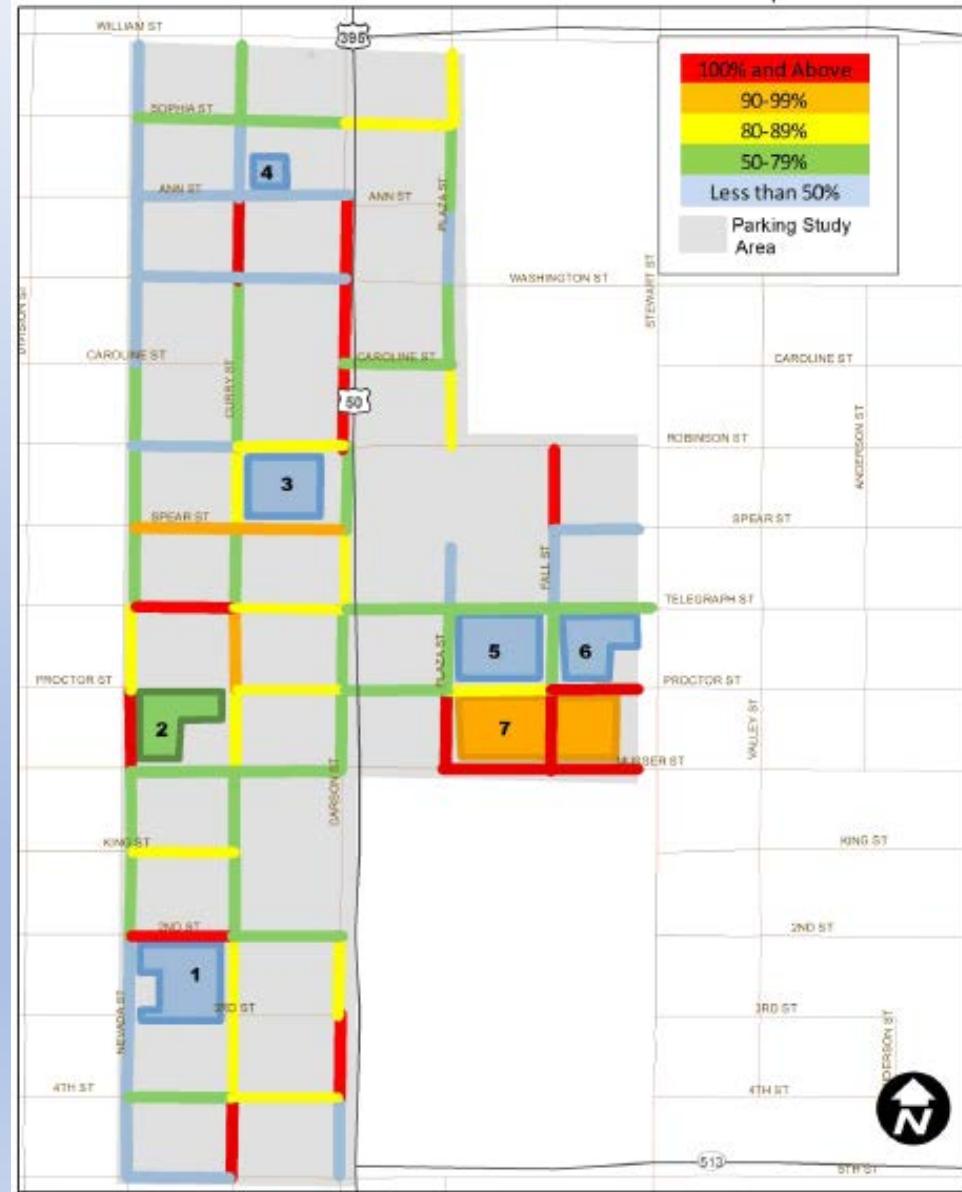
Average Daily Hourly Parking Use



May Counts



September Counts



Conclusions and Recommendations Summary

- There is overall sufficient public parking available in downtown Carson City, with a maximum observed utilization rate of 57 percent when the Legislature is in session and 51 percent at other times.
- Peak utilization: May September
 - Northern area: 34% 33%
 - Central area: 60% 59%
 - Southern area: 76% 45%
- The higher utilization rate of 2-hour spaces over regular spaces in the north subarea (63 percent in May versus 33 percent peak utilization in September) indicates that it may be worthwhile to designate 4 to 8 more spaces in the north subarea for 2-hour parking.